TM03 - VISUAL FLIGHT RULES (VFR)

EXAM STUDY GUIDE

Version 1.2

11th February 2026

The NZHGPA has developed a suite of Technical Manuals. The number of Technical Manuals is growing.

These documents can be used as:

- Best practice guides
- Study material for students and other pilots
- Guidance on rules and compliance

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1. Introduction

1.1. Purpose

The purpose of Visual Flight Rules (VFR) and the VFR exam (OPMF33) is to ensure hang glider, paraglider, speed wing, motorised hang glider and motorised paraglider pilots fly safely within our community, as well as with aviators from outside the NZHGPA. This study guide covers the basics of VFR knowledge where pertinent to hang glider and paraglider pilots. Hopefully you will continue to build on your aviation knowledge and airmanship skills. Much of the information contained within this guide requires a good memory therefore ongoing reference to the core VFR documents is needed to remain current.

1.2. VFR Exam

The VFR exam (OPMF33) is an **online examination**:

Examination instructions:

- The exam consists of **50 questions**. A pass requires **90% correct answers**.
- You have **30 minutes** to complete the exam.
- Your questions are selected from a larger pool of questions.
- You may get different questions if you sit the exam multiple times.
- You can sit the exam multiple times if you don't pass first time. You can only sit it once a day.
- **This document** can be referenced when sitting the exam.
- A **VNC** can be referenced when sitting the exam.
- Upon passing the exam you will receive a **certificate**. Keep this to show your instructor or examiner.

2. Abbreviations

ACNZ	Airways Corporation of NZ
AGL	Above Ground Level
AIP	Aeronautical Information Publication
AIRS	Accident (and) Incident Reporting System
AMSL	Above Mean Sea Level
ATC	Air Traffic Control
CAA	Civil Aviation Authority
CAR	Civil Aviation Rule(s)
CFZ	Common Frequency Zone
CTA	Control Area
CTR	Control Zone
ECT	Evening Civil Twilight
FT	Feet
GAA	General Aviation Area
ICAO	International Civil Aviation Organisation
IFR	Instrument Flight Rules
LFZ	Low Flying Zone
MBZ	Mandatory Broadcast Zone
MCT	Morning Civil Twilight
NM	Nautical Mile
NZHGPA	New Zealand Hang Gliding and Paragliding Association (Inc.)
OPM	Organisation and Procedures Manual
TM	Transponder Mandatory
VFR	Visual Flight Rules
VMC	Visual Meteorological Conditions
VNC	Visual Navigation Chart

3. Organisations, Publications & Reference Documents

3.1. New Zealand Hang Gliding & Paragliding Association

The New Zealand Hang Gliding and Paragliding Association (NZHGPA) acts as the governing body for all recreational hang gliding, paragliding, speed flying, motorised hang gliding and motorised paragliding activity within New Zealand. For simplicity, these activities will hereafter be referred to as hang gliding and paragliding throughout this document.

The NZHGPA's mandate to oversee these activities is provided by its Recreation Organisation Certificate issued by the Director of the Civil Aviation Authority of New Zealand. In addition, the NZHGPA exists to develop, protect and promote the sports of hang gliding and paragliding.

All pilots of hang gliders and paragliders **must be current NZHGPA members**. This requirement applies to students under instruction in New Zealand. Pilots must have the correct rating for the activity they are undertaking.

3.2. NZHGPA Organisation & Procedures Manual

The NZHGPA's Organisation and Procedures Manual (OPM) outlines the roles, rules, procedures, standards and processes applicable to the role of overseeing hang gliding and paragliding within New Zealand. It can be accessed here:

- https://nzhgpa.org.nz/operational-procedures-and-forms/

Updates occur from time to time and are recorded in Section 1.1 of the OPM.

3.3. Civil Aviation Authority

The primary function of the Civil Aviation Authority (CAA) is to oversee safety standards for the aviation system, but not necessarily provide direct aviation services. Funding for the CAA comes from user charges and Crown funding.

3.4. Civil Aviation Rules

Civil Aviation Rules (CAR) are those rules that govern all aspects of aviation in NZ.

CAR **Part 91** contains the general operating and flight rules, and CAR **Part 106** contains rules for hang gliders which are additional or exceptions to Part 91.

CARs can be downloaded from the CAA website here:

- https://www.aviation.govt.nz/rules/

All CAR references to hang gliders should be taken to include paragliders, speed wings, motorised paragliders and motorised hang gliders.

3.5. Airways

The primary function of Airways Corporation of NZ (ACNZ), or just Airways, is to provide **Air Traffic Control (ATC) services**. Related services include flight information services to aircraft and aeronautical information services such as the AIP and visual navigation charts. The establishment of Airways ensures the split between operational functions of civil aviation from the regulatory, aviation security and policy-making functions.

3.6. NOTAMs

A NOTAM is a written notification available to pilots before a flight, advising them of circumstances relating to the state of flying. They are a way to promulgate urgent information about potential hazards to flight which may have missed the publishing deadline for inclusion as an AIP supplement.

NOTAMs, along with weather information, can be obtained via the IFIS Mobile app or from:

- www.ifis.airways.co.nz

3.7. AIP & AIP Supplements

The Aeronautical Information Publication (AIP) is a manual containing aeronautical information of a lasting nature. There is a wealth of useful information within the AIP, which can be downloaded for free here:

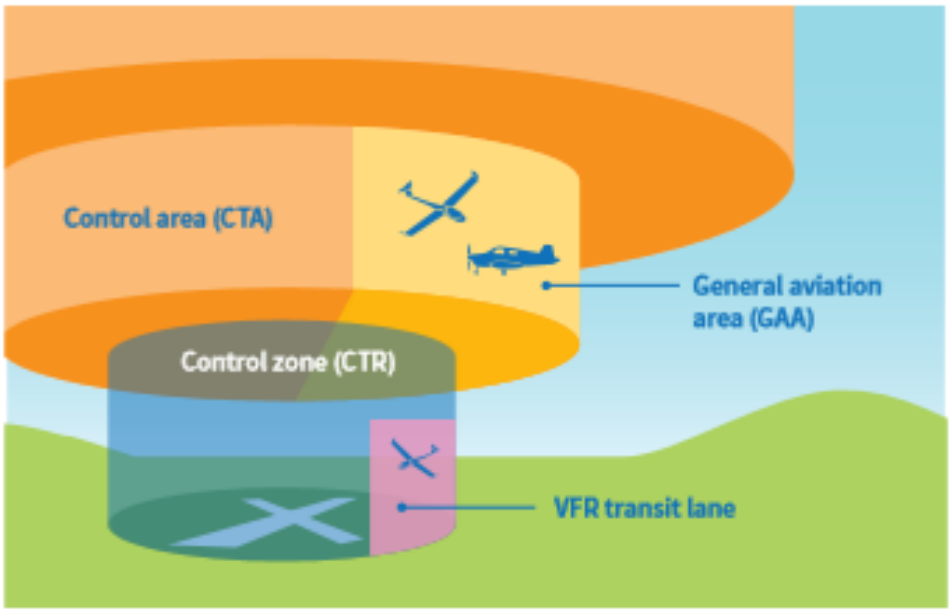
- www.aip.net.nz

AIP supplements provide **aeronautical information of a temporary nature** such as warnings, notices of military exercises, aviation events and changes to airspace. They are sent out to all holders of the AIP and are also available digitally for free from the AIP website.

4. Types of Airspace

CAA produce the following as part of their 'Good Aviation Practice' (GAP) series of publications:

- https://www.aviation.govt.nz/assets/publications/posters/new-zealand-airspace-poster.pdf
- https://www.aviation.govt.nz/assets/publications/gaps/caa-gap-new-zealand-airspace.pdf



4.1. Classes of Airspace

There are seven classes of airspace, ranging from class A through to class G. Classes B, E, and F are not currently used in New Zealand.

Class A airspace is used to accommodate high-level international air routes in the Auckland Oceanic Flight Information Region. IFR aircraft are separated from other IFR aircraft. VFR aircraft are not permitted in this airspace. Given we only operate under VFR conditions, further understanding of Class A airspace is not necessary.

Class C and D airspace are both controlled airspace and require a clearance to enter. This is used as a 'gate' to ensure that all aircraft operating within such airspace are made known to ATC. The difference between Class C and Class D is beyond the scope of this document and only relevant to pilots obtaining a clearance to operate in controlled airspace.

Any airspace within New Zealand that is not classified A, C or D, is Class G. **Class G airspace is uncontrolled**, meaning it does not require an entry clearance. You must, however, observe Class G airspace rules. Safe operation in Class G airspace depends on the **'see, detect, and avoid'** principle.

Entry to any controlled airspace requires a clearance from the local ATC. This typically requires the use of an airband radio, which requires a pilot to hold either a NZHGPA Airband Radio Operator (ARO) rating or a Flight Radio Telephony Operator (FRTO) license.

4.2. Control Zones

Control Zones (CTR) surround major aerodromes and extend from **the surface to a specified upper level**. The purpose of a CTR is to facilitate air traffic management in the vicinity of an aerodrome. CTRs may be either Class C or D and require a clearance from the local ATC before entering. CTRs may be transponder mandatory.

4.3. Control Areas

Control Areas (CTA) are areas of controlled airspace (Class C or D) extending **between specified lower and upper levels** (but never from the surface). CTAs are generally above CTRs and along commercial air traffic routes throughout the country and trans-oceanic routes. Pilots wishing to enter a CTA must obtain a clearance from the appropriate ATC before entering. CTAs may be transponder mandatory.

4.4. General Aviation Areas

A General Aviation Area (GAA) is part of a CTR or a CTA which may be released as Class G (uncontrolled airspace) during daylight hours for the purpose of facilitating VFR operations. This includes glider and powered VFR activity. They are specified from a lower level to an upper level. These were once known as Glider Flying Areas. They are now commonly used by powered VFR aircraft and therefore we shouldn't assume the airspace is reserved for our exclusive use.

There are three types of GAA.

- Those **active during daylight hours** ("DAY" on VNCs)
- Those **active when notified** to the applicable ATC unit ("ATC notification" on VNCs)
- Those **active when approved** by the applicable ATC unit ("ATC approval" on VNCs)

The type of GAA is clearly shown in the sample image alongside. In this case it is active when approved. In addition, the GAA designator (G953), its name (Alexandra), and its upper and lower height limits are shown. The lower limit of the GAA is 13,500 ft and the upper limit is Flight Level (FL) 175. FL175, put simply, is 17,500 ft. Heights are always referred to AMSL.

The image below shows three GAAs. These are the areas bounded by the light blue lines. Two are active during daylight hours, and one is active when approved. G753 "Crown Terrace" permits hang gliding and paragliding flight from the surface up to 3,000 ft.

GAAs which are **active during daylight hours** do not require activation. You are free to fly through or within these areas, during daylight hours, without any prior action.

GAAs can be **activated** by phoning the controlling ATC unit (listed in the AIP GEN 3.3 – 16) or by using an airband radio set to the appropriate airband frequency (shown on the VNC).

GAAs which are **active when notified** require you to notify the applicable ATC unit to **advise** them that you require it to be opened. Airways must activate the GAA if you advise you intend to use it.

GAAs which are **active when approved** require you to contact the applicable ATC unit to **request** for it to be opened. Airways may activate the GAA if you request use of it, however **they may decline your request**. You cannot use the GAA if your request is declined.

There may be some instances where the approval to open a GAA is managed through an agreement with a local hang gliding and paragliding Club. It is advisable to contact local pilots or the Club before contacting ATC.

It's important you know the correct name of the GAA you wish to open when calling ATC. During 'activation' usual IFR traffic will be diverted either over or around the activated GAA. Diversions may be costly for commercial operators therefore GAAs should not be left activated longer than necessary.

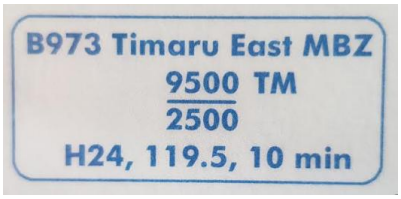
It is usually most convenient for hang gliders and paragliders to "auto-deactivate by Evening Civil Twilight (ECT)". If the use of a GAA concludes sooner than ECT or the extra height provided by the GAA is not required, every effort should be made to deactivate the area at the earliest convenience. If it is not auto-deactivated at time of requesting an activation, it is imperative that the GAA be deactivated (by phone or radio).

Note - CAA keeps a record of GAA use. The more we use GAAs, the more likely we are to retain the use of that airspace.

4.5. Mandatory Broadcast Zones

A Mandatory Broadcast Zone (MBZ) is a region of normally busy uncontrolled airspace, either surrounding an aerodrome or hosting intensive tourist air operations. An MBZ requires a pilot to use an **airband radio** to broadcast **their callsign, position, altitude, and intentions** on a specified frequency on entry, when joining an aerodrome traffic circuit, prior to entering a runway, and at specified regular intervals when operating within the MBZ. When a transmission is in the vicinity of an aerodrome it should begin with **who they are calling**, for example, "Thames Traffic".

Hang gliders and paragliders without an airband radio must not enter an MBZ unless an accompanying aircraft, in formation, can broadcast the required reports on their behalf. The **formation flying** rules are very strict and hang gliding or paragliding activity would rarely comply.



Some MBZs are Transponder Mandatory (TM) airspace. This is indicated by the "TM" in the example alongside. Refer to Section 4.7 for further information on TM airspace. As hang gliders and paragliders are unlikely to fly with a transponder, we are unable to enter this airspace.

Any pilot considering flying in an MBZ should first familiarise themselves with the NZHGPA's Technical Manual and Study Guide for airband radio licensing and use. This is available here:

- TM01 - ARO Aviation Radio Operator Manual and Study Guide

The CAA have published a GAP publication called "Plane Talking" covering the topic of airband radio communication. This is available here:

- CAA – GAP – Plane Talking

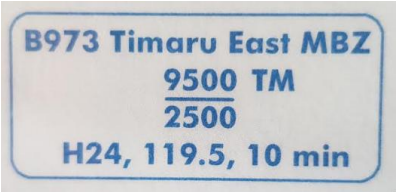
CFZs are depicted on VNCs by use of the abbreviation CFZ and a diamond-shaped boundary marking.

4.6. Common Frequency Zones

Common Frequency Zones (CFZ) have been established in certain areas of New Zealand. These areas are not controlled airspace, but they are where voluntary common (radio) frequencies have been established to enhance safety. CFZs signify areas of concentrated aviation activity, generally recreational aviation.

It is **not mandatory** to use an airband radio on the specified frequency within a CFZ, but it would be very poor airmanship not to use the published frequency and not to comply with expected local radio procedures when radio equipped. As a minimum, pilots should broadcast their position and intentions on entry and exit from a CFZ. CFZs are depicted on VNCs by use of the abbreviation CFZ and a diamond-shaped boundary marking.

4.7. Transponder Mandatory Airspace



All **controlled airspace in New Zealand is Transponder Mandatory** (TM). TM airspace is designated to assist surveillance systems used by ATC. Within transponder mandatory airspace, aircraft are required to have an operating transponder.

When requested, ATC may approve a pilot to enter controlled airspace without a transponder, however this is becoming less common.

Transponder mandatory airspace is indicated on VNCs by the abbreviation TM, as shown in the example alongside. In this example, it is a TM MBZ. Whilst we can usually fly within an MBZ, provided we adhere with the correct position reporting protocol, we cannot fly in a TM MBZ as we are unlikely to possess the required transponder.

Glass G airspace is never TM. The requirement to carry a transponder only begins when entering a CTR, CTA or MBZ. In the example above, this means you can fly to 2,500 ft without a transponder.

4.8. VFR Transit Lanes

VFR transit lanes are portions of controlled airspace that are “released” as Class G airspace during daylight hours. This allows VFR aircraft, including hang gliders and paragliders, to transit through an area of controlled airspace which is not normally used by IFR aircraft. **No clearance is required to operate within an active VFR transit lane**.

VFR transit lanes are depicted on VNCs with the designation Txxx.

4.9. Low Flying Zones

Low Flying Zones (LFZ) normally exist over flat areas and extend from the surface up to 500 ft AGL. They are prescribed to allow low-level flight training by a specified “using agency”. These are normally flight training organisations or aero clubs and are for light aircraft and helicopter use. The using agency is responsible for the LFZ and will have agreements in place with affected landowners. **To use an LFZ, you must obtain a briefing on the appropriate procedures from the using agency**. An LFZ is not a restricted area, so the using agency cannot refuse access provided pilots comply with any conditions of operations.

Pilots must be equipped with an airband radio to fly in an LFZ. Pilots are required to broadcast details of their flight and the proposed duration before entering an LFZ, then maintain a listening watch on the appropriate VHF frequency.

Low flying zones are depicted on VNCs with the designation Lxxx.

5. Navigation

5.1. Visual Navigation Charts

Visual Navigation Charts (VNC) are maps showing terrain and airspace information relevant for VFR flights and include:

- Airspace – vertical & horizontal extents, pertinent radio frequencies
- Special use areas such as Restricted, Danger and Low Flying Zones, Mandatory Broadcast Zones, and Parachute Landing Areas
- Topographical information such as terrain, airfields, hazards and obstacles.

Charts must be updated regularly to ensure you are informed of the current airspace boundaries. Pertinent changes should be shared amongst other pilots within your community.

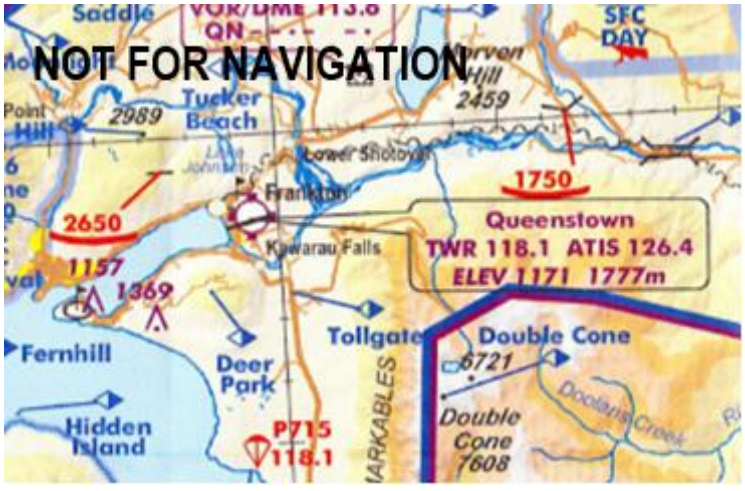
VNC's can be purchased by phoning 0800 500 045. Ordering online is easier if you're unsure of the specific map(s) you require. This can be done here: https://shop.aeropath.aero/

VNC's are printed front and back in 3 different scales:

1:500,000	These are most suited to powered aircraft, on longer cross-country flights. They contain less airspace information than the 1:250,000 series.
1:250,000	These are most suited to low level and local navigation. They are generally the best scale for planning hang gliding and paragliding flights, including cross-country.
1:125,000	Detailed terminal VNCs depicting a larger scale (more detail) of Auckland and Christchurch airspace.

5.2. Chart Characters

Like most maps, VNCs contain a legend. These legends explain the meaning the symbol used on the maps and facilitate easy interpretation. The sample map below shows the following:



- A **parachute landing area**
- Numerous **position reporting points** (e.g. Hidden Island)
- Two **wire hazards**, one at 2650ft AMSL and the other at 1750ft AMSL
- An area of **hang gliding and paragliding activity**
- Queenstown **aerodrome**.

All new pilots should have the opportunity to look at a VNC for their local flying area. **Talk to your instructor or examiner and ask them to show you how to read one.** The chart legend will be easily visible and will be a great help in understanding the detail the maps show.

5.3. Units of Measurement

Aviation altitudes are referred to in **feet** (ft) above mean sea level (AMSL), where "mean" refers to the average sea level. This norm is set by the International Civil Aviation Organisation (ICAO) and (in theory!) applies throughout the world. Airspace altitudes are always defined in feet and therefore it's worthwhile becoming familiar with "thinking" in feet.

At all times, pilots are required to fly with a **barometric altimeter**, accurate to within 100 ft. This must be set to feet, not metres. Barometric altitude is the altitude determined by a barometric altimeter by **reference to a present sea level barometric pressure**. ATC provides "QNH" to pilots, which is the pressure they need to set into their altimeters to make them read barometric altitude correctly.

New Zealand **topographical maps** generally refer to altitude in **metres** (m). 1 metre equates to approximately 3.28 ft.

Nautical miles (NM) are the standard aviation unit of **distance**. 1 NM = 1.852 Km (or 6,080 ft!!!). A nautical mile is a geometric unit defined as the length of one minute of arc on the circumference of the earth at the equator.

Unusually, NM are not used to define minimum visibility and cloud separation distances. These are defined in either **kilometres or metres**.

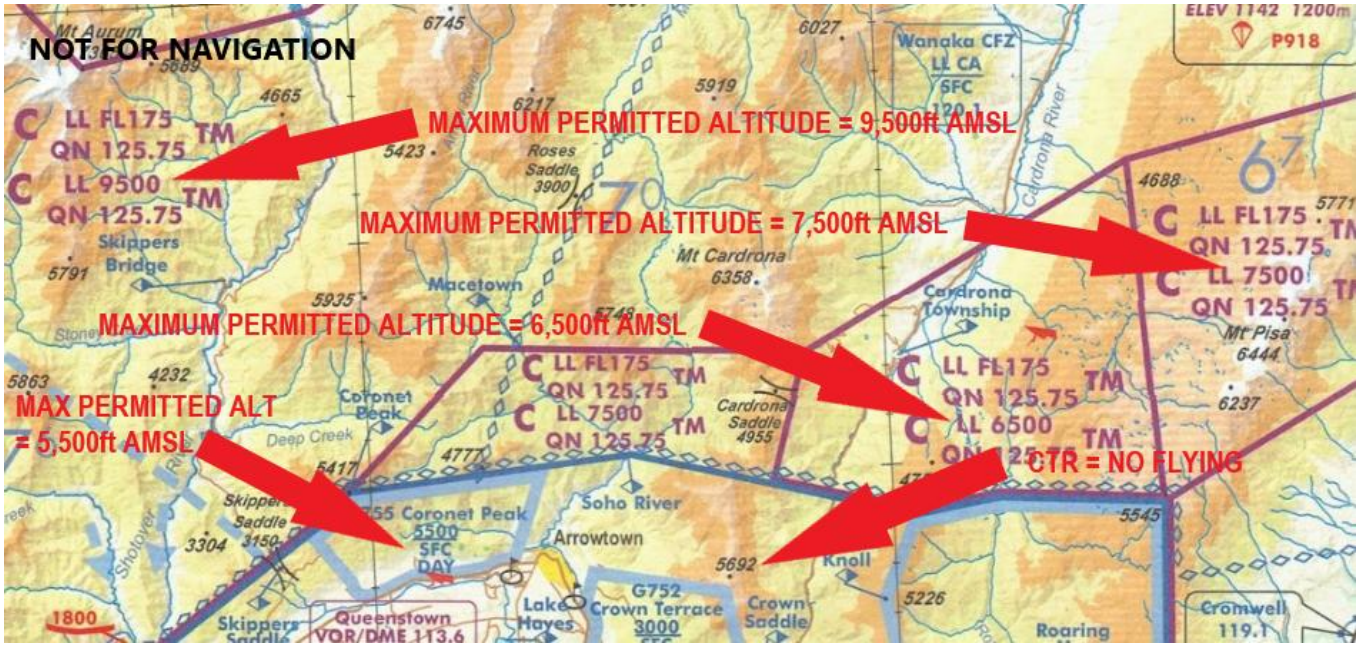
5.4. Reading a VNC

The sample maps below will go some way to helping you understand the basics of reading a VNC. Nothing can replace a proper briefing from an instructor on how to read them. You will be expected to be able to read a VNC for the VFR exam, particularly with respect to determining how high (and if) you can fly in particular locations.

Please be aware that ALL the maps shown in this guide are samples. **They are not intended for navigational use and may be out of date (incorrect)**. These should not be used as a substitute for a current VNC.

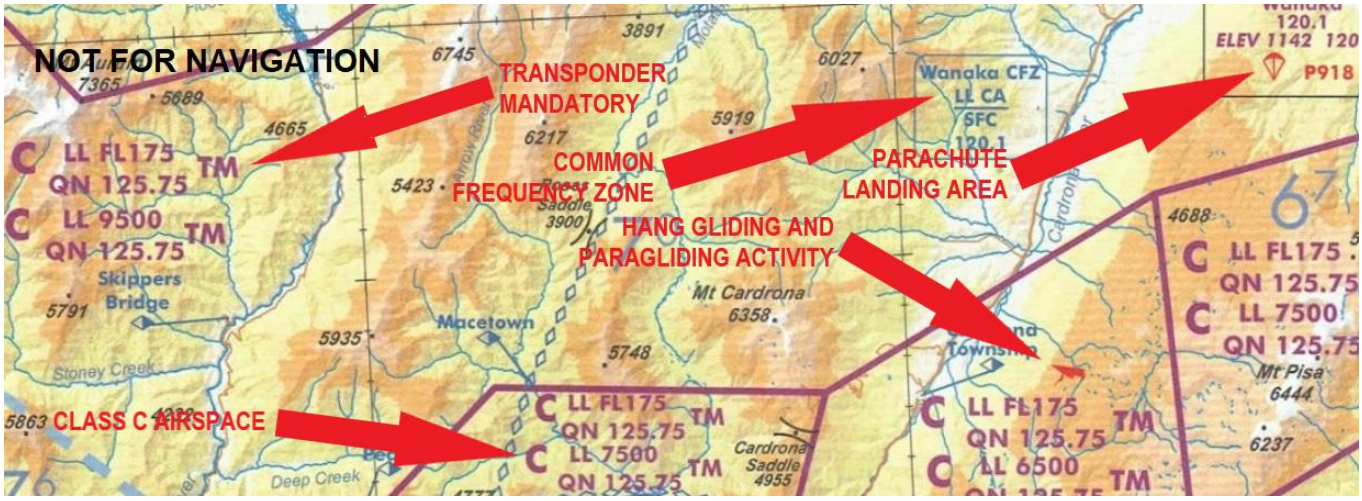
The map below identifies:

- A GAA, where you are permitted to fly to 5,500 ft. This GAA is active during daylight hours. The boundary of the GAA is defined by the light blue line.
- The maximum permitted altitude in three different CTAs. The boundaries to these CTAs are defined by the purple lines.
- A CTR. The boundary of this is defined by the dark blue line.



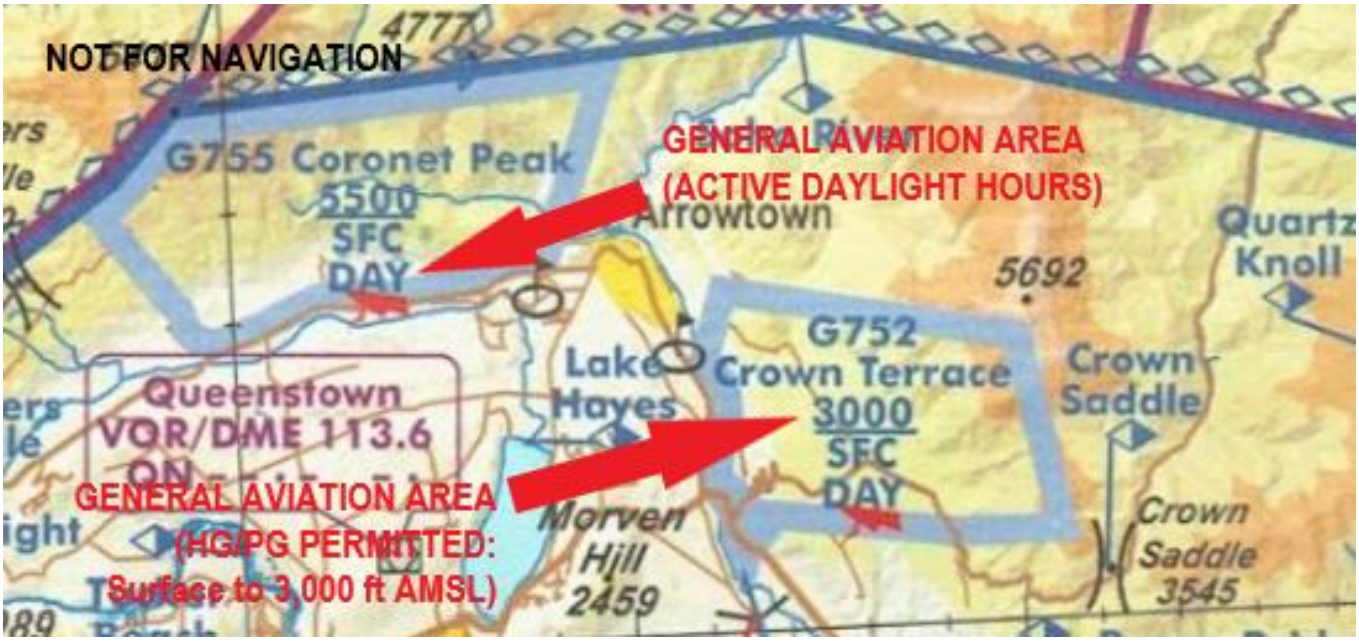
The map below identifies:

- The symbol for a parachute landing area
- The symbol for an area of hang gliding and paragliding activity
- A CFZ and the appropriate radio frequency
- How to identify the airspace class
- How to identify if the controlled airspace is transponder mandatory.



The map below identifies:

- Two GAAs, located within a CTR
- That they are active during daylight hours
- How to identify the maximum permitted altitude.



6. Visual Meteorological Conditions

Visual Meteorological Conditions (VMC) describe conditions with respect to visibility and distance from cloud for VFR flights. VFR Minima, or the minimum permissible VMC, are prescribed in CAR 91.301, CAR 106.53(1) and Section 5.5.11 of the OPM.

A hang glider or paraglider shall not operate under VFR when the flight visibility is less, or at a distance from cloud that is less, than that prescribed for the corresponding altitude and class of airspace in the table below.

Airspace		Distance from Cloud	Flight Visibility
Class C, D		2 km horizontally 1000 ft vertically outside a control zone. 500 ft vertically within a control zone.	8 km at or above 10,000 ft AMSL 5 km below 10,000 ft AMSL
Class G	Up to 11000ft AMSL	2 km horizontally 500 feet vertically	
	At or below 3000ft AMSL or 1000ft above terrain whichever is higher	Clear of clouds and in sight of the surface.	5 km

6.1. Visibility

What matters to hang glider and paraglider pilots are the visibility requirements in Class G airspace. **5 km visibility must be maintained below 10,000 ft** and 8 km visibility must be maintained above.

6.2. Separation from Cloud

The requirement to remain clear of cloud is dependent on two things. Height above the terrain and height above sea level. Minimum separation distances from cloud for flights in Class G airspace, below 11,000 ft, are defined below.

	Below 1000 ft AGL	Above 1000 ft AGL
Below 3000 ft AMSL	Clear of cloud, in sight of surface	Clear of cloud, in sight of surface
Above 3000 ft AMSL	Clear of cloud, in sight of surface	500ft vertically, 2 km horizontally

It is important to understand that the rationale for having minimum separation distances from cloud is to provide time to avoid a collision with an oncoming aircraft AFTER having seen it. An aircraft which is approaching at 120 knots is traveling in excess of 1 km every 16.5 seconds. If you are both skimming the clouds, you may have no time for collision avoidance manoeuvres.

IFR aircraft (aircraft using instruments for navigation, not visual reference) may operate within the cloud and may exit cloud climbing or descending, which is why it is important to maintain vertical separation from cloud. They are required to maintain a minimum separation distance of 1,000ft from the highest terrain in the area, hence the reduction in minima for us below 1,000ft AGL (i.e. there shouldn't be any IFR aircraft that low).

Accurately measuring distance and height from cloud is difficult. Estimating distances is the only practical way to do this, and responsible pilots will err on the side of caution. Be particularly vigilant for other aircraft when operating in the vicinity of clouds.

Under no circumstances should you fly in cloud.

6.3. Daylight Hours

VFR aircraft, including all hang gliders and paragliders, are only permitted to operate during daylight hours. This is defined as the time between Morning Civil Twilight (MCT) Evening Civil Twilight (ECT).

MCT is defined as when the centre of the rising sun's disc is 6 degrees below the horizon.

ECT is defined as when the centre of the setting sun's disc is 6 degrees below the horizon.

Practically, definitions equate to approximately 30 minutes prior to sunrise and 30 minutes after sunset. Tables showing MCT and ECT for zones within New Zealand are listed in GEN 2.7 of the AIP.

7. Other Aircraft, Other People & Aerodromes

7.1. Give Way Rules

A. Each Pilot of a HG/PG:
   a. Shall maintain a LOOKOUT, to see and avoid other aircraft.
   b. That has Right of Way, shall maintain heading and speed, but shall not be relieved from the responsibility of taking such action, including collision avoidance manoeuvres, as will best avert collision.
   c. That is obliged to give way to another aircraft, shall AVOID PASSING OVER, UNDER OR IN FRONT of other aircraft, unless passing well clear and taking into account the effects of wake turbulence.

B. Each Pilot, when APPROACHING another aircraft HEAD ON or nearly so, shall alter heading to the right.

C. Each Pilot, who is CONVERGING at approximately the same altitude, with another aircraft that is to its right, shall give way.

D. Each Pilot, who is OVERTAKING another aircraft soaring, shall pass on the right side of the overtaken aircraft.

E. Each Piot, who is OVERTAKING another aircraft soaring on a ridge, shall pass on the ridge side of the overtaken aircraft.

F. Each Pilot-in-Command, who has the RIDGE ON THE RIGHT, has right of way. The other aircraft converging must move to the right.

G. Pilots CONVERGING ON A THERMAL, shall allow the first glider to thermal (regardless of altitude) to dictate the direction of turning.

H. Where the LANDING AREA is restricted in size, the Pilot at the LOWEST ALTITUDE has right-of-way.

I. Each Pilot shall NOT TAKE OFF if there is an apparent risk of collision with another aircraft.

J. Each Pilot shall GIVE WAY TO ANY AIRCRAFT IN DISTRESS.

> There are a small number of occasions where the rules could arguably contradict. An example might be setting up to land where a higher pilot (who must give way) is on the right (who has right of way). Common sense must prevail in these instances, as it must if you encounter another pilot who does not know the rules or is not paying attention. Irrespective, you have an **obligation** to avoid an accident. **Never assume you have right of way, and never leave your decision to turn away too late.**

Hang gliders and paragliders are considered equal with respect to these rules. **This includes speed wings**, and the requirement to give way to below on landing is worthy of a reminder. Sailplanes, like us, are gliders… and therefore are considered equal.

7.2. Flying Near Aerodromes

The most important aspect to consider is whether the aerodrome controlled or uncontrolled.

A controlled aerodrome is surrounded by controlled airspace. Controlled airspace limits how close we are permitted to fly.

There is no minimum distance that hang gliders and paragliders must fly from an uncontrolled aerodrome. However, you **must remain clear of the circuit traffic** or comply with **standard circuit procedures**. Complying with circuit procedures is generally difficult on a hang glider or paraglider, and therefore should only occur following contact with the aerodrome operator.

To understand your ability to comply with the circuit procedures, you will first have to study the aerodrome traffic information in the AIP – if you don't know local traffic rules, or how to do this, stay well clear of aerodromes!

Perhaps, one of the more understated risks associate with aerodromes, whether controlled or uncontrolled, is skydiving. Stay well clear.

7.3. Military

Pilots need to be mindful of the potential for conflict in and around airspace scheduled for military exercises. This is one example demonstrating the value of checking for, and sharing the details of, NOTAMs.

The Duty Operations Officer at the RNZAF Base in Ohakea should be contacted if you are likely to be flying in an active military area or if further information is needed. They can be contacted by phoning 06-351-5441.

7.4. The Public

Hang gliders and paragliders need to be particularly mindful of the potential to endanger and upset the public. The consequence of dangerous or upsetting behaviour is not isolated to the pilot but worn by the entire community.

There is a collection of rules put in place to minimise the likelihood of such behaviour. These include, but are not limited to, the following:

- Except to take-off or land, a hang glider or paraglider must not operate over any congested area (city, town, or settlement) or over any open air assembly of persons at a height of less than 1,000 ft AGL or any obstacle that is within a horizontal radius of 600 metres from the point immediately below the aircraft. In addition, a pilot must also retain the height required to execute an emergency landing (**without hazard to persons or property**).

- A pilot shall not drop any object unless the pilot has taken reasonable precautions to ensure dropping the object **does not endanger persons or property**.

- Unlike many aircraft, hang gliders and paragliders are permitted to operate below 500 ft AGL. This is only permitted for the purpose of ridge soaring, **if such flight does not hazard persons or property on the ground**. Ridge soaring is commonly accepted to include thermal soaring.

8. Accidents and Incidents

8.1. Ground Signals

The **ground signal** for "require **medical** assistance" is an "X". A packed hang glider crossed with a hang glider bag or 2 paragliders rolled and crossed could create such a "signal".

The ground signal for "require assistance" is "V".

The ground signal for "we have found all personnel is "LL". This is commonly used to signal "all is well".

Ground signals should be not less than 2.5m in size. Lateral thinking may be beneficial… they could be trampled into snow and may be visible to a passing aircraft.

8.2. Accidents

Accident reporting is **mandatory** under the provision of CAR Part 12. Any of the following constitute an accident:

- **Serious injury / fatality**, including 3rd party injury as a result of the accident.

  A serious injury is classified as an injury that is sustained by a person in an accident which:

  (i) Requires hospitalisation for more than 48 hours, commencing from within 7 days from the date the injury was received; or

  (ii) Results in a fracture of a bone (except simple fractures of fingers, toes, nose or ribs); or

  (iii) Involves lacerations which cause severe haemorrhage, nerve, muscle, or tendon damage; or

  (iv) Involves injury to an internal organ.

  A fatal injury is an injury resulting in death within thirty (30) days of the date of an accident.

- **Substantial damage to aircraft** (affecting structural strength / performance).

- **The hang glider or paraglider is missing** or is completely inaccessible.

  An aircraft is considered missing when the official search has been terminated without being located.

8.3. Incidents

An incident is the operational occurrence, other than a hang glider or paraglider accident, which:

- Jeopardises the **safety** of the hang glider or paraglider; or

- Involves a hang glider or paraglider, and causes injury or severe mental strain to any person, or damage to property; or

- Involves a breach of **airspace** regulations.

Practically speaking, an "incident" is usually a near miss. If you think luck is all that saved it from being an accident, then it's an incident. Please report incidents. The information can be used to educate and inform pilots.

8.4. Accident Reporting

Accident reporting is the **responsibility of the pilot** involved in an **accident** (or the instructor if an accident involves a student pilot under instruction). The nature of the accident determines who needs to be informed. Section 5.13 of the OPM provides further detail on accident reporting and procedures. The following are to be notified:

- The local **Club Safety Officer** within 24 hours.

- The 24-hour **CAA Accident Hotline** on 0508 ACCIDENT (0508 222 433).

- The local **Police** (Immediately) in the case of a **fatality**.

- The NZHGPA **Operations Manager** immediately in the case of a **fatality**, or an accident which could involve **third party insurance claims** against an organisation or the Association.

A completed **accident report** must be submitted within 48 hours using OPMF07 or the online reporting system called **AIRS**. This is available here:

- http://www.nzhgpa.org.nz/safety

Filing an accident report online using AIRS is an acceptable way to notify both the NZHGPA Operations Manager and the Club Safety Officer. CAA and the Police need to be notified separately.

Incident reporting is not compulsory but remains strongly encouraged.

9. Sites

9.1. Launch Site Authorisation

CAR Part 106 requires hang gliders and paragliders to launch from authorised sites. This section describes how a site is **authorised for qualified pilots**.

- Clubs may issue a **site safety rating** (site rating) for flying sites within the Club's control.
- Where a site has a site rating, then authorisation for pilots to fly from that site shall be:

  Paragliders:

  1. Holding a **pilot certificate (rating) equal to or higher than the site rating**, or
  2. Holding a **pilot certificate one grade lower than the site rating** and being **directly supervised** by a current instructor, assistant instructor, or a current PG3 certified pilot who is familiar with the site.

  Hang gliders:

  1. Holding a **pilot certificate (rating) equal to or higher than the site rating**, or
  2. Holding a **pilot certificate one grade lower than the site rating** and being **directly supervised** by a current instructor, assistant instructor, or a current Advanced certified pilot who is familiar with the site. A **Hang Glider Pilot Supervision Authorisation** form must be completed prior to flying (unless the supervisor is an instructor who has supervised the pilot's previous 3 flights).

- If a site does not have a site rating then pilots rated PG2, HG Intermediate, PP or PHG (or higher) may **self-authorise** that site for their personal use on a daily basis providing the following procedure is followed:

  1. Confirm that appropriate permissions have been gained to access the property and launch.
  2. Ensure that the flight plan from the launch will not breach airspace, CAR's or NZHGPA rules.
  3. Assess the launch for hazards and that the flight plan poses no risk or nuisance to the public or other aircraft.

Dissemination of this Technical Manual is permitted for the sole purpose of advancing the knowledge held by recreational hang glider and paraglider pilots. Dissemination must be in its original format except with prior written permission of the NZHGPA Training Manager.

Email training@nzhgpa.org.nz with questions, suggestions, errors or amendments.