



**GLIDING NEW ZEALAND INCORPORATED**

***A Guide for Organisers’  
and  
Administrators’  
of  
Gliding New Zealand  
(GNZ) Sanctioned  
Gliding Competitions***

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1 November 2022

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## Preamble

This Guide is based on the British Gliding Association (BGA) Competition Organisers' Guide 2019. Subsequent edits to that Guide are incorporated into this GNZ Guide as appropriate.

This version is effective from 1 November 2022 and will continue to be updated annually.

## Amendments to the GNZ Guide

Amendments and changes to this Guide shall be requested through a Gliding New Zealand (GNZ) OPS16 Document Change Request form and submitted to the GNZ Executive Officer. The GNZ Executive Committee and Sailplane Racing Committee are jointly responsible for the maintenance and update of this Guide.

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## INTRODUCTION

### 0.1 A History of Gliding Competitions

Gliding contests are one of the initiatives to achieve Gliding New Zealand's (GNZ) vision of "*Great Gliding Experiences for Everyone*".

Following the rapid development of gliding in Germany post World War 1, The first German gliding competition was held at the Wasserkuppe in 1920. The best flight lasted two minutes and set a world distance record of 2 kilometres. Within ten years, it had become an international event in which the achieved durations and distances had increased greatly. In 1931, Gunther Grönhoff flew 272 kilometres on the front of a storm from Munich, Germany, to Kadaň, in Western Czechoslovakia, farther than had been thought possible.

In the 1930s, gliding spread to many other countries. In the 1936 Summer Olympics in Berlin gliding was a demonstration sport, and it was scheduled to be a full Olympic sport in the 1940 Games. The Olympia glider was developed in Germany for the event, but World War II intervened. By 1939 the major gliding records were held by Russians, including a distance record of 748 kilometres. During the war, the sport of gliding in Europe was largely suspended.

In many countries during the 1950s, a large number of trained pilots wanted to continue flying. Many were also aeronautical engineers who could design, build and maintain gliders. They started both clubs and manufacturing facilities, many of which still exist. This stimulated the development of both gliding and gliders. The increased numbers of pilots, greater knowledge and improving technology helped set new records, for example the pre-war altitude record was doubled by 1950 and the first 1,000-kilometre flight was achieved in 1964.

The first World Gliding Championships was held at the Samedan, Switzerland, in 1948. Today the opportunity to compete at the annual Continental and various World Gliding Championships represents the pinnacle of performance for pilots flying in their own Club, Regional and National contests.

The very first contest held in New Zealand was the Central Districts Gliding Championship held at Masterton in October 1962. The following year in November (1963) the 1st NZ Nationals were held also at Masterton's Hood Aerodrome and gliding contests have regularly occurred throughout New Zealand since.

As has been established over these many decades world-wide, successful gliding contests typically are safe and achieve three key outcomes:

- sporting (determining winner(s) in fair competition)
- operational (without injury or damage); and
- reputational (creating a positive image creates a positive image of gliding across the gliding community, the wider aviation community and the public.

This guide has been provided to support GNZ's purpose of "*enabling enjoyable & safe soaring*" – in relation to gliding contests and to enable the reader to quickly understand the people (roles) and processes that have been developed, over

decades of contests here and worldwide, to achieve similar purpose, vision and success in all forms of competition.

Routinely, New Zealand contests are conducted under the GNZ Exposition paras 1.6 and 2.4, and the MOAP section 2-12. The Approvals Section of the GNZ Part 149 Certificate confers the privilege of authorising “glider aviation events”.

## **0.2 Overall Control of Gliding Contests in New Zealand**

The Sailplane Racing Committee (SRC) is responsible to the GNZ Executive for the management and governance of all competition related matters affiliated with GNZ (see GNZ Advisory Circular (AC) 2-10 Competitions).

The SRC is tasked by the GNZ Executive to receive all bids to hold contests and to consider and propose a contest calendar for Executive approval. Local task weeks and rallies may be included but do not generally form part of this calendar.

The SRC is also tasked by the GNZ Executive to prescribe and maintain the GNZ Competition Rules, GNZ Handicap Register and the GNZ Contest Marking System, which together are the governing regulations for the GNZ National and Regional Championships. They are revised annually, the updated revisions being effective on 1 November each year.

For local contests, including Task Weeks, the Rules may be modified subject to review by the appropriate Regional Operations Officer (ROO) and communication to all involved in the contest.

Most gliding contests are organised and run by volunteers. These volunteers give freely of their personal time and skills and, while they may be reimbursed for actual and reasonable expenses, they are not remunerated for their role. Gliding contests are attended by competitors and crew who have considerable previous experience helping, running or competing in similar events in New Zealand and, often, overseas. Most of those volunteers and pilots also have considerable experience if not as certified GNZ instructors, then in mentoring new GNZ members and other volunteer helpers in relation to everyday gliding-related operations and/or gliding contest practices and procedures. Gliding Clubs individually or collectively host events and create an organising committee.

Each contest organising group and contest officials will have a different set of individuals selected for one or more roles as described in Part II of this Guide.

Organiser(s) propose the Contest Director for the approval of the SRC. The ROO has overall operational responsibility for any contest held in their region and, for this reason the ROO must approve the Safety Officer proposed by the Organiser(s).

Contest Organisers<sup>1</sup> and Contest Officials<sup>2</sup> are typically drawn from the local, regional or national ‘pool’ according to the contest type but may come from beyond. Key officials, such as the Organiser<sup>3</sup>, are selected by the host body, mindful of the role

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<sup>1</sup> *Contest Organisers* is the term used for all individuals whose roles are focussed on the hosting, planning and preparation of a contest, and with non-operational roles during the contest.

<sup>2</sup> *Contest Officials* is the term used for those with operational roles during the contest. Some individuals may hold both organisational and official roles.

<sup>3</sup> *Organiser* is the term used to identify the individual whose primary role is the management of preparation for the event and management of logistics during the event.

descriptions and ideal qualities of the individuals. This approach is also applied as organiser(s), in liaison with key officials select other officials who will be on-site and run the contest.

In due course GNZ is likely to adopt a Safety Management System (SMS). In the meantime, there is a standard hierarchy that should be adopted to ensure competent oversight of contests held in New Zealand. This hierarchy in Figure 0-1 shows the inter-relationships and responsibilities of those holding various GNZ and contest-related roles (some held concurrently) relating to gliding contests in New Zealand.

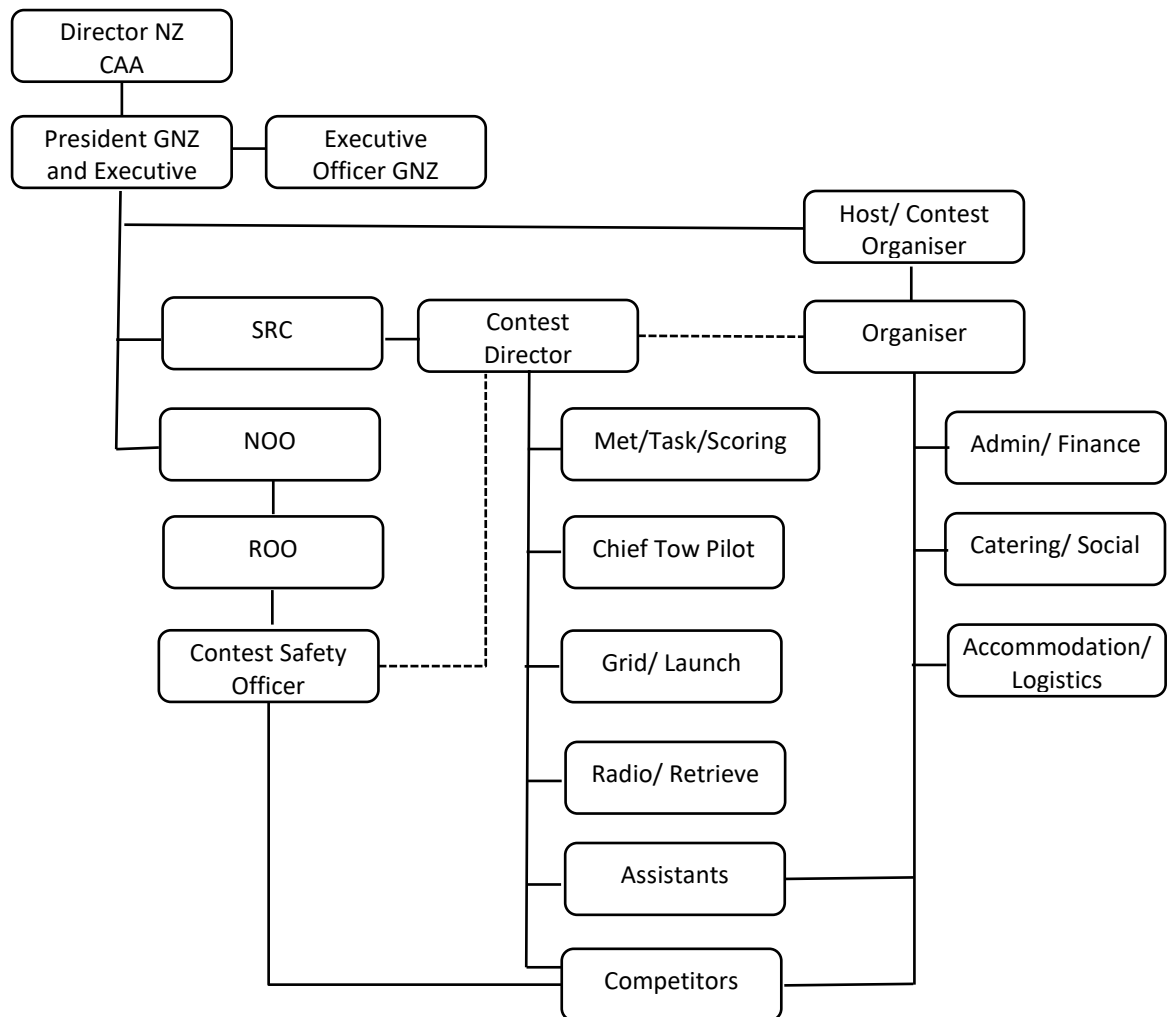


Figure 0-1: Hierarchy of Competition Management

The documents that Contest Organisers must be familiar with are listed in Table 0-1.

Table 0-1: Competition Relevant Documents

Essential Reading	Useful Information
<ul style="list-style-type: none"><li>• NZ CAA CAR Part 91, Rules and Procedures</li><li>• NZ AIP</li><li>• GNZ Manual of Approved Procedures</li><li>• GNZ Competition Rules</li><li>• GNZ AC 2-10 Competitions</li><li>• GNZ AC 1-05 Emergency Plans</li><li>• GNZ AC 1-03 Anti-Doping Policy</li><li>• GNZ OPS10 Incident Report</li><li>• Host Airfield Standard Operating Procedures</li><li>• Host Airfield Emergency Plan</li><li>• FAI Sporting Code – Annex A to Section 3</li></ul>	<ul style="list-style-type: none"><li>• NZ CAA AC 91-1 Aviation Events</li><li>• GNZ Code of Conduct</li><li>• FAI Guidelines in the Event of a Casualty or a Serious Accident at FAI Air Sports</li><li>• BGA Emergency Plan Template-postaccidentguide.pdf on the BGA website</li></ul>

### 0.3 Contest Variants

Annually there is one National, three Regional (northern, central and southern) Championships and various local contests held in New Zealand<sup>4</sup>. At any given gliding competition there may be one or more sub-contests (classes). The glider classes recognised by the FAI (used for international competition) are not specifically used In New Zealand due to the paucity of aircraft in each class. Instead, a handicap system is used across most contest classes.

There are typically one to four ‘classes’ in any New Zealand competition as described in the GNZ Competition Rules. The Organisers of other contests may describe what classes are offered and accept entries from pilots with the nominated pre-requisite experience. The key features of the gliding contest types are shown in Table 0-2.

Specific event dates and organiser details are provided on the GNZ website as are links to event-specific information and registration.

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<sup>4</sup> Note: The SRC is considering formally adding the “Grand Prix” (GP) style competition to the Championships calendar.



Table 0-2: Key features of gliding contest types in New Zealand

<b>Contest Name:</b>	<b>Nationals*</b>	<b>Regionals*</b>	<b>Grand Prix (GP)*</b>	<b>Local/Single Class (PW5)</b>	<b>Enterprise</b>	<b>Task Week</b>
<b>Frequency:</b>	Annual	Annual	Annual	Ad Hoc	Ad hoc	Ad hoc
<b>Location:</b>	Alternates North and South Island <sup>5</sup>	Appropriate to the region	Decided at AGM	Local Club initiative	Local Club initiative	Local Club initiative
<b>Classes:</b>	Open; Racing; Club <sup>6</sup> ; Sports	Open; Racing; Sports	One or more groups	Varies	Varies	None
<b>Tasks:</b>	Racing and Assigned Area Tasks (AAT)	Racing and AAT	200-400km; 2-3 hours; max 20 gliders	Racing, AAT, Enterprise, GP	No set task. Points for distance, getting back, or reaching specific TPs	Individuals choose tasks in discussion with coaches
<b>Start:</b>	Pilot selected	Pilot selected	Regatta start; height and speed limited	Depends on the task	Varies	Pilot selected
<b>Handicaps applied:<sup>7</sup></b>	Yes	Yes	Task distance may be handicapped	Maybe	Maybe	Maybe
<b>Scoring:</b>	1000-point system	1000-point system	1 <sup>st</sup> = 10 points (9+1 bonus); 2 <sup>nd</sup> = 8 points, 3 <sup>rd</sup> = 7 points.... 9 <sup>th</sup> = 1 point	Depends on the task	Varies	Pilot choice

\* GNZ approved Championships

<sup>5</sup> Typically held at Waharoa and Omarama

<sup>6</sup> The Club Class Nationals may be held as a stand-alone event or may incorporate a local contest

<sup>7</sup> The GNZ handicap values are based on the British Gliding Association Handicaps

## **PART 1 - PREPARATION**

With a significant period of pre-planning your competition is likely to be a success. Pre-planning encompasses a number of tasks that could be delegated to other members of your organisation.

Preparation for each contest begins 12-24 months before an event. Organisers will typically liaise over the 12-24 months preceding an event following an approximate timeline and activities as outlined in [Section 1.15 Top-Level Timeline](#). As the event draws closer those with contest official roles will increasingly become involved in preparations.

Organisers and officials must work together with open lines of communication and reporting. GNZ's Code of Conduct sets out expectations in terms of how members conduct themselves when interacting with others in relation to the sport.

### **1.1 GNZ Requirements**

The GNZ requires the organising club, through the SRC, to have agreed competition dates before the annual Pilot's Meeting in accordance with GNZ AC2-10. The Pilot's meeting at the AGM recommends the competition calendar, which is subsequently approved by the GNZ Executive. The GNZ also require that a minimum level of competence and capability exists within the organisation team. Key personnel and the general financial arrangements (such as entry fees) are subject to approval by the SRC. The Rules, Handicaps and Marking System employed in GNZ approved championships are those laid down by the SRC.

### **1.2 Local Arrangements**

It is important that other local arrangements are taken into account at the earliest opportunity. Ensure that any planning and neighbouring airfield requirements are identified and suitably addressed before a competition date is decided. Any significant local arrangements that could affect the competitors should be included in the local rules. See the [Local Procedures Section](#) for more detail.

### **1.3 Launching Capabilities**

It is desirable, as a minimum standard, that all competition gliders in any task group are launched within 60 minutes. Minimizing the launch time increases opportunity for pilots to get the best out of a small window of opportunity.

In order to achieve the required launch rate, it will be necessary to identify the correct number, type and availability of tugs well in advance of the competition. Remember that large heavily-ballasted gliders will need more powerful tugs, so try to predict the mix of your expected entries and plan accordingly. As a rule-of-thumb, expect each launch to take at least eight minutes, so the absolute minimum number of tugs for a 30-glider grid would be four. Allowing an extra one for breakdowns, that means you would look to have five available.

Tug availability becomes notoriously difficult during the peak summer months so you should start to contact tug owners and operators well in advance, in fact as soon as you have decided on a date. You may even want to take tug availability into account when deciding the dates to bid for. If your dates clash with other competitions, you may have a problem. If you do find yourself short of dedicated tugs, you can try

arranging for tugs to ferry-in from local clubs just for your launch period. This is not ideal and can be expensive.

#### **1.4 Infrastructure Arrangements**

Actions to ensure that your club has the necessary facilities for the competition need to be identified at the early planning stages. Additional photocopiers, public address systems, briefing room facilities, catering, phone and internet requirements may be necessary to ensure the smooth running of your competition.

#### **1.5 Organisational Team**

Each of these persons in your team is a volunteer and, while they may be reimbursed for actual and reasonable expenses, they must not receive remuneration. If a volunteer is compensated beyond reasonable expenses, the organization ceases to be a “Volunteer Association” and becomes a “Person Conducting a Business or Undertaking” – a PCBU – and the Health and Safety at Work Act becomes enforceable.

Working together is prerequisite to ensuring a successful competition. It is recommended that the organisational team should include some people who have been involved in running competitions before. Where this is not possible, the team should consider practicing, in advance, key areas of running a competition.

#### **1.6 GNZ Contest Details**

Regardless of whether your competition is a sanctioned National or Regional Championships, or a local event, the GNZ should be informed of the following details to facilitate the GNZ Events webpage being populated with the correct information:

- Name of Competition
- Start and End Dates
- Start and End Times
- Practice day(s)
- Organising Club and Club email address
- Organiser Name
- Organiser’s email address and mobile telephone number
- Classes

#### **1.7 Roles and Responsibilities**

To ensure that your organisation works together as a team, to run a safe and well organised competition, it is important that each role within the team is defined.

##### **Contest Director**

The Contest Director (CD) is appointed by the SRC. The CD:

- has overall responsibility for ensuring that suitable personnel, equipment and facilities are available for the efficient organisation and running of the competition.
- must be fully conversant with the GNZ Competition Rules and is responsible for ensuring compliance.

- should also double-check the daily competition tasks to ensure safe routing, especially of final glides.
- should maintain an overview of the competition to ensure that all elements are being brought together to achieve a successful competition.

### **Key Officers**

The CD should ensure the following key officers are nominated and available:

- Safety Officer (appointed by the ROO)
- Deputy Contest Director (it is desirable that a Deputy CD be named to avoid delay to the competition should the CD be unavailable)
- Task Setter

### **Control**

“Control” refers to the admin and communications centre of the competition. Usually, this would be a dedicated area set up by the host club and equipped to deal with all of the administration and communication tasks associated with the competition and used as a base and meeting point for the CD and Competition Officials. A well-run and well-equipped Control Centre is a major asset at a competition. While it is not necessary for operation of Control to be under a single individual, it does need to be run by competent people who are familiar with, or can be trained in advance, in the processes.

### **Additional Roles**

Additional roles will be required to run the competition. It is good practise to assign these roles to individuals; not only does this empower the individuals, it should allow the CD to maintain an overview of the entire competition. While one individual may take on more than one role it is important the Key Officers should not have additional duties placed upon them which may impact on their ability to perform their primary role.

Additional roles which will be required:

- Scorer
- Meteorological interpreter and presenter
- Launch Marshal / Chief Grid Marshal
- Chief Tow Pilot
- Catering Manager
- Social Organiser

In addition, it may be useful to have a dedicated Airspace Officer if there are significant airspace negotiations required pre-competition. However, the management of the airspace and airspace applications and communications could be integrated with another role during the competition.

## **1.8 Use of the Internet and Social Media**

The internet is pretty much inescapable for organisations wanting to run a gliding competition nowadays. It can be used for benefit in so many ways.

## **Competition Management**

You may wish to make use of the GNZ competition management package or you may prefer to set up your own home-grown system. Regardless of how you choose to do it, pilots will expect to be able to apply to enter your competition on-line.

### **Communication during the Competition**

The use of text messaging can be a valuable tool to reach everyone registered for the competition to pass on key information regarding briefing, grid and launch times and also decisions about delays or cancellations. The internet can also be a valuable way of distributing information to the pilots during the competition. Uploading tasks to Soaring Spot prior to the formal task briefing can allow pilots time to study the task. Alternatively, a home-grown website can provide a page that competitors can access to get information such as briefing times, grid-before briefing instructions, NOTAM files, etc.

### **Real-time Competition Reporting**

The gliding community nowadays expects to be able to follow competitions on-line. (It's about nurturing the dream). Don't neglect this side of things. Today's on-line followers may be next year's competitors. Publishing a competition blog and posting photographs can really enhance the reputation of your competition and your club. Specialist packages can be used, but a lot can be done with sites like Facebook, Soaring Sport and Flickr.

## **1.9 Entry Administration**

As soon as your competition is open for entries, you can expect to receive enquiries, entries and deposit payments. In order to ensure that these are handled correctly it is important that they are administered carefully. You may wish to consider a web-based system that can visibly show the status of pilots who have entered. It is recommended that pilots, crews, officials and volunteers all be registered on the Soaring Track on-line Contest Manager which supports GNZ Competitions and events. Consider having a separate bank account for monies received as reconciliation of the entry fees can be notoriously difficult if not administered correctly. However, more importantly, ensure that a protocol has been agreed with the host Club committee as to how competition communications and payments are to be handled; some competition organisations prefer to manage communications within the competition team, whereas others leave the communications and chasing of payments to the Club.

## **1.10 Local Procedures**

Rule 59 of the GNZ Competition Rules provides for Organisers to issue directions for the orderly conduct of the contest. These may be "*Local Procedures and Rules*" or "*Pilot Briefing Notes*". These local procedures and rules are subject to SRC approval to ensure that they do not conflict with the GNZ Competition Rules.

These are important documents that the organizing club will have to write and publish before the competition. Local Rules are normally published on the competition web-site or emailed to participants. If you don't already have a template for this document at your club, go on-line and have a look at some of the documents

published on other competition web-sites. This should give you an idea of what the competitors will be expecting.

An important requirement is that details of temporary airspace restrictions already announced at time of publication should be included in the Local Rules.

The Local Rules should include airfield access, circuit procedures, and start and finish procedures.

### **1.11 Publication of Competition Airspace Files**

These days there is almost universal use of moving-map displays as aids for navigation and airspace awareness. Many types of equipment are available and there is more than one format and several potential sources of airspace files. There is a strong possibility that pilots in your competition may be using airspace files which differ significantly from each other and (more importantly) from the file that you will be using for scoring and for checking for prohibited airspace penalties.

To help pilots to be on the “correct” airspace file and to avoid any misunderstanding, it is highly recommended that the airspace file which will be used by the organisation for scoring and infringement checking should be published. Pilots can, if they wish, make use of it themselves, or, if they do not, they will at least have been given the opportunity. Details of the file and where it can be downloaded should be given in the Local Rules.

If temporary airspace restrictions are known to affect your competition, you may wish to include these in your “Official Airspace File”.

### **1.12 Emergency Action Plan**

The pre-planning to the event should establish an *Emergency Action Plan* so that operational and communication systems are available for the possibility of an unplanned event. Templates for Emergency Plans are available from GNZ (AC 1-05) and the BGA at [www.gliding.co.uk/bgainfo/safety/forms/postaccidentguide.pdf](http://www.gliding.co.uk/bgainfo/safety/forms/postaccidentguide.pdf)

The host club should have an Emergency Action Plan in situ and this should be expanded as necessary. It is recommended that a copy be attached to the main notice board in the briefing area so that it is readily accessible to everyone during the competition.

It is recommended that this plan is known to all key personnel before the competition and areas that require testing are practiced, where necessary, before the start of the competition.

The emergency action plan should be able to deal with the following, non-exhaustive list:

- Off-site or on-site accident involving damage to one or more aircraft.
- Off-site or on-site accident involving injury or fatality to one or more persons.

It may be necessary to have a reactive press briefing available for any of the above and/or mechanisms to ensure that unnecessary media access to any incident does not impede the emergency services.

### 1.13 Risk Assessment

A risk assessment should be conducted to review likely risks during the competition and to enable strategies to be put in place to mitigate to avoid the risk. Appendix B to NZ CAA AC91-1 provides a Risk Assessment Guide. The GNZ is considering a new AC (AC 2-10A) which will provide a risk template covering generic risks at GNZ Competitions.

### 1.14 Competitors are Customers

One final, but very important, point is the need to treat your competitors right. You won't go far wrong if you just remember that they are your customers and treat them accordingly. They will have paid money to enter your competition and are likely to spend considerable sums at your club during the competition. They will probably have taken time off work and will be on holiday. It's your organisation's responsibility to make their experience as pleasant as possible. Don't forget that it's not just the flying that counts. Everything from the quality of communications, the club facilities, the friendliness of club-members and competition officials, to the quality of the catering and the availability of evening and scrub-day entertainments are just as important as the quality of the briefing and task-setting. If you want places at your competition to be in demand, you will need to pay attention to all of these things.

### 1.15 Top-Level Timeline

The information contained in table 1-1 provides an overview of the major decision and action points that need to be addressed by a club wishing to organise a competition.

Table 1-1: Decision and Action Points for Organisers

When	What	Who	Notes/Detail
On decision to bid for a National or Regional Championship Event	Prepare Bid and submit to SRC (see GNZ AC 2-10 for guidance)	Host Club	Submit competitions details to the SRC by the requested date
On Decision to Host Local Event	Register your competition with the SRC	Host Club	Submit competitions details to the SRC by the requested date
9 months to 1 year ahead	Appoint Organising Committee (OC) and CD	Host Club	See "Organisational Team" in Part 1 of this Guide.
ASAP	Decide entry numbers and whether single or multi-class for a Local event	OC CD	This could be flexible depending on entry numbers, but needs to be planned
ASAP	Read the Organisers Guide and GNZ AC 2-10 from Cover to Cover	ALL	Anyone not experienced in running competitions.
Periodically until Competition opens	Organising Committee Meetings (in person or as on-line/ telephone conferences)	OC	Develop action plan based on main headings below. Review progress against plan. Take prompt action to contain slippages and rectify problems.
ASAP	Allocate Official Roles and review other manpower requirements	OC CD	See "Roles & Responsibilities" in Part 1 of this Guide. Try to arrange that every key role has a back-up in case of illness or absence during the competition.

ASAP	Review infrastructure and site facilities	OC CD	Identify any weaknesses and develop plans to rectify, if necessary. See “Infrastructure Arrangements” in Part 1 of this Guide.
ASAP	Review tug availability	Chief Tow Pilot	Take early action to source any additional tugs that will be required. See “Launching Capabilities” in Part 1 of this guide.
ASAP	Review Communication and Radios	OC	See “General Communications” and “Competition Radio” in Part 2 of this Guide
ASAP	Start work on Catering, Entertainments and Social planning	OC	Develop catering plan and a programme of events for scrub days and evenings
ASAP	Decide Entry Fee, Deposit amount and due dates and policies regarding discounts/refunds etc. Identify any other charges you plan to make (e.g Caravan sites, bunk house fees etc.)	OC	Make sure you anticipate any questions you might be asked by potential entrants
ASAP	Set up Admin system for management of entries and receipt of fees. Include procedure for management of a waiting list if the competition fills up	OC	See “Entry Administration” in Part 1 of this Guide. Make sure you have this in place before publicising your competition
ASAP	Publicise Competition Dates, Entry Fees etc	OC	Several routes are available for this, although the GNZ website and the Internet is now the default medium. See “Use of the Internet and Social Media” in Part 1 of this guide.
ASAP	Organise meeting(s) with the area Airways manager to confirm and agree airspace requirements and arrangements. Notify the GNZ Airspace Committee of the intended requirements.	OC	See “Designation of Competition Airspace” in Part 2 of this Guide
As entries are made	Acknowledge entries and the receipt of deposits and balances by email	Comp Admin	Don’t leave your customers in the dark.
If competition becomes full	Monitor and manage waiting list	Comp Admin	Keep waiting-list pilots informed. Communicate promptly when places become available. Don’t leave them wondering what is going on.
In Good Time	Prepare or Review Emergency Action Plan	Safety Officer	See “Emergency Action Plan” in Part 1 of this Guide
Quarter 1 of Competition year	Familiarise with Changes to the GNZ Rules for this year and review any Organisers’ Briefing Notes from the GNZ.	CD	Ensure rest of team is briefed where necessary
NLT <sup>8</sup> 3 months out (plus SUP publication deadline)	Apply for a SUP to notify the competition to other users. Determine if NOTAMs may be required during the competition and prepare a template for use.	Airspace	See “Designation of Competition Airspace” in Part 2 of this Guide

<sup>8</sup> “No Later Than”



NLT 2 months out	If Competition Airspace file is to be used, make necessary arrangements to provide it.	Airspace	See "Publication of Competition Airspace Files" in Part 1 of this Guide.
NLT 2 Months out	Write or update Local Procedures and/or Rules including Airspace Information	CD	See "Local Procedures" in Part 1 of this Guide
NLT 3 weeks before start	Publish approved Local Procedures/ Rules with advance airspace information	CD	
NLT 3 weeks before start of Competition	Publish Competition Airspace file	Airspace	See "Publication of Competition Airspace Files" in Part 1 of this Guide.
NLT 1 Week Before Competition	Conduct final run-through of processes and systems.	OC	While there's still time to fix any problems
Last few days	Set up competition infrastructure: Control, Briefing Areas, Signage, etc.	OC	Consider other infrastructure requirements such as camp sites, toilets, water ballast points, waste management.
Day prior to 1 <sup>st</sup> Competition Day	Registration	Control	See "Registration" in Part 2 of this Guide
Opening Day Briefing	To include housekeeping, site and local airspace information, rule changes since last year and introduction of Comp Officials. Consider appointing a Pilot Safety Committee (PSC). Show Prizes and Trophies.	CD	Site and local airspace info may need repeating or emphasising at daily briefings
ASAP during Competition	Initial meeting with PSC to confirm Terms of Reference (if established)	CD	See "Pilots' Safety Committee" under "Safety" in Part 2 of this guide.
Daily After Briefing	Publish any NOTAM required for the day	CD	See "Designation of Competition Airspace" in Part 2 of this Guide
Daily During Competition	Publish results at appropriate level. Provide competition information via Competition Blog or similar service	Scorer/As appointed by Director	Don't underestimate the value of keeping the world at large informed about your competition.
ASAP after the competition	Submit Director's report to GNZ	CD	See "Director's Report" in Part 4 of this Guide.

## **PART 2 – DURING THE COMPETITION**

### **2.1 The Role of the CD**

The CD must be thoroughly conversant with the GNZ Competition Rules if running a National or Regional Championship. Once the competition gets underway, the CD is responsible to see to it that all the resources of the organisation work together to make best use of the available time and weather while achieving the standards of safety and sportsmanship expected; all while staying within the Rules. See the Reference Section for an example of the [daily schedule](#) at a competition and the activities that have to be managed and the decisions that have to be made.

The CD also is responsible for the safety of all competitors and must exercise an appropriate duty-of-care at all times when they are under his/her control.

### **2.2 Competition Control**

It is good practice to designate a room or area to be used exclusively as an office/meeting area for the duration of the competition. As well as providing an office environment for the administrative tasks that have to be performed and a place where competition officials can meet, it is helpful as a focus for all of the organisational issues that will arise during the competition. It also ensures that competitors have a place to go to for help or advice.

#### **Central Information Point**

Control is where competitors and others will expect to get answers to questions or make contact with the Organisation. It is also the place where messages to competitors and others can best be managed. As the message hub of the competition, it is the ideal place to site:

- Competition telephones and computers.
- Air Band Base Station (for pre-launch announcements and start, finish line and flight following communications, but see “Start and Finish Line” below))
- Ground Radio Base Station (for contacting competition officials out on the airfield)
- PA system (for making general announcements in the communal areas)

Ideally the control centre should be manned throughout the competition day. It should be lockable.

#### **Start and Finish Line**

It is essential that gliders in the air are able to receive clear, readable transmissions from the organisation on the ground. Start and finish radio communication is best carried out using a base-station with a decent aerial to ensure adequate range, rather than less powerful hand-held radios. It is good practice to site the equipment near the control centre. Consider the effect that running the start/finish line radio from a busy control centre or public viewing area might have on the person trying to concentrate on managing the radio. Some clubs use their launch vehicles (they often have good radios already installed) or another isolated area to manage the start/finish radio, away from the noise of the competition office and control.

## Starts & Finishes

Although scoring is done exclusively from flight recorder files, start, finish and landing times should be recorded as they happen. Apart from the obvious safety implications of knowing whether a glider has started or finished and landed, the recording of this information allows crews and others to keep abreast of the progress of the competition (especially if it is published on the internet) and may also allow faster calculation and publication of preliminary scores.

## Landouts

One of the most valuable tasks of the Control Centre is the coordination of landout information. There should be a dedicated telephone used for this purpose with the number printed on all task sheets every day, along with at least one back-up number. Clear procedures should be in place for the reception of landout information and to ensure that it is passed to crews accurately and without delay. Records should be kept of all landouts and the progress of the returning retrieve teams so that all gliders and pilots are accounted for before the end of the day.

The Organisation is responsible for invoking the emergency procedure in the case of a missing aircraft. It is, therefore, ABSOLUTELY NOT ACCEPTABLE to permit competitors to contact their crews and arrange retrieves without involving Control. The landout reporting procedures should be stated in the Local Rules and emphasized at briefings. Consideration should be given to applying penalties, if necessary, to enforce this.

## Flight Recorders (FRs)

With the increased use of removable memory devices and email submission of FR files, there is much less need to manage the reception of FRs. However, not all pilots have the most modern equipment or the ability to email traces, so provision should be made to receive recorders and removeable memory devices after the finish and keep them securely, possibly overnight.

## 2.3 Registration

GNZ Nationals start on a Saturday, with the Practice Day of the Friday. All GNZ Regionals and Ad Hoc competitions start on a Sunday, with the Practice Day on a Saturday. Competitors can be expected to arrive during the Practice Day. The competition cannot start until the registration process is complete so the time available is potentially limited to the few hours available on the Practice Day evening, with a very short period to deal with stragglers on the first contest morning. If the weather looks good on the first day, no-one is going to be pleased with a delayed briefing caused by late registrations. Pilots generally understand this and cooperate, although there will be the odd one or two who genuinely can't get to the site until the morning of the first contest day. Whatever happens, a major priority for the Organisers is to ensure that they are on the ball and are NOT the cause of any delay.

Here are some key points to cover in your planning for that all-important registration window:

- Registration area clearly signposted?
- There will be a queue, can you provide seats?

- Have a checklist so you don't forget to do everything with each competitor.
- You may be taking money (balances of fees and/or launch pre-payments). Have you got a process for this? Have you somewhere to put cash and a process for dealing with EFTPOS card payments?
- Do you have a pre-prepared file for registration forms and other competitor information?
- Is there an on-line contest management system available to capture the registration details for competitors, crews, and volunteers?

If you are using a web-based competition management system, you will need to have a computer with Internet access at the Registration point and someone trained in its use.

All registered GNZ competitions should have an on-line entry registration form on the Events page of the GNZ website. Those registration forms are completed online and the submission of a registration requires acknowledgement of the terms and conditions. Organisers may create their own online form as necessary as long as it contains all the details on the GNZ form as a minimum requirement including declaration.

Electronic records must be retained after the event in case of follow-up action being necessary.

Entry is open to any pilot who is a qualified and financial member of a gliding organisation affiliated with GNZ. For National Championships all pilots-in-command must have previous competition experience as pilot-in-command at a Regional Championship, a National Contest, a "Novice" Class or similar. For Regional Championships all pilots-in-command without previous competition experience must hold an XCP. Exceptions can be made for a Soaring Pilot who has a written endorsement of their entry by their Chief Flying Instructor.

## **2.4 Safety**

For some clubs, launching and landing arrangements for a competition may not be too different from their normal activity. However, for some, the arrangements for launching and landing during a competition may require additional measures to be put in place to ensure that flight safety is maintained.

These measures must be included in the local arrangements that were introduced during the pre-planning stage of the competition organisation.

### **Launching and Safety**

Launching any size of grid can be completed in a safe and timely manner if a well-organised system is introduced, and practiced, by the organising team. Think about planning a visit to another competition to see how they do it if your launch team is inexperienced.

Problems commonly arise in the following circumstances:

- Significant land-backs during a grid launch
- Launch failure during grid launch

- Re-grid following the abandonment of a task
- Launching of an alternative class to that gridded
- Relighting gliders during the finishing of another class task
- Change of vector due to a significant wind shift
- Managing itinerant aircraft visiting the airfield

Although it is difficult to foresee all scenarios, a pre-planning 'desktop' exercise to think through potential problems can help ensure your launch team don't get taken by surprise.

A common problem during launching is that of ensuring that the grid area is clear of obstacles (people, cars, wing stands etc) during both launching and afterwards if it will be an operational area following the successful launching of the grid.

All airfield users should be made aware of competition arrangements so that the airfield operations are not compromised at any point during the period of the competition.

### **Finishing and Safety**

All airfield users must be especially vigilant during finishing. The competition rules require that the finish procedures are clear to competitors but it is recommended that this is also communicated to all parties to ensure that finishing can be co-ordinated with other operations occurring at the site. A 'fail safe' system should be utilized to prevent communication errors occurring in any procedure that is developed locally to deal with ground and air operations. A risk of an incident is increased significantly if procedures are not established for the following, but not exhaustive, scenarios:

- Finishers that have lost radio communication
- Finishers that use the wrong finish line
- Finishers that land on a non-active runway
- Finishers that finish in opposing directions to the normal operations
- Finishers that finish in a pre-briefed pattern which conflicts with current operations.

The CD, Safety Officer or a designated person, should monitor all finishers and landing aircraft to ensure that the conduct of flying is continually observed and to enable communication, where necessary, with landing aircraft. Staffing and briefing of finish line officials should reflect this requirement.

A fail-safe system should be in place to ensure that normal, abnormal and emergency situations that occur at the airfield during finishing can be communicated via the finish line for further action by the organisation or other airfield users.

### **Pilots' Safety Committee (PSC)**

While the GNZ Competition Rules do not require that a competition has a Pilots' Safety Committee, it is recommended that this be considered. Normally this would be a group of three pilots selected by their peers via a vote at the first briefing. The

role of this group is to provide a peer-group forum to promote safety and airmanship standards at the competition as well as dealing with complaints arising from lapses in those standards without necessarily involving the Organisation.

- **Suggested PSC Terms of Reference**

- The PSC is empowered to investigate complaints about safety and/or flying standards of all aircraft and pilots involved in the competition, including tugs and tug pilots, but may, at their discretion, investigate and take action in the absence of a complaint, when they judge that it is necessary to do so.
- The PSC has wide discretion in how it deals with issues and complaints but may give verbal or written warnings to individuals where they consider it appropriate. This would not normally involve the Organisation, or be brought to the attention of the organisers.
- If, however, the PSC judges that an issue or complaint is particularly serious, or that action by the Organisation is required, it may bring the matter to the attention of the CD. In this case, the PSC may recommend that a competition penalty or penalties be imposed. The CD should be guided by the recommendation in deciding whether or not to impose a penalty.
- The PSC should not involve itself in any matter other than that related directly to Safety and Flying standards.

Since the PSC is elected at the first briefing, at a time when they, along with the rest of the competitors, quite naturally have their mind very much on other things they may not give sufficient attention to the matter unless a safety issue actually arises. CDs are therefore requested to make sure that, as early as possible in the competition, they meet with the newly-elected PSC as a group in a quiet, undisturbed location. At this meeting, the above terms of reference should be run through to ensure that all members understand their role.

Since it is necessary that all pilots and PSC members alike are aware of these Terms of Reference, CDs are also advised to publish them to all participating pilots in advance of the competition and to display them prominently on a notice board during the competition

Any penalty the PSC may recommend is intended for application in cases where poor airmanship/dangerous flying is displayed to reporting pilots despite previous advice from an earlier reported incident. CDs must not regard the recommended penalty as one that they must administer where no other suitable penalty is available. The CD has full and final responsibility to decide whether to actually administer the penalty if given a recommendation to do so.

## **2.5 Airfield**

As with all airfield operations it is important to establish a safe environment for all people: competitors, crews, organizers club members and visitors.

## **Airfield Boundary**

The airfield boundary must be made clear to all relevant personnel (landowners and members of the public) to ensure that air law requirements will be complied with during the competition.

Great care should be exercised in defining the boundary of the airfield taking the following key factors into consideration:

- Legal status
- Landowners' permission
- Airfield insurance cover
- Public safety (access and Health and Safety)
- Aviation safety

## **Responsibility for Airfield Operations**

The airfield operations, outside of the times of competition flying, remain the responsibility of the Chief Flying Instructor (CFI) of the host Club. During the competition flying the CD fulfils the responsibilities of a CFI.

If other club operations are occurring at the same time as the competition, the CD must ensure that these are co-ordinated in a safe and efficient manner so as to prevent any conflict with the safe running of the competition.

The Club should ensure that normal club operations are managed to ensure the safe co-ordination with the competition. It is recommended that CD, or a deputy, co-ordinates with any instructor who has been delegated the task of running club or non-competition operations during the duration the competition. This should ensure that the safety aspects of glider movements during the gridding process are not compromised.

## **Local Arrangements with Adjacent Airfields**

Where adjacent airfields may be impacted by the competition the CD should ensure that local arrangements are agreed before the competition and, where necessary, communicated on a daily basis.

If an adjacent airfield is designated as a "re-light airfield" the activities of competition gliders and tow planes must be coordinated with the local CFI.

## **Airspace Mailing List**

To ensure that airspace is co-ordinated on a daily basis it is recommended that an emailing list is established so that daily tasks (provided in an agreed format) are circulated to all interested parties as quickly as is practicable. This does not negate the need to follow the requirements set by the Airways New Zealand and the CAA, including the publication of SUPs and NOTAM. It is recommended that the club advertises any additional services that it has implemented locally and nationally to ensure that the information can be promulgated to as large a group as is possible.

## 2.6 Airspace

The pressure on airspace continues to increase, and our freedom to use what remains available is under constant threat. It is vital therefore, that we are seen to use the airspace with common sense and respect for others.

Depending on the complexity of the airspace requirements, it may be advisable to appoint an Airspace Officer. This role should be given the highest of prioritisation and support given the reputational risks of mis-identification of airspace for task setting. A dedicated individual, fully conversant with airspace issues provides a valuable conduit to the Air Traffic Service providers in the area.

### Designation of Competition Airspace

The GNZ Airspace Committee is responsible for applying for, managing and negotiating airspace use. Anyone wanting to apply for airspace should liaise with the Airspace Committee first (contact details are on the GNZ website contact page).

Well before applying for any airspace the Organisers should meet with the local area Airways managers to ensure everyone is agreed about what is going to be applied for, and the dates. Those meetings should be referenced on the airspace application. During these meetings any adjustments needed to the MoU that GNZ has with Airways can be actioned, which dictates the procedures for using the areas during the event.

Airspace requests go to CAA using their airspace application form, which can be found at <https://www.aviation.govt.nz/airspace-and-aerodromes/airspace/airspace-forms/>

The Organiser should create the SUP, including all text and diagrams for CAA for them to confirm and accept. Routinely, the detail can be copied from previous applications for the same site.

The application must be made at least 90 days before the event starts, and more importantly, before the AIP supplement cut off deadline. The AIP deadlines are monthly (*so the lead time could in fact be 90 days plus 30 days for application*) and are published annually. The deadlines for the coming year may be found by goggling “AIPNZ Update Cycle”

This airspace application is only for non-permanent, temporary contest airspace. If you aren't using any temporary airspace, then you don't need to apply in advance. So, if you're only using existing published G areas during your event, then no application is needed.

R (Restricted) areas need to be NOTAMed the day before. This is done by emailing the NOTAM [office\\_notam@airways.co.nz](mailto:office_notam@airways.co.nz). The R areas have to be already defined in the AIP NZ.

Finally, the contest or event, if not added to the AIP SUP as a result of the airspace application, should be NOTAMed instead to ensure other users awareness.

### Publishing Tasks to the Gliding Tasks website

Tasks can be automatically picked up from Soaring Spot for competitions using SeeYou for task setting and scoring, or added manually. See the website for details.



Competition organisers are asked to ensure that tasks are published on this website as soon as practicable on each flying day.

Please also continue to liaise with any other airspace users who may be affected by your flying.

### **Prohibited Airspace**

Pilots should be reminded that penetrating prohibited airspace will be penalized in accordance with the GNZ Competition Rules. The exceptions to this are when:

- entry was made in order to land safely and that a landing was made promptly while inside the zone, and
- the CD is satisfied that the entry was made with the permission of the appropriate ATS unit and obtained before the entry took place.

The penalties associated with airspace infringement are simple and severe. This is to further discourage the infringements that regrettably still occur.

Task setters should give consideration to avoid setting task legs near to any low airspace where the prevailing wind is likely to drift a pilot into it if soaring conditions become unexpectedly difficult.

### **MBZs and Transponder Mandatory (TM) Airspace**

When in the vicinity of an MBZ pilots are encouraged to make their presence and intentions known by making a radio call on the appropriate frequency. When flying in TM airspace, gliders must turn their transponders (TCAS or ADS-B out) on.

## **2.7 Task-Setting**

Task setting is all about planning the task length and shape to optimise the opportunities on a given day. In New Zealand, with the combination of high terrain, significant controlled airspace in some areas, challenging microclimatic weather conditions and sometimes short soaring 'windows', the role of the Task Setter should not be underestimated.

Setting an appropriate task means considering the right balance for the range of glider handicaps, the variations in pilot ability, airspace restrictions and the length of the soaring day. The seriousness of potential airspace infringements, from a reputational perspective, should be considered at all times when designing tasks on any particular day.

A good task should give all competitors a fair race with a minimum of luck and guesswork. Whilst it is undesirable to 'waste' a good day by under-setting the task, you should also attempt not to over-set - making it impossible for competitors to finish. This is particularly true when it only affects the pilots flying lower performance aircraft.

Attempting to set tasks to generate a 1000-point day only for the day to become 'devalued' is misguided. If the weather conditions dictate a short task length of 150km, then this is what should be set. It would be better for all concerned if a shorter task is chosen, thus allowing the pilot some flexibility on start time, and still race in reasonable conditions using most of the available day. Please bear in mind

that you're unlikely to get disgruntled pilots' if they have completed a fast 300km, but you will if they fail a struggling 400km!

With that in mind, tasks should be designed not to maximise the distance flown on a particular day but to establish, by the end of the competition, that the winner is the fastest pilot. However, where soaring and a successful grid launch can be guaranteed by mid to late morning, a longer task should not be ruled out.

The key to setting a good task is to establish what the meteorology information suggests is the 'rough area' where the task should be best set and the probable 'length' of the soaring day.

This should be done at the earliest opportunity on a particular day; although options may be forming 24-48 hours before.

The next action is to decide what type of task is required. There are two long-established course types recognised and defined in the GNZ Competition Rules: the Racing Task and the Assigned Area Task (AAT).

AAT are intended to allow competitors the opportunity to make the best use of soaring conditions and should be set only when good uniform soaring conditions are forecast across the whole task area to avoid the results being unduly influenced by luck.

The AAT task is a valuable test of skill for pilots in uniform conditions but care should be taken to ensure that the design is carefully thought out and limits the degree of chance that can be created with the setting of this type of task. AATs can be a good option when there is a large variation in glider handicaps and can also make a welcome change from fixed course tasks.

In general, where conditions are unlikely to be uniform, a Racing Task should be set.

Some pointers to assist with setting the task are:

- a) Check the met forecast and discuss this with your 'Met man' at the earliest opportunity. Decide the rough area where the task should be set and also the best finish direction given forecasted wind. At this point you may have decided what type of task (AAT/Racing) is appropriate.
- b) Establish the Permanent and Temporary Airspace that will impact on the task. In most cases the airspace identified the night before may have not significantly changed but re-confirm what temporary airspace may impact the task before starting task planning.
- c) Decide when the start line is likely to open. This will be approximately an hour after the first launch. First launch depends on how the day develops but may be delayed by the requirement for briefings, getting everyone on the grid, and the inevitable other delays that may occur due to weather. On the first flying day of a competition there are the additional risks of delays due to pilots being unready and also potential organisational issues such as grid launching.
- d) Decide when the pilots need to finish by. Does the met briefer envisage the day continuing into the evening or shutting down early for any reason? Is any weather arriving to spoil the day? This, of course, comes with experience but

where thermal strengths are likely to deteriorate due to top cover approaching from a warm front then it is useful to consider this issue, in combination, with any significant head wind that might impede progress on the later stages of the task.

- e) Estimate the achievable cross-country speed taking into account glider and pilot performance. This will be based on thermal strength and cloud base but must also allow for positive factors such as thermal streeting and negative factors such as blue holes.
- f) Estimate the potential task distances achievable. The combination of available task time and predicted cross-country speed gives an estimate for the potential task distances achievable. For Racing Tasks, this calculation should be based on the slower pilots in the lower performance aircraft. With AATs, lower handicappers will not be required to fly the same distances as the high-handicappers and this can be taken into account.
- g) Decide Distances and Task Shape. From your rough estimation of achievable task distance, you should be able to design a task within your task setting programme that can be shaped to coincide with the area where the best weather is likely to be available. The available task area and the desired task length will influence the overall task shape and whether the task has to be folded to fit (creating 'arrow' or 'bow-tie' shaped tasks). If the wind is strong then consider predominantly up and down wind. Running streets is fun but struggling crosswind can be demoralising. Inbound and outbound tracks at turning points should be separated as much as possible as lookout may be compromised close to turning points.

Excessive numbers of turning points should be avoided although it will sometimes be necessary to add control points to ensure adequate clearance from airspace. Don't make the mistake of trying to use standard turn point types as control points to define the boundaries of an AAT. All zones in an AAT are normally based on a radius from a turn point and the distance flown inside them will count. You may want to emphasise this point during briefing.

In general, when setting Racing Tasks, 2 or 3 turning points will be adequate unless weather and airspace require additional turn points to 'fold' the task into the available soarable window or airspace.

Take particular care to avoid setting task legs close to very low airspace where the prevailing wind may encourage pilots to get pinned against the airspace boundary when conditions are unexpectedly poor thus encouraging accidental infringements.

### **Fall-Back/ Alternative Tasks**

A number of fall-back tasks should also be set just in case the day does not develop quite as predicted. It is preferred that this is done without significantly changing the shape of the task by using turning points that are close to the original task line. When using this approach be careful that this does not result in task legs becoming closer to prohibited airspace.

To minimise planning and pilot stress it is often possible to do this by changing or removing one turning point of the original task at a time. This approach can also minimise the work involved when multiple classes are being tasked simultaneously as fall-back tasks for one group can become primary tasks for another.

It is recommended that fall-back Racing Tasks are set that are incrementally reduced in length to take into account of delays in launching the grid. Every 30-minute delay, to the primary task 'window' is approximately equivalent to 30-50kms of task length. This can be done similarly for AATs by reducing the time on task by 30-minute increments, but do be careful that the minimum task distance is still achievable in the time available.

### **SeeYou and Task Sheet**

By this stage, the Task Setter(s) has defined the task area, the task length and the finish direction. It is time to fire up a task setting program and start creating the task sheet. It is important that SeeYou is set up before the competition begins with current airspace information and the current competition turning-point list. It may be useful to add templates for different task types, turning point types and finish line directions. This makes the design of the task on a particular day relatively straightforward and takes away the potential for introducing errors.

It is also advisable to add any temporary airspace for the day. This will enable tasks to be set more readily with reasonable separation of turning points and track lines from airspace boundaries.

Once the primary and fall-back tasks have been selected, it is important that they are reviewed by someone who has not been involved in the task setting process. This provides a sanity check and should especially check for any problems with airspace and achievable task length. The CD may wish to do this.

An example of the format for the task sheet derived from SeeYou is provided in Part 4 of this document including some guidance on how to create them in SeeYou.

It is important that the information provided on the task sheet is accurate. In particular it is recommended that the following points should be checked:

- Task designation is explicitly clear
- Turn point names and co-ordinates are provided as per the format in the competition turn point list
- The observational style description is included; normally a circle of specific radius (see example)
- All airspace areas (GAA, Restricted) available for competition flight is detailed
- All prohibited and TM airspace, and ATZ information, is detailed

In most cases the Task Sheet can be on one piece of A4 paper, but where additional tasks are required, this may require additional task sheets to be produced. It is recommended that different colour paper is used for each class and remember that people such as the Grid Marshall, CD and others will also require copies of the task sheet when deciding how many to print. Note that with Club Class Grand Prix task (see below) the distance required to be achieved by each aircraft/ handicap group should be identified.

Where there is any doubt on the weather, and task shape/length, it is best to delay briefing until the most appropriate task can be configured. Attempting to rush a task

to meet a briefing deadline could ultimately end up in the best task for the day being missed or, worse still, the day being scrubbed.

A template task sheet should be prepared in advance that can be used daily to check the task sheets prior to photocopying. Include a checklist to ensure that all details are updated with the day's relevant information and check that details have not been inadvertently copied from the previous day.

As the day develops, the Task Setter, in dialogue with the CD and Met briefer, should review the tasks and select the appropriate one for the conditions. This may be the primary task, one of the fall-back tasks or a totally different task which is subject to a briefing at the front of the grid. Briefing on a new task at the front of the grid brings on a number of other challenges, and risks that should be carefully thought through before taking forward.

The GNZ Rules permit airborne tasking as an option provided the pilots have prior warning at the briefing and the "new" task has been previously promulgated as an option. The risk with airborne tasking is that a pilot may fail to hear the communication announcing the new task.

At the end of the day, it is useful to the Task Setter to discuss the day's task with the pilots so that lessons can be learned for the rest of the competition.

## **2.8 Grand Prix (GP) Handicapped Task**

The GP task is a combination of a Racing Task and an AAT. It is suitable for task groups with a moderate handicap range.

The differences are that all gliders "start" at the same time and the distance that gliders are required to fly on the task is corrected for their handicap.

Assuming a triangular task is set, with two turn points, the required distance adjustment is achieved on the first and second legs; the third leg being the same for all gliders. A circular Assigned Area is placed over, normally, the first turn point; the second and any subsequent turn points being a conventional "beer can". The handicapped distance is achieved by turning within the Assigned Area at an appropriate distance from the second turn point; lower performance gliders turning earlier than the higher performance aircraft and so fly a shorter task.

An approximation of the correct position to turn in the Assigned Area can be achieved by turning at an appropriate distance from the centre of the Assigned Area to shorten legs one and two to achieve the required handicapped distance.

Higher performance gliders can be expected to gradually fly away from the lower performers on the first leg; the lower performers will turn in the Assigned Area at about the same elapsed time (but shorter ground distance) and all gliders should come back together on the third leg heading to the finish line.

Assuming optimal performance by all pilots, the time on task should be the same for all gliders with the shortest time on task winning, so the day ranking becomes obvious as soon as finishers arrive. Low performance gliders can stay "in touch" with high performance aircraft for much of the race, making it more fun for everyone.

## Setting Tips for GP Tasks

Task-setters need to take special care to ensure that gliders at one extreme of the handicap range are not disadvantaged by having to negotiate airspace or weather conditions that gliders at the other end of the range won't encounter.

## Briefing The GP Task

Since this is a new task format, not all pilots will be familiar with it. It is imperative that all pilots should be thoroughly briefed. The concept is relatively simple and should not present too many problems for pilots, but the format does imply a change of tactics and, for the sake of fair play, pilots should be given the time to think through the implications and to ask questions.

The following points must be made clear to all pilots:

- Each pilot's required task distance is fixed and unique to their handicap in each task.
- Unlike a pure Racing Task, the distance required may have to be achieved by flying into the "beer can(s)", not just clipping the edge.
- Every new task, including alternates on the same day, will mean a different required task distance for them.
- Make sure they know their task distance and the radius that defines their turning options within the Assigned Area before they launch.

## 2.9 Daily Briefing

The daily briefing and the use of task sheets is the only way of ensuring that the pilots have the correct information for the task that they fly. The organisation of the task, bringing together task design, airspace co-ordination and meteorology information should not be spoilt by a poorly run brief and inadequate task sheet.

Pilots are reliant on that information being correct to provide a valid flight and to ensure that flight safety is not compromised.

Critically important is the requirement to brief Airspace restrictions, exemptions and hazards that might affect competitors.

Where an additional airspace restriction is in force and hence briefed and there is a possibility that tasking could take a pilot close to such airspace, the organisation should provide sufficient detail to allow pilots to create electronic files for their navigational instruments. You should consider providing this detail when known at the beginning of the competition. If this is not possible and the additional airspace design is not a simple circle, tasks should not be set where there is any realistic likelihood that such additional airspace may be infringed.

Pilots entering a GNZ sanctioned event should be fully conversant with the normal airspace in the task area as published and in force all the time as described on a current 1:500,000 aviation map. It is always helpful to amplify this knowledge by verbally briefing the various standard airspace considerations in the area likely to be flown in on each of the designated tasks. However, contest organisers have a duty of care and must fully advise pilots giving appropriate detail of any additional prohibited

airspace notified by SUP or NOTAM that may be encountered on task. It is not realistically possible in a contest situation for the pilots to check all SUPs and NOTAMs themselves. They are rightly reliant on the organisation for a full and unambiguous briefing of temporary additional restricted or prohibited airspace that may be relevant to the intended flight.

See the Part 4 - Reference section for details of the minimum content for [task sheets](#).

## 2.10 Met Briefing

Met forecasting is essential for task-setting. However, it is also essential information for pilots if they are to make the best of the day.

Minimum weather information such as wind speed and direction, cloud base, thermal strength and expected cut-off time, etc should always be provided at morning briefings. Best-practice, however, recognizes that a pilot who has a good grasp of the synoptic situation is better-equipped to make tactical decisions when faced with changing weather in the task-area and this is one of the key skills that separate champions from also-rans. For this reason, organisers should make every effort to provide as high a standard of met briefing for the pilots as they are able.

A qualified aviation meteorologist on the team is, of course, the gold-standard. However, with the excellent met information available on the internet nowadays, it is not at all necessary to have a meteorologist (amateur or otherwise) on-hand to be able to deliver a high-standard of met briefing.

Many pilots are quite capable of self-briefing to an acceptable standard using these modern tools and this will be true of many of your competitors, but it is often difficult to do this effectively in a competition environment, so a briefing to at least the same standard should be given.

As a minimum, the organisation should seek to prepare a short presentation each day containing the information that such a self-briefing pilot would normally use.

The most commonly-used internet sources are:

- **Skysight** (a subscription service) <https://skysight.io/>
- **Top Meteo** (a subscription service) <http://www.topmeteo.eu>

Forecast and weather information is freely available from the NZ Met Office at [MetService - Te Ratonga Tirorangi](#)

and at [How to access aviation weather information | aviation.govt.nz](#)

- **RASP** is an additional, free, facility ([DrJack RASP BLIPMAPs for New Zealand](#))

## 2.11 General Communications

Good communication with everyone at your competition is essential. Competitive fairness goes out of the window the moment any pilot fails to receive information that he or she needs for the competition and everyone's enjoyment is threatened when stress-levels go up due to poor communication.

The trick here is belt and braces. Never rely on a single medium for delivering a message.

### **Key Competition Communications:**

- Grid Order: Handed out at initial briefing and Posted on Notice Boards
- Grid Before Briefing: On Main Notice Board; on Website; by Text Message
- Briefing Time: Nominal daily briefing time in Local Rules with changes advised by Notice Board; on Website; by Text
- Earliest 1st Launch Announced at briefing. Changes on PA; Competition Frequency Airband; Text Message
- Rebrief Announce on PA, Airband, Text Message

## **2.12 Competition Radio**

Radio Communications can be largely be split into 3 areas: organisation, competitors and crews, and other airfield users.

To ensure efficient transmission of communication to all key organisational staff, it is recommended that ground to ground and ground to air radios are used. Where possible, separate frequencies should be established to ensure that clarity is maintained in normal, abnormal and emergency operations.

Radio frequencies for communication with tugs, competitors, and other airfield-based gliders should be established beforehand so that conflicts with other competitions and other gliding operations are avoided and so that key safety messages can be communicated to all relevant aircraft expeditiously.

## **2.13 Use of Radio and Digital Communications**

The GNZ Competition Rules are clear about communication between pilots and crews. The use of radios and digital communications is intended to:

- enhance safety, and
- preserve the spirit of fair competition between pilots without external assistance, and
- minimise distraction, with all its safety implications, from the increasing availability of in-cockpit Internet and messaging services on mobile devices

Obtaining tactical data from outside sources that are not available to all competitors is unfair and using mobile devices is unsafe.

Obviously, penalties should only be given when there is strong evidence that the rules have indeed been broken. If the rules are being broken, it is expected that it will eventually become evident and peer pressure will play a large part in keeping people honest. The Pilots' Safety Committee could have an obvious role to play here.

It is suggested that CDs adopt the following approach to these requirements are follows:

- detailed briefings to make it quite clear what is allowed and what is not
- occasional random equipment checks may be used to reinforce the rules



## **2.14 Gridding**

### **Safety**

It is good practice to have all persons working within the grid area wearing high-visibility vests. This lets everyone else, including the tow pilots, know who they are and lets them spot each other amid the throng of crews and onlookers.

### **The Purpose of Forming a Grid**

To minimise the role of chance in the competition, it is important that the entire field should be launched within the minimum time and that launching should start exactly when the CD intends and be completed as quickly as possible. It is also important that gliders are launched in the order required by the rules. Mustering the gliders together in a grid at the launch point makes all of this possible.

### **Grid Order**

Grid order determines launch order. Pilots must be informed well in advance what their grid order for the day is. The usual practice is to allocate gliders to a “Cone Number” and move the numbered cones, marking the position of each row, from day to day. An individual glider always aligns with the same cone number. This lets the grid form automatically in the right place and in the right order without help from the marshals once the cones have been set out.

### **The Shape of the Grid**

The shape of the grid (how many rows and columns) will be determined to some extent by size of the airfield and the launch area. However you do it, leave access lanes between columns to allow later-arrivals to reach their allocated row and to allow pilots who refuse a launch (before the grid is compressed) to extract their glider and get to the back of the grid or the designated relight area.

### **“Heavy” Column**

If you have a mixed-class field containing some large gliders and only a few powerful tugs, consider designating one of the columns for the heavies. That should help spread them out through the launch sequence and, with luck, you will always have a heavy glider available when your powerful tugs arrive.

### **Grid Before Briefing**

On good days, you will want to launch as early as conditions allow. In this case the cone system, coupled with access lanes, really comes into its own, letting the pilots grid any time before briefing. It is essential that the intention to grid early is communicated to pilots as early in the day as possible. The competition notice board, the website and text messaging are ideal for this. An announcement should also be considered at breakfast time.

### **Grid Marshals**

It takes a lot of effort to get a large number of gliders assembled at their appointed places and launched without delay. The launch rate with a large grid can be intense and a team of people who know what they are doing is essential if this is to be accomplished. It does not take many good grid marshals to run an efficient grid. The key is that they should work as a team under the direction of a single individual.

## **Equipment**

Not much is needed, but a few short ropes with rings for release-checks are essential as are rope-hooks. With rope hooks, two marshals working together can bring the rings from a waiting tug to the nose of a glider ten times faster than a single person on their own can do it. Shaving seconds off each launch is as valuable as fast-climbing tugs when it comes to getting a large grid launched in under the hour. Having a spare tow rope or three laid out beside the grid will also help keep the launch progressing when a rope knots.

## **Self-Launchers**

Self-launchers can usually be incorporated into the grid and allowed to launch direct from their grid position. If you are short of runway, however, and your launch area permits it, you might want to consider sending heavy self-launchers off (in proper order) from an area off grid, and as far back as possible. This approach might also be considered if self-launcher slipstream is a concern.

## **Compressing the Grid**

On all but the largest of airfields you may want to maximise the available length of take-off run. This can be achieved by compressing the grid from front to back shortly before the launching commences. Cars and equipment should be moved out of the way and gliders rolled back so they are nose to tail. Note that once this is done, any late arrivals on the grid will have lost their opportunity to take their place and will have to be treated as if they have refused a launch. Also, any pilots wishing to refuse a launch will be unable to get out of the grid and moving them out during the launch sequence could be disruptive, so compressing the grid should be left as late as possible.

## **Managing “Grid Squats”**

If the weather does not cooperate, an opportunity to launch may not occur until later in the day or, even, not at all. This could mean waiting on the grid for an extended period. If launching is to be delayed, it is imperative that pilots are kept informed.

The time for the earliest possible first launch should be kept under constant review and communicated to the pilots. Announced slippages should be long enough to be worth announcing but not so long as to run the risk of missing a favourable opportunity. Once announced, a slippage must not be revoked and whatever happens, pilots must not be put in the position of being rushed into an unexpected launch. Good practise is to keep to announced times and to give ten- and five-minute warnings. A portable PA system for use on the grid can be invaluable here. Announcements should be backed up on air band as many pilots will be close to their gliders with their radios switched on. Announcements of new earliest launch times should also be made on the public PA system in the communal areas and via text messaging.

If the grid-squat has been going on for an extended period, consideration should be given to standing down for comfort breaks and/or lunch.

## **2.15 The Decision to Launch**

When conditions are good, you can't go far wrong launching as soon as it becomes soarable. During the time between first take-off and opening the start line, conditions are likely to have improved and getting the start line open as early as possible will probably be sensible. In any case pilots always have the option of refusing a launch or making a later start if they wish.

When conditions are marginal or rapidly changing, launching too soon could result in mass relights, but launching too late could mean missing a useable window.

Competition pilots will generally trust the CD's decision to attempt the task, so the CD has a responsibility not to launch until there is a reasonable prospect of completing it. Likewise, the CD has a duty not to launch if weather conditions are, or are likely to become, hazardous.

### **The Sniffer**

On any day, a sniffer is the CD's first opportunity to find out whether conditions are developing as expected. A good sniffer can be an invaluable aid to the CD in making the decision to launch.

Make sure the sniffer pilot understands what is required, that is: clear factual reports of the conditions (achieved average climb rate, cloud base, visibility, wind at flying heights). Over-enthusiastic reports and personal opinions are not wanted.

In difficult or rapidly-changing conditions a turbo-equipped glider can be particularly useful as a sniffer. If you have a choice, a sniffer with wing-loading similar to the competing gliders is also beneficial.

### **Rebriefing**

If conditions dictate, it may become necessary to switch to a fall-back task. If this is one which was briefed earlier as one of a set of alternatives, the briefing should consist simply of informing pilots of the change and ensuring that all pilots are aware by using a re-brief checklist at least 10 minutes before launch. On the other hand, if a completely new task is to be briefed, extra care should be taken. The new task will have been created in response to unexpected conditions and it may well have been created in a hurry. Extra care must be taken to ensure that the new task meets the required standards and that proper task sheets are produced. The pilots must not be rushed into launching after a significant re-brief.

It is general practise to call the pilots together in a group on the grid to carry out these re-briefings. It is then easier to ensure that all pilots have the information, but it also promotes fairness since it allows clarifications and answers to questions to be heard by all. As well as the new task, pilots should also be told the reasons for the decision. New information about incoming weather, for instance, may be of value.

## **2.16 Launching**

During the launch phase, the launch marshal alone is in charge.

### **The Role of the Launch Marshal**

It is important that the launch phase is carried out under the direction of a single individual who is conversant with all aspects of tug and glider operations and is

capable of directing tugs by radio to avoid conflicts in the air and on the ground. Tugs on the ground will have to be directed to their next customer and grid marshals will have to know which tug is being directed to which glider and which will be next to roll. It is not uncommon for two or more tug/glider combinations to be hooked up and ready to take up slack at the same time. Obviously, no-one should be in any doubt as to which is to go first, especially the tug pilots.

### **Helpers**

As with any glider launching operation, only helpers who know what they are doing should be allowed to attach ropes and run with wings. Generally, these tasks should be carried out only by grid marshals or the recognised crew of the glider being launched.

### **Pilots' Option to Refuse a Launch**

Any pilot may refuse a launch when offered in the normal grid order. Pilots who do so must then use the relight procedure to launch. In practise, pilots taking this option will often position their gliders in the relight area without being directed to. The decision to refuse a launch may be made at any time, even after launching has started and grid marshals will need to be ready to help move the glider out of the way quickly to minimise disruption.

### **Launch-Logging**

Don't forget to make a record of launches. Glider Registration, Tug Registration and Time are all that is required. This information will almost certainly be required later by someone.

### **Last Grid Launch**

The earliest time that the start line can be opened is based on the time that the last competitor had the option to launch. Gliders which have been moved voluntarily to the relight area have had the option to launch, but have chosen to not exercise it, so they do not count for this purpose. If the relight area is at the back of the grid (which is often the case in single-class competitions) it will not be obvious where the grid finishes and the relight area starts. Don't make the mistake of counting the gliders waiting for a relight. Make sure you work from the time that the last glider in their correct gridded position is launched.

### **Drop Zones (DZ)**

Drop (or Release) Zones are areas which should be designated in advance where gliders should be released by the tugs. They aid competitive fairness but are primarily a safety measure as they help to ensure separation of gliders and tugs through predictable tug routes from the runway to the DZ and back into the circuit. The safest situation, of course, is when gliders can immediately climb and stay above release height. However, conditions can change during launching and circuit traffic can increase if gliders are dropped in unsoarable areas. It makes sense from both a sporting and safety perspective to use DZs but to remain flexible. The following recommendations are made:

- DZs and towing patterns should ideally be clearly described in the Local Rules and briefed during the competition so that pilots know where they are and have the opportunity to avoid them if they are unable to stay above release height
- DZs should be reasonably sized and positioned so that descending tugs do not conflict with the tow-out pattern
- DZs should be positioned to enable competitors to land safely on the contest site for a relaunch, after allowing adequate time and altitude to search for lift after release
- The CD may change the DZ zone during the launch if those about to be towed will be at a sporting disadvantage to those previously launched. A good example would be a rain shower in the zone or if it's generally unsoarable in the zone after having been suitable earlier in the launch sequence – you can brief the towplanes to tow to a different area
- It is highly recommended that the tugs are fitted with Flarm to assist with situational awareness

### Relights

Gliders may land back, even during the launch phase so, if space on the airfield permits, it is both safer and less disruptive to brief a landing area for relights which will not interfere with normal launching. It may also be practical to designate a relight launch area away from the grid. Moving landed gliders from the landing area to the relight launch area should not be allowed to interfere with normal grid launches although, in multi-class competitions, provision should be made to comply with the rule which requires relights from an earlier class launch to be merged with those of a later class. Provision should also be made for immediate relight where the failure to launch successfully was not the fault of the pilot or crew.

An adjacent airfield may also be designated as a *relight launch airfield*. Arrangements need to be made to ensure that ground handling assistance is available for any glider that lands there and that a tow plane is available without undue delay.

## 2.17 Starting – General

The start procedure has been adjusted over the years to try to facilitate the safest set of conditions at the start where, inevitably, there is a high glider density and resultant collision risk. In order to discourage the practice of circling extremely close to or in cloud, resulting in reduced conspicuity of gliders, recent past measures sought to set a start height well below cloud and defined as the start gate opened. As a result, dive starting became prevalent. This was deemed very dangerous as gliders were diving and pulling up whilst others were circling slowly in the start area. This was subsequently outlawed with the implementation of the “5 minute” rule, later adjusted to the “2 minute” rule (stay below start height for two minutes prior to starting).

The GNZ Competition Rules provide the option for the CD to set a maximum start altitude for each class with a penalty being applied to all starts made above this altitude, but with no prior time period. This provides the CD with the ability to set a limit to discourage the advantage that might be gained from a fortuitous wave climb,

for example. If a start height is imposed, remember that this then includes (by default) a speed limit of 170kph (91.7kts) when crossing the start line or ring.

The GP start

However, no specific measures other than good airmanship practices prevent the dangerous practice of flying in restricted visibility around and in the base of cloud in the vicinity of the start point, which was a contributing factor to a fatal collision that occurred at an overseas competition some years ago.

Good airmanship does need to be promoted to prevent heightened risk if a pilot were to fly in severely restricted visibility. It is recommended that, at the beginning of the competition, the risks associated with all aspects of the event, including the start procedure and the airmanship required, should be discussed at briefing and refreshed throughout the event.

Please encourage pilots to use the Pilot Safety Committee if they think fellow competitors are being irresponsible.

The GNZ Rules permit cloud flying in accordance with the GNZ MOAP unless the CD announces otherwise at briefing.

## **2.18 Starting – GP Task**

The GP start requires very precise timing and instructions. Penalties are applied for manoeuvres that increase the risk of collision arising from all gliders in the class attempting to cross the start line at the same time.

The GP start is a regatta start – the clock is running for all competitors from the nominated time.

The normal start area is defined by a straight line 2km long centred on a point, with a 2km radius defining a semi-circle on the non-task side of the line. The straight line extends virtually either side of the start point.

A start altitude must be set and a start speed (groundspeed) should be set. Normally the speed limit would be 170kph..

The start sequence is commenced once the CD is satisfied that all competitors are close to the start altitude and in the vicinity of the start line. The start countdown, from usually 15 minutes to Zero, is defined in the GP Rules. This timing must be adhered to carefully as competitors will be timing their run to the start line within seconds.

The CD may decide to terminate the start countdown if there is concern that competitors may not be able to achieve a fair start. In this case the countdown must be recommenced when the CD is satisfied that all have a fair opportunity to start.

## **2.19 Task Cancellation**

The CD may: re-task; hold the start-line; cancel the task prior to the start line opening; and, re-task in the air.

The CD may also re-task if, after the start-line has opened, all competing gliders land back without starting.

It is worth remembering that, at mid-summer, it is not unheard of for it to be so dark late in the evening. This could allow a class to be launched on a moderate task late in the afternoon. Please do not be tempted to 'scrub the day' too early. It is better to have restless pilots waiting to launch than angry pilots deprived of a reasonable afternoon contest.

## **2.20 Finishing – All Tasks**

### **Finish Line**

Following the tragic accident at Husbands Bosworth during the 2005 Junior World Gliding Championship, it is increasingly clear that flying conduct during the finish continues to require careful consideration to ensure safe procedures are implemented and should be fully monitored to ensure that these procedures are being followed.

The NZ CAA provisions relating to low flying requires that glider pilots may not fly within 500ft of people, vessels and property unless protected by the exemption of being in the process of the procedure of landing in accordance with normal aviation practice. The standard gliding circuit is accepted as an exemption to this requirement, provided that they exhibit a descending glide profile keeping the landing area in view at all times and in the case of a competition final glide, where a direct landing is a viable option. The "*Competition Finish*" is defined in the GNZ MOAP at section 2-12 Final Glides and Competition Finishes and includes the flight and safety parameters that must be achieved and the training that a pilot must undertake prior to conducting a low-level, high-energy finish over the airfield.

In the context of finishing and the close proximity to the ground in the final part of final glide to landing, it is clear that a minimum height rule may only be broken without penalty on the grounds of flight safety (including extreme low energy that may lead to landing short) and is appropriate to eliminate the possibility of danger to members of the public. This minimum height is set at 50 ft above ground level and any structure, including inside the airfield boundary, where people require the very same protection from danger. Furthermore, adherence to GNZ best practices of a descending flight path and retaining sight of the landing area when below 500ft is required. However, it is acceptable to pull up to change from a direct landing to an abbreviated circuit pattern.

The finish line should be arranged in such a way that it is orientated from between 0-30 degrees to the perpendicular of the inbound track line and situated such that gliders can safely land directly beyond it without turning. Positioning of the finish line and inbound track to it should take into account any potential conflict with any person, vehicle or structure on the approach to and around the finish line and should normally be placed near the runway threshold to maximise the safe landing area beyond. A Control Point (or the final Turn Point) should be positioned as necessary to ensure that finishing gliders follow a straight, obstacle free path for, at least, the last 10km or so. This minimum distance is to ensure that the pilot is not pre-occupied with landing considerations and clearance from other gliders whilst trying to satisfactorily round the final turn point.

The Safety Officer and CD, or a designated person, should continuously monitor the conduct of finishing gliders and any public activity close to the airfield boundary, which might pose a danger to the pilots and themselves.

### **Finish Ring**

Internationally, since 2013, the Finish Ring option has been used to provide a deceleration zone after finishing hence giving more time for pilots to organize their landings and to fit into the circuit with other glider traffic. However, it must be noted that the final leg must still be orientated roughly to the landing vector (within 30 degrees) with a viable landing direction forming part of the landing procedure in force at the time. Otherwise, it does not readily meet the requirements for pilots to meet the low-flying regulations.

The radius size of the ring must be specified (normally 3km) and allow for finishing gliders to blend into the circuit pattern. If there is a probability of other users in the circuit the finish ring radius may need to be larger. The finish ring minimum crossing altitude should be as low as possible and set such that a glider on a normal final glide (with a Macready setting of 2 to 4) is able to maintain a constant glide angle, from prior to the finish ring to the runway threshold, without having to adjust their glidepath vertically to clear the finish ring. This minimum height may need to be adjusted upwards should the finishing gliders be entering a traffic circuit with other GA aircraft in the circuit (so, for example, the finish ring height is set to bring gliders into the commencement of the downwind leg at 800-1000ft AGL).

Setting the minimum height too high results in increased pilot work load and risk with manoeuvring gliders popping up to minimum height, while increasing the risk of pilots inadvertently accumulating penalties.

It may be appropriate to set different minimum crossing altitudes for different classes (eg Open Handicap versus Sports Handicap classes).

The GNZ Competition Rules specify the penalty for crossing the finish ring below the required altitude. CDs are reminded that when using this finish method, they must be prepared to routinely monitor pilots' flight recorder records for height compliance.

The CAA has made it known that they will continue monitoring our events to ensure compliance to the GNZ Competition Rules and the Law. So please make sure that every effort is made to continue to encourage safe flying practices by careful consideration of the finishing procedures and continual monitoring of compliance. A clear transgression observed by the CAA may well lead to them taking a draconian view rather than its current standpoint of tolerance to our needs.

## **2.21 Scoring**

As with all competitions, it is important that the scoring, together with any necessary penalties, are applied in a consistent and transparent way.

The GNZ Contest Marking System is a set of scoring definitions and formulae for assessing performances at championships. The scoring formula is based upon the internationally utilised procedures in the FAI Sport Code – Annex A to Section 3.

The scorer must be proficient with the GNZ Contest Marking System, or be mentored by someone attending the competition who is familiar with the system.



The CD must be sufficiently familiar with the marking system as to be able to satisfy themselves that the day scores are being calculated competently and that penalties are being applied correctly.

### **Hardware and Software Requirements**

Although it is pilot's responsibility to ensure that the organisation has the ability to download Flight Recorders it is advisable for the organisation to ensure that it can, if necessary, provide some assistance by having ready access to cables, memory card readers, and software for downloading commonly used Flight Recorders.

Many contest organisations now require pilots to hand in their flight evidence on memory devices, to email their traces, or to download their Flight Recorders themselves using their own computers, or using computers provided by the organisation for this purpose.

Arrangements and procedures for downloading Flight Recorders and submitting flight traces should be clearly notified in the Local Rules.

### **Data Storage**

Take regular backups of all data, at appropriate points, at least daily.

Keep a written log of any manual adjustments or corrections made and any penalties applied. This will assist in ensuring that, should day performances need to be recalculated, any manual adjustments which will need to be reapplied are not overlooked. Also note times that each day's scores change from Preliminary to Unofficial and Unofficial to Final.

When overall final results are compiled, they should be uploaded to the website nominated by the SRC (currently Soaring Spot).

### **Flight Recorder Evidence**

It is acceptable to allow secure IGC files to be delivered on removable memory devices or by email. This method of presentation actually saves the organizer time in collecting the data required and is to be encouraged.

The CD must establish that a competitor has no objection to the release of their Flight Recorder evidence before distributing any copies of it. It is recommended that this be explained prior to the start of the competition and announced at the first briefing. Any competitor's request to the organisers to restrict the release of their evidence must be respected. After the final competition results have been produced, all data from competitors requiring confidentiality must be deleted. It is also recommended that it is made clear to competitors that it is their responsibility to clear the Flight Recorder memory as appropriate.

Whilst the scorer will probably have obtained down-loading software to provide data in the standard IGC format for most propriety Flight Recorders, the onus is on the competitor to ensure that suitable software is provided to the organisation. It is suggested that the Local Rules state this fact as well as advising competitors which types of Flight Recorder software is already held.

Current GPS analysis programs highlight any anomalies with the recorded data. All anomalies should be investigated by a visual inspection if they occur between start

and finish and all recordings should be viewed at turn points to ensure that the occasional 'phantom position' points are spotted. 'Phantom position' points are normally fairly obvious as the displacement from the rest of the recording usually exceeds a kilometre. Clearly the effect of a 'phantom point' that gives control anywhere in the flight must be discounted.

CDs should ensure that a complete flight log of the day including all flying on the day is retained. This is to ensure that evidence that may have shown a land-out and re-launch or engine start in the case of motor-glider before the start, is not deliberately lost. Such evidence may take the form of several IGC files.

Competitors are an honest bunch. There are however, a number of simple checks that can be made, if required, to allay any suspicions. View traces to check that the direction of thermal drifts is similar to other competitors. For Flight Recorders that record GPS height, check this mirrors a barograph trace. If there is a particular suspect, install a flight recorder in the tug used to tow them and compare traces for that part of the flight. Closely compare landing and take-off times with the observed records.

### **Flight Recorder Evidence - Additional Requirements for Turbo and Motor Gliders**

Motor-gliders and turbo-equipped gliders are able to compete fully with pure gliders. CDs should be particularly aware of need to monitor FRs to ensure that engine use is recorded and that the flight recorders used are in fact recording noise. This can be achieved by ensuring baseline noise is apparent on the traces and also comparing this with real engine start noise recorded either on self-launch or on mandatory turbo engine test.

Only flight recorders that are IGC approved and carry operative noise sensing (ENL) or other approved means of sensing engine operation are now permitted for gliders fitted with any means of propulsion. The logging interval must be set to 6 seconds or less whether the glider has a small self-retrieving power plant, is a self-launcher or pure glider. To cater for older loggers where this may be a problem due to memory size, if the logger is not capable of recording a trace of 10 hours duration at 6 seconds, then a maximum of 12 seconds remains permissible.

The CD has the discretion to require an engine test for logger integrity purposes although the rules allow a pilot to "test start" their engine immediately after launch. If the engine run time is excessive the CD may consider that the glider is landed at the point of engine start.

FRs incorporating micro-switch engine control, e.g. EW "b" model, are no longer acceptable except for use with pure gliders and as a special exception with self-launching electric powered gliders. With the case of electric powered gliders, where engine use cannot be definitively verified by IGC FRs with noise sensors intended for noisy i/c engines due to the very low noise level, a FR with micro-switch engine control must be used to either control the whole flight including position and height or simply to control the use of engine only with the position and height control being realised from another FR. In this special case, it will be necessary to ensure that the aircraft is suitably scrutineered for integrity of the micro-switch circuit before the first flight of the competition. The integrity of the system is then automatically

checked each day as the pilot cycles the engine doors/engine pylon prior to launch and on closing down the engine. The engine must be regarded as in use if the engine doors are open or the pylon erected as defined by the micro-switch actuation. Control of engine use using this method is not regarded as suitably secure for general use but it has been decided to make this special exception for electric motor-gliders due to the unusual situation that owners of self-launching electric gliders find themselves in at present with no reasonable fully IGC approved FR solution.

## **2.22 Penalties**

The GNZ approved penalty table is split into sections depending on the type of offence, with differing penalties depending on whether it is a first occurrence of that particular offence, a second occurrence or subsequent occurrence. CDs are urged to carefully read the penalty structure to evaluate its contents.

There must be no discretion within the penalty structure and penalties must be consistently applied. In many cases, the penalty for a first offence is a “warning” only. This, along with all other penalties, must take the form of a notification to the pilot, ideally in written form, together with annotation on the score sheet clearly identifying the penalty and what it was awarded for. The intention is to ensure that the pilot and their peers are fully aware that the penalties are being administered, even if warning penalties, to promote compliance.

It is not acceptable to regard a general warning to all pilots as a first offence warning. Any penalty must be earned individually by demonstrated specific actions that are in breach of the rules.

### **Dangerous or Hazardous Flying**

This can take many forms and the various scenarios in most cases have a different penalty structure. The following advice on the monitoring of conduct and administration of this type of penalty is offered:

- Cloud flying - this penalty applies when cloud flying is specifically banned by the CD. It is potentially difficult to prove and may rely on triangulation of data from other gliders observing the deviant glider entering/ exiting cloud.
- Circling incorrectly within nominated zone or not complying with CD’s limitations on manoeuvres. These limitations may apply throughout the day, not just to the pre-start situation. The penalties for this type of manoeuvring in the GP Task are particularly severe as they reflect the increased risk of mid-air collision during the start.
- Towing: Hazardous Manoeuvres. This encompasses the practice of “sling shotting” off the towrope at release and any manoeuvre that places the tow plane at risk.
- Finish Line: Hazardous Manoeuvres would include:
  - a) Flight below 50ft AGL outside the declared airfield perimeter other than an emergency straight-in approach where it is not possible to maintain safe airspeed to maintain the minimum ground clearance or in the event of an out-landing. FR evidence from 500ft above airfield elevation will be used to verify

any deliberate planning of energy management that leads to flight below the minimum limit. Such proven cases will not be exempt from penalty.

- b) Any approach that does not describe a descending flight path other than to convert from a straight in approach to a go around or for reasons of flight safety.
- c) Flight below 50ft inside airfield perimeter except when on landing approach.

The purpose of this 3-part rule is to eliminate the practice of contour following and fence hopping, whether the intention is to land ahead or go around after a finish resulting in a safe but low final glide that may meet the legal requirements and ensures that the landing area and any unexpected ground hazards are continually visible.

The rule effectively precludes the possibility of flying in ground effect except in the case where a pilot has so little energy that flight below 50ft is inevitable to ensure safe arrival at the airfield. Such a situation is effectively an emergency situation anyway and can easily be verified by FR and visual observation to ensure it was not brought about by deliberate energy mismanagement in the final 500ft of the flight. A decision made well back at higher altitude, for example to leave lift and set off on final glide, cannot be held against the pilot if ultimately the decision later results in an extremely marginal situation.

For the purposes of assessing whether a pilot maintains a descending profile, CDs should consider it acceptable to still be dolphin flying between 200ft and 500ft (although this should not be briefed as acceptable) as at medium speeds and in a height band where strong thermals may still prevail, it may well be impossible to maintain the necessary profile. However, below 200ft, where lift is usually rarer and the visibility of the landing area and proximity to the ground are major issues, then a descending profile should be displayed to avoid penalty. After crossing the finish line, the minimum safe height must be maintained until the final part of the approach to land if a go around is selected.

The CD and the Safety Officer must, between them, ensure that the conduct of all aspects of the flight path control from the time gliders become visible to the eye on approach until completing the flight, are monitored. It is not the intention of catching out pilots who are at 49ft AGL or on a virtually flat approach path but to cut out irresponsible fence hopping and contour following where it is not necessary to complete the task. Such flying will be clearly identifiable.

Verification of any of the final glide conduct should not be routinely checked by FR analysis but where dangerous conduct is observed, the FR can offer additional evidence within the limits of its resolution.

- Landing: Hazardous Manoeuvres. This is a specific penalty that can be awarded for failure to stick to specific briefed landing instructions. CDs will have to take into consideration the defence of a possible necessity to deviate from any briefed instructions, if not doing so would have clearly led to a dangerous situation occurring, e.g. due to the actions of other finishing pilots or airfield traffic or possible major wind fluctuations.

## 2.23 Competition Forums and Feedback

The SRC recognises that communication and consultation between itself, competition organisers and pilots is essential and sees competition forums as one very effective way of achieving this. CDs of Nationals are required, and CDs of Regionals are strongly encouraged, to hold at least one forum during their competition, chaired, if possible, by a member of the SRC.

As well as providing a platform for feedback to the organisation about their own competition, these forums allow the SRC to keep abreast of developing issues that are seen as important within the competition community and to consult on proposed or recently introduced changes to rules and recommended practices.

Forums may be arranged on an ad-hoc basis by the CD at any time and may cover any topic or topics chosen by the CD, the SRC member or by the pilots present. In addition, however, the SRC may wish to seek input on specific matters of concern and may wish to “seed” topics for discussion.

### Guidelines for Arranging a Competition Forum

- Pre-Announce in the Local Rules. If pilots know in advance that a forum will be held, it may help them get their thoughts together and add to the effectiveness of the exercise.
- Consider asking for suggested forum topics in advance. That could give you a good idea as to what is “hot”.
- Pick your time. Consider when you are likely to get a receptive audience. Just after a day cancellation at briefing will give the highest attendance, but will be hard to plan in advance. On the other hand, a pre-planned evening meeting may find most of your pilots otherwise occupied unless it is linked to some other event that you know will be popular.
- Start on a specific topic that you already know will provoke debate. Avoid opening with “Does anyone have a topic they want to discuss” You are very likely to get the “Stunned Mullet” response.
- Pick up other topics as the discussion develops. There may be a tendency to drift off-topic. Note interest in any new issue, and come back to it later.
- Consider a “Panel” approach. Sometimes a “Panel of Experts” can be a good way of getting things moving since questions can be asked direct from the floor, or by the chairman if the audience is shy. Pick your panel carefully in advance.
- Spread the load. Get someone else from your organisation to take notes. It’s not easy both to chair the discussion and make a decent record.
- Don’t let a few noisy people distort the feeling of the meeting. Where there is disagreement consider taking a show of hands to make sure any “silent majority” gets proper recognition.
- Include a summary of your forum in your CD’s report.

## PART 3 – CHECKLISTS

### 3.1 Getting Started

Competition	Nationals, GP, Regionals, Local?
Application to GNZ	Unless you are running a Nationals, GP or Regionals, in which case you will have gone through a bidding process, you will need to advise the GNZ/SRC of your intentions to run a local competition. In either case, it is essential that the information required in section 1.6 is communicated as requested by the SRC for inclusion on the Pilots Meeting at the GNZ Annual Conference.
Fees and Charges	Entry fees are subject to SRC approval. Decide entry fee, deposit amount and due date. Consider special offers such as discount for early booking etc. Set due date for payment of fees. Decide if you need a refund policy.
Promotion	How is the competition going to be advertised?
Web Presence	GNZ? Home-Grown website? Will you have a blog?
Entry Admin	Entry list automated on website or manually using club volunteers. Bank account for entry fees? Sort codes and Account number to allow direct transfers.
People	Who will be Contest Director, Deputy Director, Met-Briefer, Task Setter, Scorer, Airspace Officer, Safety Officer, Control, Launch Marshall, Grid Marshall, General Helpers. Will there be enough people to help throughout the competition?
Tugs	Enough to launch each class within 1 hour or a GP class as quickly as possible. Arrange well in advance, or risk having too few. Don't forget to allow for outages.
Accommodation	Where will competitors stay: bunkhouse? local B&B's (list?). How many camping sites? Will you charge for camping/caravans? Are electric hook-ups available?
Refuse Disposal	You will need more than usual. Hire a skip?
Catering	There will be many mouths to feed. This can be a great revenue source for your club but will need dedicated staff and facilities.
Communications	How will you communicate with competitors at the competition? Notice Boards/PA/Text Messages/VHF/Website?
Radio	Do you have enough VHF handhelds? Is there a base-station? Consider range and readability of handhelds if not.
Local Rules	Who will write these?
Sniffers	A sniffer should be on call every day. Has this been organised?
Club Operations	Will normal club operations be continuing during the competition? If so they are subject to the control of the Contest Director.
Deputy Director	Have you appointed a deputy director to take over if necessary?
Briefings	Where will briefings take place and will pilots have adequate seating and table space? What presentation aids are available? Computer projector and screen almost essential.

### 3.2 Airspace

Airspace Officer	Will having an Airspace Officer make life simpler for you?
Airspace Meetings	Have you met with the local area Airways manager to discuss airspace requirements and notified the GNZ Airspace Committee?
Advance Information	Have you published advance airspace information in your Local Procedures/ Rules?
Competition SUP	Check it has been created and is correct and is compliant with the 90 days prior requirement (plus the publication deadlines for the SUP). Do you understand the Coordination Arrangements? Are you clear on how you will comply?
Competition NOTAM	Check it has been created, if required - the SUP may be late - and is correct. It may not appear until close to a week before the competition. Any daily NOTAM need to be pre-coordinated with the CAA.
Co-ordination	Have you obtained contact details for other airspace users in your likely task areas who may have to be contacted? No good looking for their numbers on the day.
Local Hazards	Have you identified any airspace hazards in your local area that visiting pilots may not be aware of? These should be highlighted in your briefing.
Temporary Hazards	Have you taken steps to ensure that any short-notice temporary hazards can be identified?
Airspace Dispensations	Have you identified the potential airspace dispensations that you may wish to make use of in your likely task areas? If any prior action is required to invoke them, have you taken it (SUP)?
Airspace Files	Do you intend to issue supplementary airspace files to the competitors for use in their moving-map devices? If so, how will these be distributed?

### 3.3 Safety

Safety Officer	Has a Safety Officer been Appointed?
Emergency Action Plan	Do you have an emergency action plan, is it easily accessible in a public location and is everyone aware of it and their role in it?
Risk Assessment	Has a risk assessment been completed to identify and avoid or mitigate likely risks during the competition?
Coordination with Other Flying on Site	If other flying operations will be taking place at the host site during the competition, have you considered possible conflicts and alerted the other users? If club-flying is planned to continue, has a club/competition liaison procedure been agreed and published in coordination with the CD?
Launches	Have you thought through the potential safety issues connected with launching and worked out how to deal with them, and briefed your ground crews? (See "Safety" in Part 2),
Finishes	Same considerations as for launches
Ground-Traffic	There are likely to be a lot of visitors unfamiliar with your site and your normal safety procedures. Are any additional traffic-control measures and associated signage in place or available? Note: this applies to pedestrians as well as vehicles.

Pilots' Safety Committee	Is a PSC of value to you? Are you clear on the role of the PSC and the procedures associated with it? (See the relevant section in Part 2)
Local Hazards	Have you included local hazards in your briefing material? (E.G any local unlandable, disused airfields?)

### 3.4 Control

Control Area	Have you allocated a separate room or area?
People	Are people available throughout the competition to run control? Do they know what they have to do?
Equipment	Tables/Desks Chairs. Office Supplies, Pin Boards and White Boards. Supplies of pins and dry-wipe markers?
Computers	Will people use their personal machines or do you need to provide one or more? Internet Access? Cable or WiFi?
WiFi	Do you have adequate bandwidth? Do you need a temporary contract with your provider to ensure capability?
Printers	Will you have a dedicated printer? Is it fast enough (laser)? Is it colour-capable? Don't underestimate the printing load. Up to three alternate task sheets plus results sheets per pilot per day, plus sundry other bits of paper. All produced before briefing each morning.
Accommodation	Where will the competition officials call home? Scorer, Met Briefer, Task Setter, Director all need workspace.
Information	List of entries, Contact Numbers of local airfields, Contact numbers for local services? Copies of emergency procedures. Copy of Competition Rulebook
Personnel Information	List of names and contact phone numbers for everyone involved? Contact details for NoK for competitors, crews, tow pilots?
Security	Is there secure storage for pilots' property (loggers and memory devices). Is the control centre lockable?

### 3.5 Meteorology

Met Briefer	Do you have a dedicated Met Briefer for the whole competition? If not, can you provide met briefing cover every day? If not, use someone with competition met briefing experience. Has a briefing format been communicated to the volunteers and have they practiced preparing it?
Internet	Met forecasting is practically impossible these days without good internet access. Is this available?
Briefing	Best not to attempt live internet at briefing. Images should ideally be pre-loaded to memory sticks.
Ad-Hoc updating	Will you have the ability to update forecasts during the day? This is invaluable on days when launching may be delayed.



### 3.6 Task Setting

Contest Director	Do you have a Task Setter for every day of the competition? Is there a back-up in case of illness or other absence?
Task Setter	Establish where, and when, you will receive your meteorological information. If necessary, more detailed information can be paid for through some of the subscription services that the Met Office provide.
Contest Director	Ensure adequate computing and printing/copying facilities are available. Ideally connected to the internet and a competition LAN with Printer. The Task Setter is going to want to look at weather forecasts, NOTAMs etc and will need to print task sheets.
Contest Director	Ensure SeeYou is available for task setting and scoring. SeeYou from Naviter is the only complete competition management system with inbuilt scoring that creates the task sheet to the required standard.
Airspace	The likely temporary airspace for a particular day can be established the evening before a competition day. It is useful that the Task Setter has this information when he discusses the task shape/distances with the Met Briefer.
Task Setter	Before breakfast check the likely task areas, thermal strengths and soaring 'window' with Met Briefer. Calculate best-worst case task lengths based on information available. Where confidence is high, consider a Task A and a Task B. Where confidence is lower consider adding additional fall backs and potentially different task directions.
Airspace	Confirm airspace for the day with Task Setter and how this may impact on the final tasks that have been decided by the Task Setter.
Airspace	Provide information for Task Sheet in format required.
Task Setter	Create tasks on SeeYou and in the format required.
Contest Director	Review Tasks independently of Task Setter. Involve Airspace and Met Briefer if necessary. Check task sheets for suitability and ensure that trigraphs, turning point descriptions, airspace and ATZ information are correct.
Admin	Print and copy Task Sheets.

### 3.7 Ground Marshalling

Team	Do you have enough capable volunteers for every day of the competition?
Hi-Viz Vests	One per marshal plus some spares
Grid Plan	Have you determined the format of the grid? Are you clear on how the grid positions are to be calculated and communicated to the pilots from day to day?
Grid Cones	Or equivalent (buckets). How many do you need?
Release Check Ropes	Not everyone will want to bother, but some will and you can't wait until the tug is there
Rope Hooks	Invaluable. One per marshal plus a couple of spares. Know how to use them (Two marshals per rope pulling in opposite directions)
Spare Tow Ropes	Essential. Lay out at least two spare ropes beside the grid before launch commences

### 3.8 Scoring

Software	Do you need/ have you organized access to SeeYou licence(s)?
Scorer	Has a Scorer been appointed who is familiar with the scoring software? Is there a back-up in case of absence?
Hardware	Does the Scorer have exclusive use of a computer? Is there a back-up available?
Security	Do you have the means of storing competitors' property (loggers and/or memory devices) overnight if necessary?

## PART 4 – REFERENCE

### 4.1 Example of the Daily Schedule

The following table shows the daily schedule at a GNZ approved competition. It is intended to illustrate what a competition day is like from the Organisation's point of view. Details will differ from club to club and between the different types of competition. Although it may not be written down, the Contest Director and Competition Officials at every competition will be working to ensure that each day is conducted in accordance with a schedule not unlike this, which assumes a daily briefing being held at 10:00.

When	What	Who	Notes/Detail
07:15	Preliminary Met Review	Met Briefer Task Setter	Review preliminary forecast Identify potential tasking options
07:30	Preliminary Airspace Check	Task Setter	Review NOTAMS
07:45	Preliminary Tasks	Task Setter	Refine task options
08:30	Morning Meeting	CD Met Briefer Task Setter Airspace Safety Launch Marshal Control Scorer Chief Grid Marshal	Confirm previous day's scores can be published at Unofficial status. Review any organisation, safety, penalty or other issues to be dealt with or mentioned at briefing. Review airspace issues, NOTAMS. Review Met and Task Options. Airfield operations and gridding Plan for the day. Identify ATS Units and airfields to be advised. Request airspace as required. Admin issues to be raised at briefing. Publish rig and grid instructions to competitors if not already done.
Before briefing	Club Flying Liaison	CD Club Duty Instructor	Discuss planned club operations and any issues arising.
Before briefing	Publish unofficial scores from previous day	Scorer Control	Print Unofficial score sheets with time and date of publication for distribution at briefing.
NLT 09:00	Obtain grid briefing from CD/ Launch Marshal. Post grid positions notice and lay out Grid Markers	Chief Grid Marshall & helpers	To permit gridding before briefing. Chief Grid Marshal may need to look into morning meeting to get briefed if grid position not previously decided.
NLT 09:45	Produce Master Met Briefing	Met Briefer	Files for presentation on-screen plus any printed data for pin-board or pilots. Copy files to Control server.
NLT 09:45	Produce Task and Airspace Briefing Data and Tasksheets	Task Setter	Print tasks and place on pilots' tables in briefing area. Upload tasks to Soaring Spot.
NLT 09:45 If grid before briefing; otherwise as directed	Gliders arrive on grid	Pilots	Assisted and directed by Chief Grid Marshal and marshals where necessary

NLT 09:45	Print Met Briefing Sheets	Met Briefer with help from Control	Post on briefing pin board and place on pilots' tables in briefing area.
10:00	Day Contest Briefing	Everyone	Housekeeping; Results; Safety; Met; Tasks
ASAP	Brief Tug Pilots	Chief Tow Pilot	Ensure Tugs are ready and fuelled. Review operation for the day including DZs and landing/taxiing procedure for launch phase.
Any time after briefing	Make blog entry	Any authorised blogger	NB: Blogs may be made at any time provided they are relevant and interesting. However, no task information should be given until the actual task being flown is confirmed.
ASAP	Compress Grid	Chief Grid Marshal	Late arrivals to back of grid.
At discretion prior to launch phase	Launch Thermal Sniffer	CD	Determine thermal strength and cloudbase. Use information to inform max start height, launch time and start open time decisions.
NLT 15 mins before 1 <sup>st</sup> launch	If new task not previously briefed is to be flown. Brief all pilots (on grid)	CD	Use sign-off sheet to ensure all pilots aware
NLT 10 mins before 1 <sup>st</sup> launch	If previously briefed fallback task is to be flown or if change to AAT designated time is made. Inform pilots	CD	Use sign-off sheet to ensure all pilots aware
NLT 10 mins before announced earliest 1 <sup>st</sup> launch time	If launching is to be delayed, announce new earliest 1 <sup>st</sup> launch time.	CD	Announcement will usually be made on Grid PA and on competition frequency. The length of launch time slippages will be determined by circumstances, but should not usually be less than 15 minutes at a time. If pilots have been waiting on the grid for an extended period, consideration should be given to a longer comfort/snack break.
NLT 10 mins before actual 1 <sup>st</sup> launch	Stop Club Launching	CD	Contact Club Duty Instructor and request cessation of club launching
NLT 10 mins before actual 1 <sup>st</sup> launch	Announce 10 mins to 1 <sup>st</sup> launch.	CD Control	Announcement will usually be made on Grid PA and on competition frequency. May be repeated on clubhouse PA by control.
NLT 5 mins before actual 1 <sup>st</sup> launch	Announce 5 mins to 1 <sup>st</sup> launch	CD Control	Announcement will usually be made on Grid PA and on competition frequency. May be repeated on clubhouse PA by control.
NLT 5 mins before actual 1 <sup>st</sup> launch	Invoke Traffic Control measures	Chief Grid Marshal	Specific measures, including signage and manning, prepared in advance for every possible launch position. Goal is to ensure separation of vehicles and people from launching gliders or tugs that are landing or taxiing.
NLT 5 mins before actual 1 <sup>st</sup> launch	Confirm launching on Onglide	Launch Marshal CD	CD confirms intention to launch.

At discretion During Launch Phase	Commence launching Record launch details	Launch Marshal Control at grid	Pilots offered launches in grid order. All to have been offered launches with 1 hour Glider ID, Pilot(s) Name(s), Tug ID, T/O Time. Enter to Club Record system off-line (ideally same day).
As late as practical	Decide Start Open Time	CD	Start Open Time >=Last Launch offer +15 mins. Advise Control
GP Tasks: Start Open minus 15 minutes	Commence countdown for the GPP Start	CD or Control	For the GP Task - On Competition frequency
Start Open minus 10 minutes	Announce Max Start Height and 10 minutes to Start Open	CD or Control	On Competition frequency
Start Open minus 5 minutes	Announce Max Start Height and 5 minutes to Start Open	CD or Control	On Competition frequency
Start Open minus 1 minute	Announce Max Start Height and 1 minute to Start Open	CD or Control	On Competition frequency
Start Open	Announce Max Start Height and Start Line Open	CD or Control	On Competition frequency
After Start Open	Monitor pilots' reporting start times	Control	On Competition frequency Acknowledge and record.
At any time	Make blog entry	Any authorised blogger	NB: Blogs may be made at any time provided they are relevant and interesting. However, no task information should be given until the actual task being flown is confirmed.
Once task under way	Issue approval for club flying to restart	CD	Only when risk of relights is low.
During Task	Man telephones for landouts and deal with any that arise	Control	Handle landouts
NLT 0.5 hr before first expected finisher	Stop club operations	CD	Contact Club Duty Instructor and request cessation of operations immediately
Before Finishes	Station lookouts on landing threshold (if necessary) to control walkers	Grid Marshal	As required depending on the runway in use
In good time for finishes	Monitor finish calls and acknowledge. Respond with information if required	Control	On competition frequency. Record finishes.
During Finishes	Observe all finishes from	CD Safety Officer	Ensure finishes meet safety and airmanship requirements. Note IDs of any offenders

	suitable vantage point	Or designated person	
During Finishes	Log all finishers	Control	Note glider ID and Time and record
During Finishes	Clear landing areas	Grid Marshals	Ensure landed gliders are cleared quickly to edge of landing areas. Supervise movements thereafter if necessary. Goal is to maximise available landing area for later finishers.
When all gliders accounted for	Restart club operations. Release airspace	CD	Contact Club Duty Instructor to restart club operations Notify ATS that gliders are clear of any airspace used for the day.
Within 60 minutes of each landing	Receive pilots' flight evidence	Control	NB: All loggers and/or memory devices to be logged in and out using a written log. All such devices to be kept securely under the personal supervision of a competition official or in safe.
ASAP	Carry out scoring process	Scorer	
ASAP	Confirm all pilots accounted for	CD Control	Have outlanded pilots made contact with their crews? Count other finishers. If necessary, invoke missing aircraft procedure.
ASAP	Evening Meeting	CD Scorer Other interested officials	Review Preliminary Scores Monitor engine tests for turbos on first day Apply any Penalties Consider any Protests Publish NOTAM for the following day
ASAP	Print and publish Day score sheet at Preliminary status	Scorer	Including upload to Soaring Spot.
At any time	Make blog entry regarding outcome of the day	Any authorised blogger	NB: This can be done the same evening, or the following morning, if more convenient.

## 4.2 Task Sheet Specification

The GNZ Competition Rules anticipate that a task sheet must be supplied to pilots for each task briefed in addition to the task being available on Soaring Spot. The recommended minimum content should include the following:

- Task date, Class and priority designation
- Written task description to include trigraph, description and co-ordinates of start, finish, and turn points in degrees and decimal minutes, task length, leg lengths, leg headings (degrees true),
- Written observation zone description where task is an AAT
- Graphic interpretation of task area (minimum size A5) showing all observation zones, track lines, all relevant permanent airspace boundaries and any temporary restricted/prohibited airspace including prohibited parachute zones identified as shaded areas.
- List of relevant temporary restricted/prohibited airspace and prohibited parachute drop zones to be titled as ADDITIONAL PENALTY – to include time, location and height descriptor as appropriate. In the event of any discrepancy between graphical and text descriptions of such airspace/parachute zones, the text version will always be authoritative.
- Written list of relevant airspace exemptions in operation
- Radio frequencies of any ATZ / MBZ within 5km of track lines and start volume for Racing Tasks and discretionary for Assigned Area Tasks.

See overleaf for an example Task Sheet.



**Task Information**

Type: Assigned area task with 3 areas  
 Task distance: 213.2km/520.3km (364.3km)

Style	Code	Points	Latitude	Longitude	Dis.	Crs.
Start		303-Horrible	S44°32.000'	E170°00.000'		
1.Point		022-Clyde	S45°11.500'	E169°18.900'	91.0km	216°
2.Point		029-Dobson	S43°47.600'	E169°59.900'	164.6km	20°
3.Point		041-Grampians	S44°15.700'	E170°27.700'	63.9km	145°
Finish		305-OM Finish	S44°28.800'	E169°59.433'	44.7km	237°

Observation zone description:

Start 303-Horrible: Cylinder R=5.0km

1.Point 022-Clyde: Cylinder R=30.0km

2.Point 029-Dobson: Cylinder R=30.0km

3.Point 041-Grampians: Cylinder R=30.0km

Finish 305-OM Finish: Cylinder R=3.0km

Start Height: 7000ft (max 170km/h ground speed)

Grid Time: 13:00, Rwy: 27

Launch Time: 13:30

Minimum Task Time: 3.00 hrs

Finish Cylinder: 3km radius, Minimum Height: 2000ft QNH

CET-30mins: 21:16 QNH: 1017

Airspace: G957, G958

Relight fields: L348 Clearburn, L335 Riverside

Retrieve Phone: (Clive) 027 229-4860, (Gavin - backup only) 0274 364-446

118.6MHz - Mt Cook MBZ, 120.1MHz Wanaka Common Freq, 119.2MHz - Milford

Common Freq, 129.3MHz Chch CTRL

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### **4.3 Creating the Task Sheet**

Task sheets meeting the required specification can be readily created using the most popular SeeYou task setting software. Other task planning software has not been tested.

Producing a graphic interpretation that suitably illustrates the normal and any additional restricted/prohibited airspace as well as the graphic details of the specific task is particularly important. To achieve this when using SeeYou, task setters should consider turning off unnecessary cluttering detail like turn points and their labels, waterways etc., perhaps leaving just towns visible on the underlay. The normal airspace will need to have its graphic detail specification changed within the program to ensure it is displayed in outline only, preferably in black and somewhat thicker than the default setting – this will allow standard airspace to show up clearly as a lattice across the task sheet map.

If there is any additional prohibited/restricted airspace this should be shown as shaded. If the task sheets are to be produced by photocopying, this can be achieved by printing a master copy with all airspace in outline only and then shading the master copy by hand with a pencil or similar before photocopying. In this way, additional information labels showing vertical airspace level definitions may be added by hand to any airspace area thus offering additional clarity for pilots. Such additional labelling is not a requirement of the rules however. Alternatively, organisers may wish to print task-sheets direct from SeeYou without having to use photocopying. See the next reference section for advice on how this can be achieved by creating an Additional Penalty airspace file for SeeYou.

In order for the map to be maintained at the required A5 size or bigger when using SeeYou, care is required with the set out of the additional written information. Written into the SeeYou software is automation to shrink the map giving preference to the number of lines of text incorporated. This is why it is recommended to turn off the “written observation description” section where the task is not an AAT.

Additionally, and most importantly, lines of manually added text should be optimised to use up the bulk of each line thus minimising the number of lines used.

To avoid doubt, it is recommended that a declaration is added to the text notes to clarify the format of co-ordinates (should be degrees and decimal minutes) and time zones of any times given.

Don't forget to add Control contact telephone numbers. This can be done without using space in the text section if you put it in the footer.

### **4.4 Competition Airspace Files**

Competition organisations typically generate a competition-specific airspace file for use in SeeYou task setting and scoring, and also publish the file for use by competitors. It is important that such competition-specific files include all sensitive airspace, including any temporary restricted airspace, so that tasking can take into consideration such sensitive airspace, scoring appropriately identifies and penalises entry into prohibited airspace, and competitors using the file inflight can be shown all sensitive airspace on moving maps and given airspace proximity warnings.

Temporary competition-specific airspace will normally be promulgated by SUP or NOTAM. These restrictions are usually published in advance, but may be issued at any time during a competition. Given the potential for short notice of an airspace restriction affecting competition flying, revisions to the competition airspace file may be required during the competition. SUPs are usually published well in advance on the effective dates and should be included in the competition airspace unless well clear of the potential tasking area.

Penalty zones that are known in advance and are likely to apply throughout the competition period should be included in the baseline competition airspace file. Individual zones can be notified inactive in the daily briefing and on the 'exemption' section of the task sheet.

SeeYou uses a single competition airspace file for scoring at any one time. It is therefore important to ensure that the file used for scoring on a given day contains the correct penalty airspace. The recommended practice is to allocate a version number to each file, starting with 'v1' for the base competition airspace file that is issued to competitors in advance, then 'v2', 'v3' and so on with any amendments to reflect temporary changes (SUP or NOTAM). The version number in use on a can be notified in daily briefing and on the task sheet.

Print the task sheet and check that the shaded additional penalty areas are clearly visible. If not adjust the colour/fill parameters in SeeYou until they are.

#### **4.5 Weighing Procedure**

In order to discourage pilots from either flying heavier than their maximum certificated mass or it is appropriate to have in place the means to check weigh gliders either on the way to the grid or on the grid as seen fit. To enable this, it may be necessary within the Local Rules to set limitations when ballast may be loaded or dropped. As weighing is a time-consuming operation it is expected that such weighing will be done on a random sample basis or when it is suspected that limits are being exceeded.

A simple procedure for weighing procedure is as follows. Gliders should be weighed with wings balanced and with all equipment required for flight. If weighing takes place on the way to the grid it must be ensured that the glider has a small into wind component. The mass of the pilot is also measured at this time. The intended take off mass is the combined mass of glider, plus all equipment, pilot and any calibration error that is registered for the weighing scales in use.

Determining flight mass of gliders outdoors has errors associated due to wind strength and its direction relative to the wings so it must be assured that any benefit is given to the pilot so that in the event of being found overweight there is no doubt that this has occurred. Therefore, check weighing should only be contemplated when the wind is modest and the operation is set up in a direction that allows a wind component from leading to trailing edge of wing. If conditions do not permit weighing outside and there is a pressing need to weigh a glider, this should be done in a hangar.

CD's expecting to carry out check-weighing at their competition should ensure that suitable equipment is available and tested beforehand. It is suggested that the advice

of a local GNZ certified Class 3 engineer is sought on this matter well in advance of the competition.

#### **4.6 Contest Directors Report**

It is important to complete and submit your report, along with the results, as soon as possible after the competition. Please note that we are not seeking to ascertain the precise number of hand washbasins or toilets available during the competition! What we are seeking is information on all services provided, problems encountered, and events that occurred, as this information is used extensively by the Competitions and Awards Committee to assist in making any changes to the rules for the following year.

The CDs report should include details of each and every airspace infringement including brief details of location and cause following interview with the pilot concerned.

## CONTEST DIRECTORS REPORT TEMPLATE

### ENTRY DETAILS

A list of the number of competitors and classes and the handicap range of each class.

### RESULTS

### ORGANISATION

Please indicate where you had separate people in the following roles or explain shared roles.

<b>Role</b>	<b>Yes / No / Joint role with &lt;specify&gt;</b>
Director	
Assistant Director	
Task Setter	
Met	
Airspace	
Scoring	
Control	
Airfield Control	
Launch Marshal	
Safety Officer	
Tug Master	
Other, specify	

### TUGS

The number of tugs available and the launch period. Any problems encountered in launching the task groups within the allocated time.

### FACILITIES

Electricity in camping area?	
Catering?	
Bar?	
Events organised during week	
Last night party	
Other	

### PILOT SAFETY COMMITTEE (if a PSC is appointed)

Any reported incidents.

## SCORING

Scoring and analysis software used. Any problems encountered.

## COMPETITIVE FAIRNESS

- 1) The number and detail of any prohibited airspace penalties – in order to compile statistics and to review procedures, it is desirable to fully document each and every infringement including the Directors view on the cause following interview with the pilot concerned. Ideally this should be in the form of a table as follows:

Date	Glider	Type of Prohibited Airspace	Penalty Points	Description of Event	Director's Comment
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- 2) Any protests.
- 3) Any general issues around competitive fairness or other aspects of the rules which you would like the SRC to review.

## ACCIDENTS/INCIDENTS

A brief report on any accidents or incidents incurred during the competition, including a copy of the completed OPS10 form.

## RECOMMENDATIONS

A brief report on recommendations, interpretation of the rules, specific practices, you feel could be adopted by the SRC for inclusion in the Competition Rules or this Guide.

## PILOT'S MEETING

If you held a pilot's meeting during your competition, please include a brief summary of the discussions in your report or advise who chaired the meeting.