

Greytown Soaring Centre

Airfield Common Practices and Rules

1.0 Preamble

This document describes the Standard Operating Procedures (SOPs) of the Greytown Soaring Centre (GSC). These are site-specific rules and should be used in conjunction with the rules and procedures in the Gliding New Zealand (GNZ) Manual of Approved Procedures (MOAP).

These SOPs may, at times, impose more restrictive rules than those in the MOAP.

Individual clubs operating under the GSC umbrella are expected to operate under these SOPs also. Clubs must have their own operating rules (relating to their own aircraft and facilities) that exist in addition to the GSC SOPs, just as the latter exists in addition to the GNZ MOAP.

These SOPs are rules that relate primarily to flying operations at the Papawai airfield. The rules of the GSC as an Incorporated Society are covered in a separate document.

2.0 Club Responsibilities

Before discussing the rest of the GSC SOPs, it is useful to highlight the areas that individual clubs are responsible for.

2.1 Flying Days

Clubs are responsible for organising their own flying days, within any limitations that may be set by the GSC. These limitations may be caused by the fact that the Papawai airfield is used by the South Wairarapa District Council for irrigation, and that it is also a working farm. Some designated times may have to be reserved for these operations in certain parts of the airfield. Clubs should keep the GSC informed as to when they intend to operate.

2.2 Timekeeping

Clubs are responsible for their own timekeeping and flying accounts. If two or more clubs are operating, then a shared system may be arranged but it is up to the individuals involved to do so.

2.3 Liability and Disputes

Clubs are expected to resolve their own disputes internally. Damage caused by individual clubs or their members must be rectified by those same clubs without delay. Clubs are expected to have and enforce rules regarding the appropriate conduct of their members, especially in interactions with members of the public.

3.0 Airfield Layout

The vectors in use at the Papawai airfield are shown in Figure 3.0a.

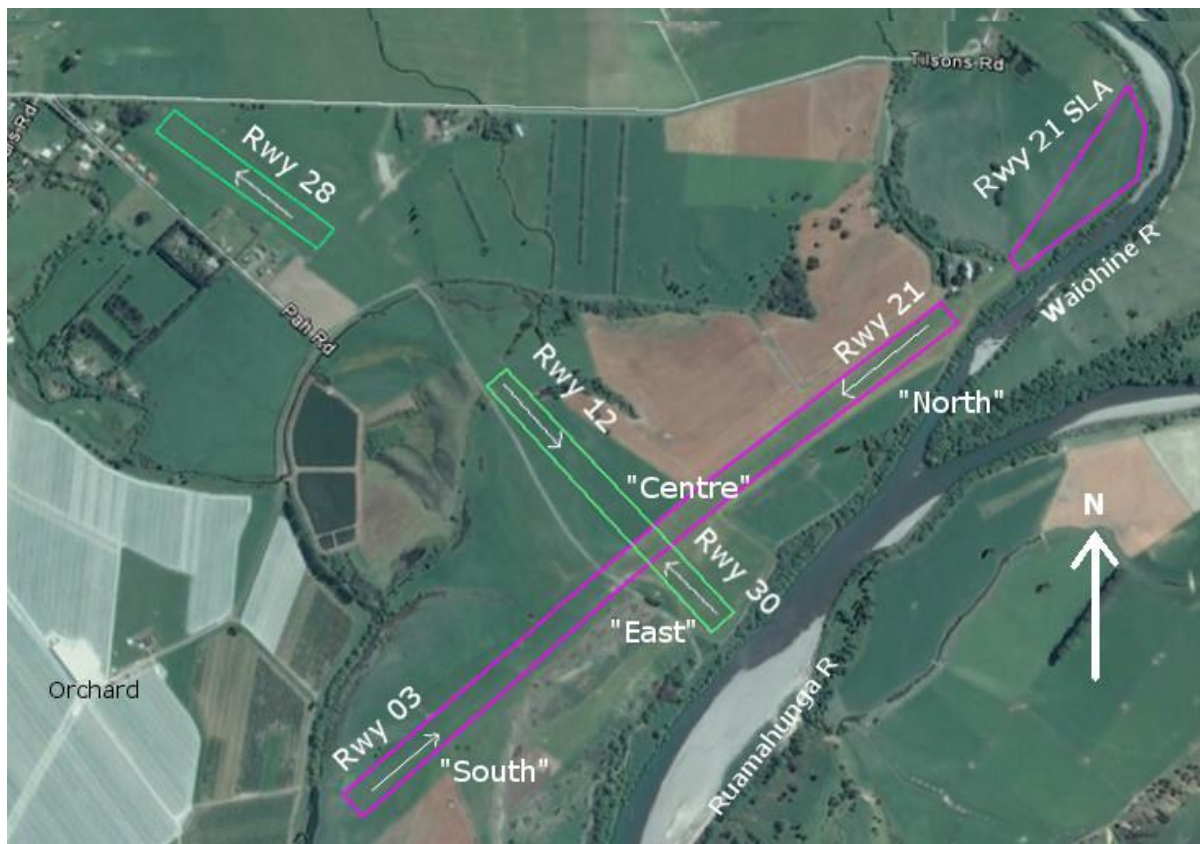


Figure 3.0a: Vectors and Landmarks of the Papawai Airfield

3.0.1 For aerotowing, Runway 12/30 is approximately 670 metres long. Runway 03/21 is approximately 1520 metres long. Winch cables may extend further than the indicated runway lengths if safe to do so.

3.0.2 Runways as shown are 60 metres wide. The area between Runway 21 and the SLA is presently only 40 metres wide and bordered by tall trees, so is not recommended for aerotow launches or landings in cross-wind conditions.

3.0.3 If in doubt of circuit directions, there are two rules to remember:

- For runway 12/30, circuit side is away from the covered orchard.
- For runway 03/21, circuit side is over the river.

On occasions when a strong easterly or sou-easterly is present, there is often heavy sink over the river, so the launch point controller may change the circuit for 03/21 to the hangar side.

3.0.4 The Papawai Airfield sits at approximately 125'AMSL and uses a common radio frequency of 134.45MHz.

The following sections describe the various vectors and their *recommended* launch point layouts. The rationale behind the layouts is described in section 4.

3.1 Naming of Runway Sections

Since there are several landable sections of the various vectors, a naming convention has been implemented.

3.1.1 Runway 03/21 has been divided into "south" (at the SW end), "centre" (from the river access road to the GWR hangar) and "north" (i.e. the Short Landing Area).

3.1.2 Runway 12/30 has been divided into "centre" (to the west of runway 03/21) and "east" (to the east of runway 03/21). There is no "runway 30 west" – that has been named as runway 28.

3.1.3 Downwind calls should describe the intended landing area e.g. "Papawai traffic, Foxtrot Oscar, downwind, 03 centre".

3.1.4 The side of the runways with the hangars on is called "Hangar Side". The other side is called "River Side".

3.2 The Short Landing Area (SLA), Runway 03/21 North.

This is approximately 400 metres long and provides a safe landing area separate from either active runway. It can also be used for extending runway 03/21 for winching operations to approximately 2200 metres, with the following caveats.

3.2.1 Runway 21 in use for winching only - The launch point can be either the NE end of the SLA or the NE end of runway 21. Displacing the threshold of the SLA further towards runway 21 puts launching gliders closer to the obstacles around the Gliding Wairarapa hangar and clubhouse. If it is intended for gliders to land behind (and then roll up to) the launch point, then the launch point should be at the NE end of Rwy21. If not, then the launch point can be at the NE end of the SLA.

3.2.2 Runway 21 in use for both aerotow and winching – The launch point for both operations must be at the NE end of runway 21. There is not enough width in the runway at this point to allow different launch points for both operations.

3.3 Runway 28

This is approximately 400 metres long and can be used for landing aircraft near Tilsons Road. It is not yet suitable for winch launching or aerotowing and should be treated as a conventional farm paddock.

3.3.1 Permission to land on runway 28 is only by prior approval from the Duty Instructor on the day.

3.3.2 The Duty Instructor must ensure that this runway is clear of stock or other obstacles before granting landing permissions.

3.3.3 Runway 28 hazards include the proximity of fence posts and, late in the day, landing towards the setting sun.

3.4 Runway 21

3.4.1 The recommended grid layout for this vector is shown in figure 3.4a

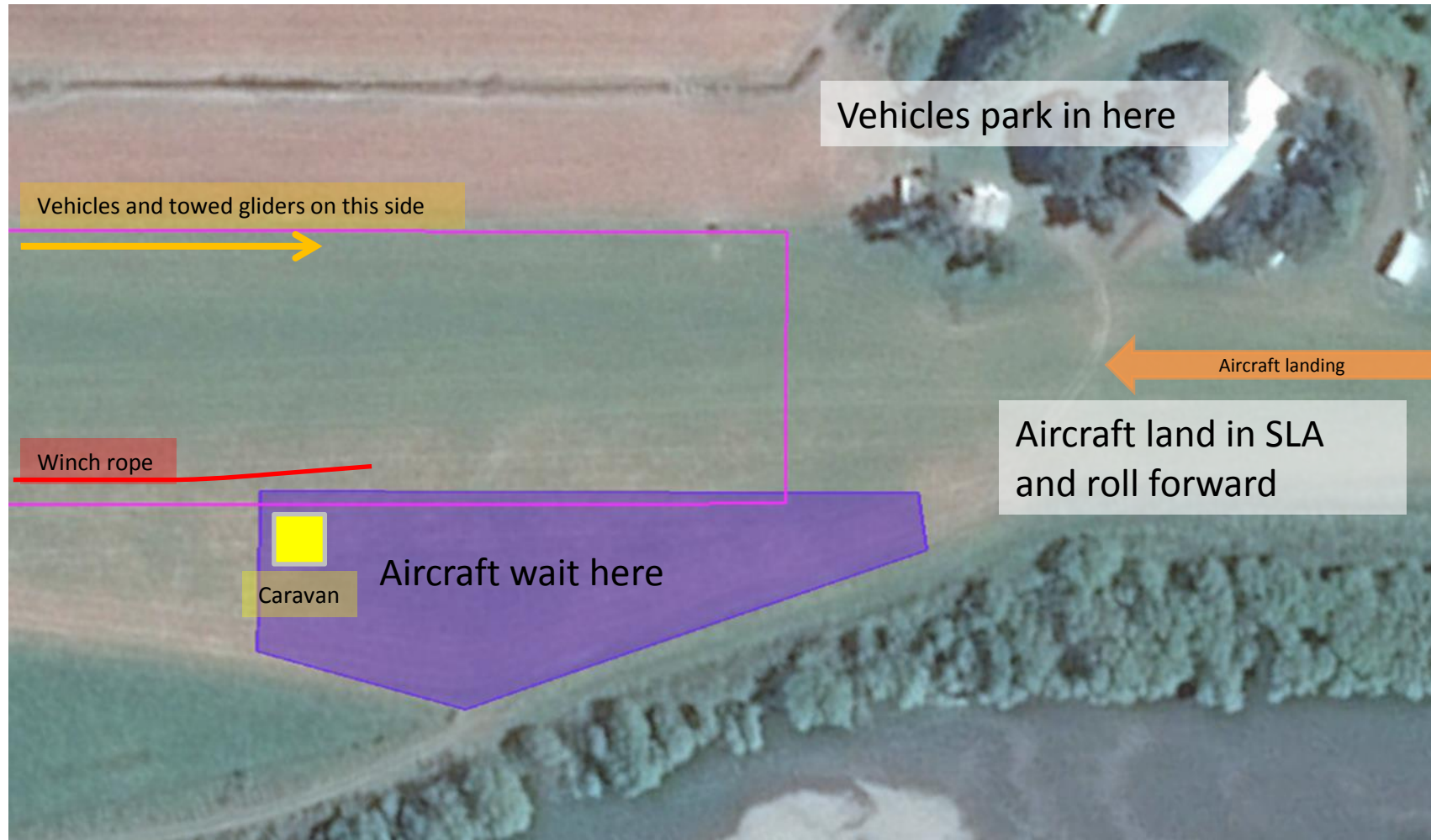


Figure 3.4a: Recommended grid arrangement for Runway 21 launch point

3.4.1 Aircraft requiring a re-launch and able to land in the SLA behind the launch point should do so, rolling forward as far as possible but not over the gravel road. Aircraft not requiring a relaunch immediately can also land in the SLA and turn clear to its western edge. Another option is to land long and steer right into runway 30 to clear the active vector.

3.4.2 Backtrack only when cleared by the launch controller.

3.4.3 The standard circuit for runway 21 is left-hand, as shown in figure 3.4b.

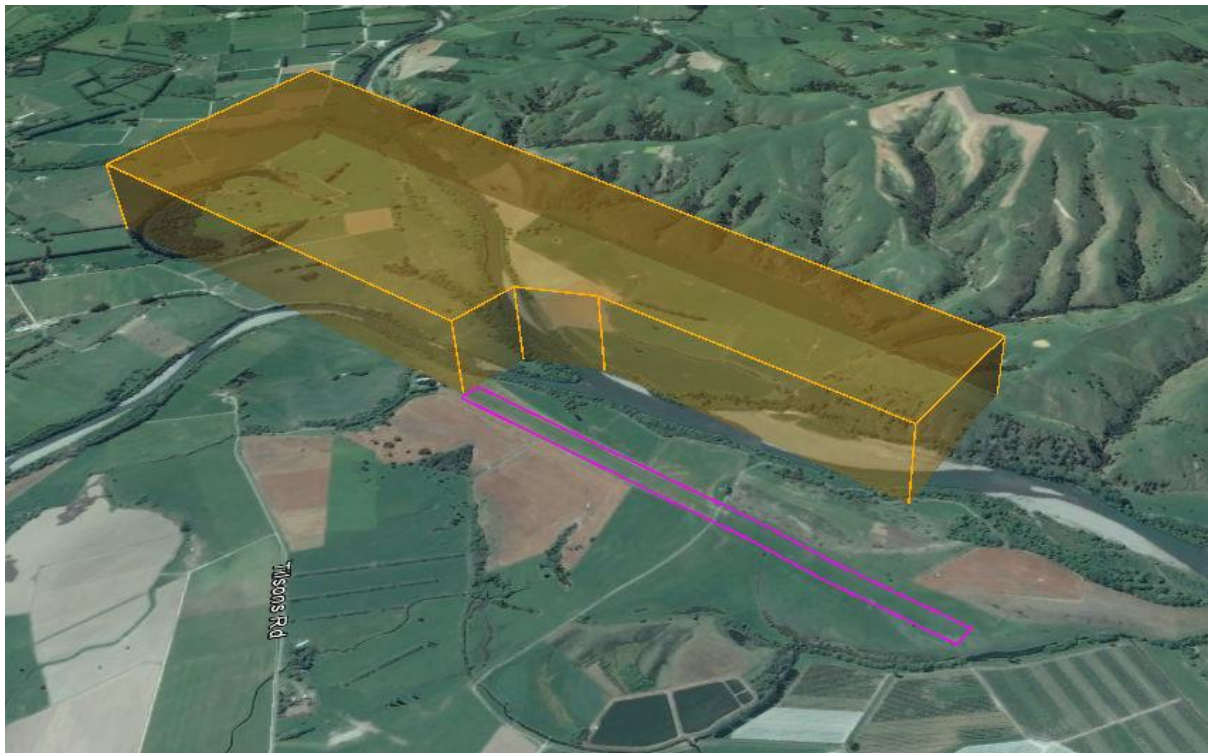


Figure 3.4b: Standard Left-Hand Circuit for Runway 21.

3.4.4 A further staging area is available along the NW edge of the SLA, out of the path of the active vector.

3.5 Runway 03

The primary launch point for this vector is displaced 300m from the 'southern' end of the vector. Rough ground to the SW of the old gravel road means that this section is unsuitable for landing on by towplanes or heavy gliders. It's improving but still rough.

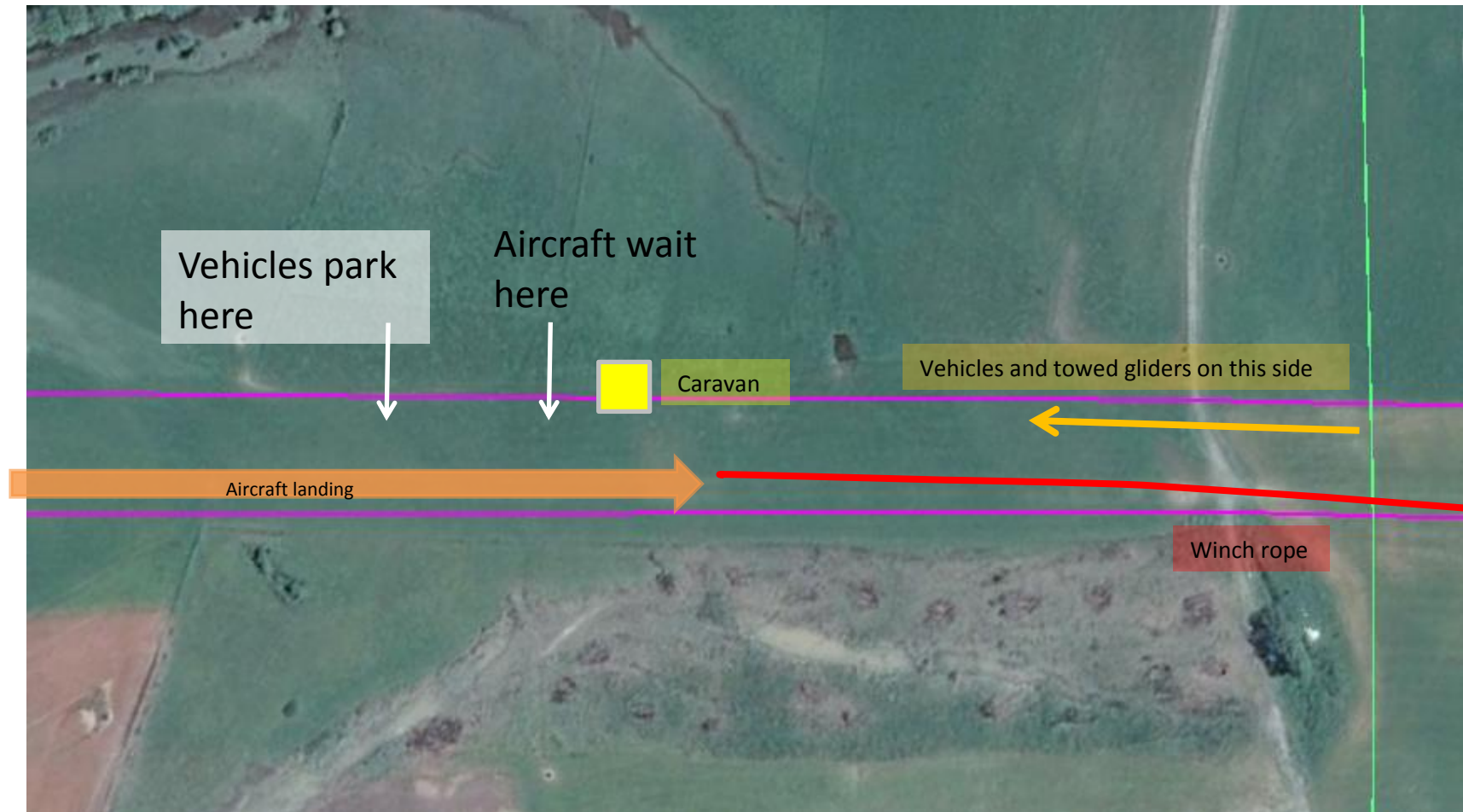


Figure 3.5a: Recommended grid arrangement for Runway 03 launch point

3.5.1 If possible, keep runway 12/30 (shown in green) clear in case of emergencies.

3.5.2 The standard circuit for runway 03 is right-hand, as shown in figure 3.5b.

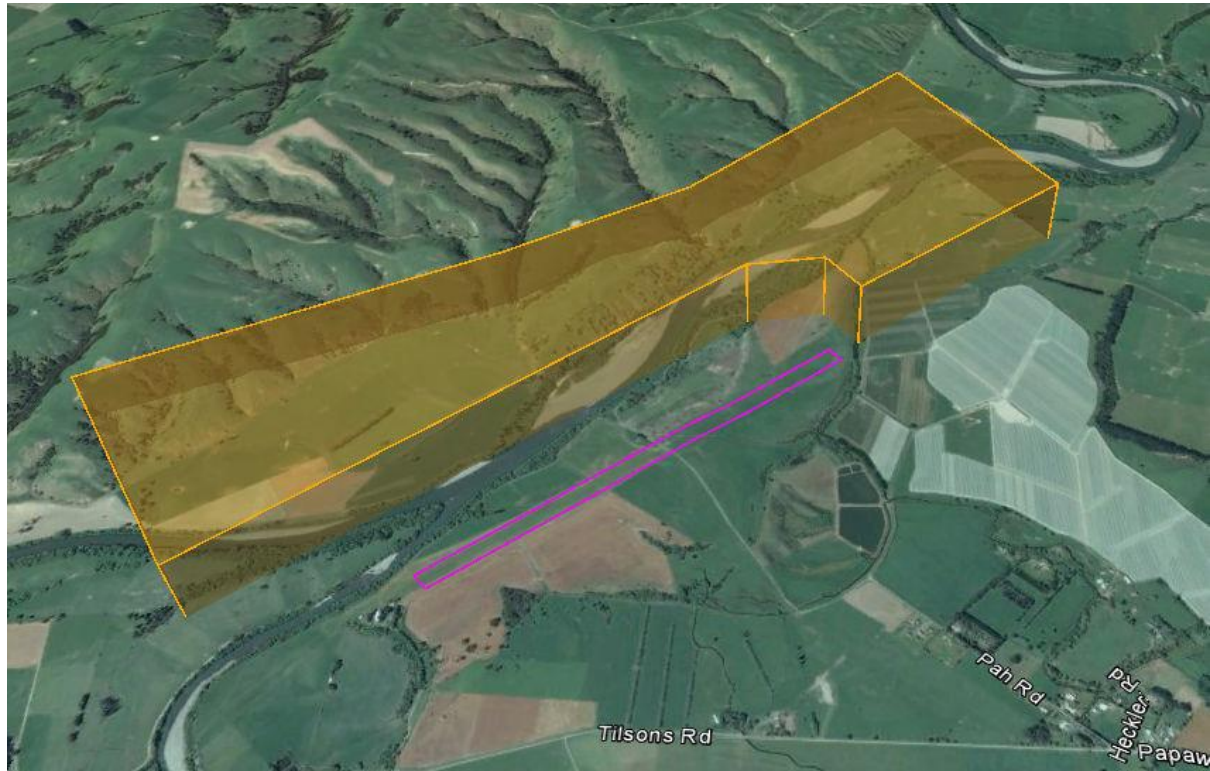


Figure 3.5b: Standard Right-Hand Circuit for Runway 03

3.6 Runway 30

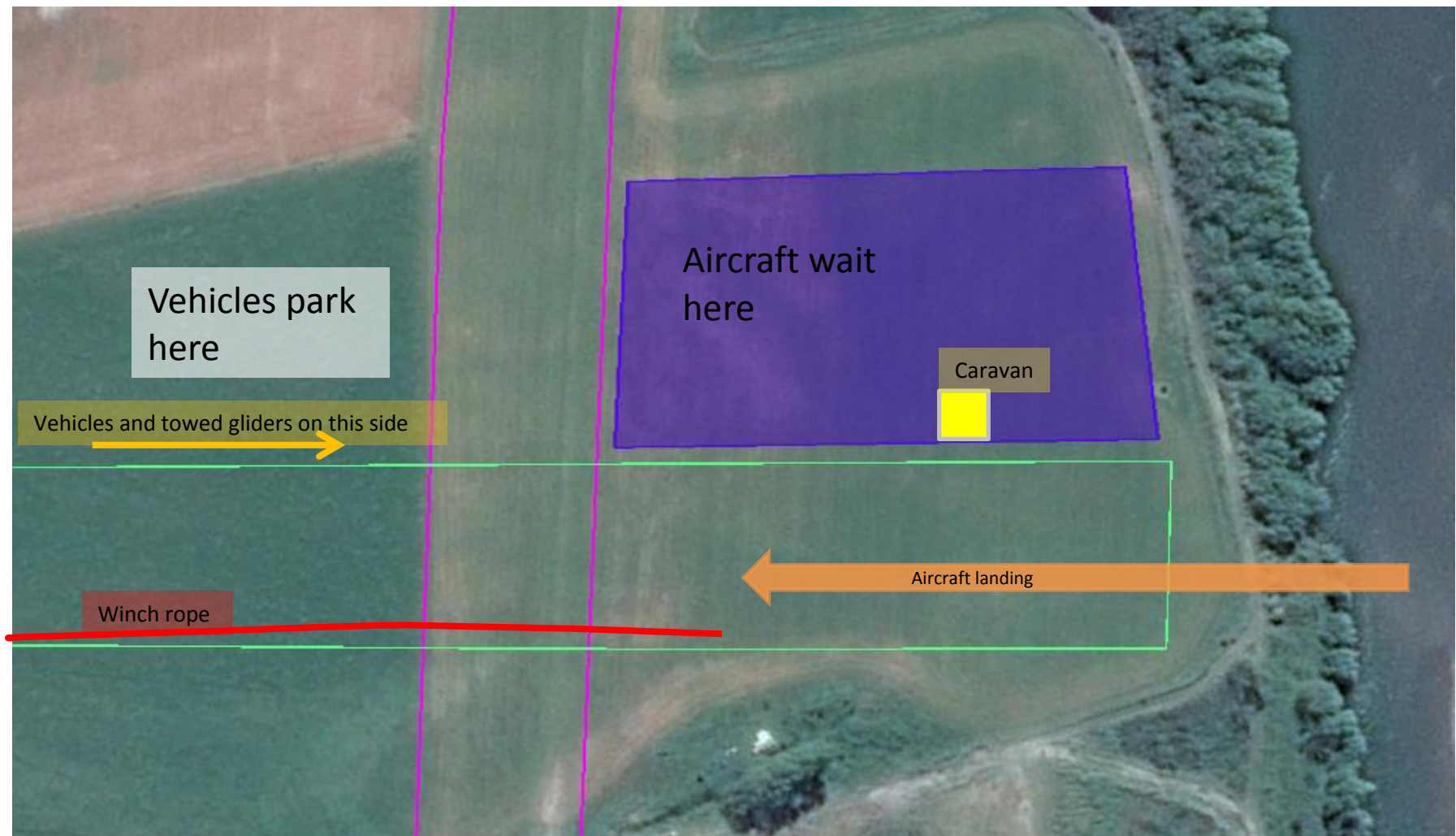


Figure 3.6a: Recommended launch point layout for runway 30

3.6.1 The recommended launch point arrangement for this vector is shown in figure 3.6a.

3.6.2 If possible, keep runway 03/21 clear in case of emergencies.

3.6.3 Note that the winch rope is laid out on the non-caravan side in this instance, to keep it clear of back-tracking aircraft and vehicles.

3.6.4 The standard circuit for runway 30 is right-hand, as shown in figure 3.6b. Note the higher terrain on the base leg.

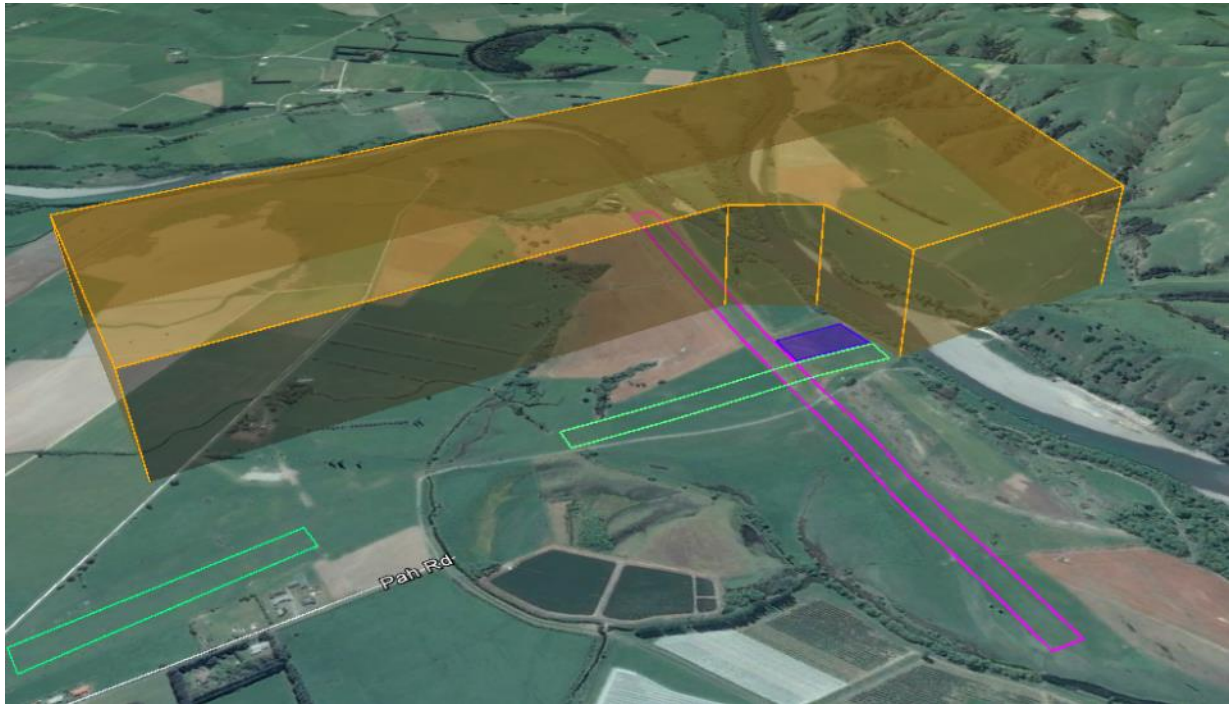


Figure 3.6b: Standard Right-Hand Circuit for Runway 30

3.7 Runway 12

3.7.1 Runway 12 is short and faces trees and rising ground, so is not recommended for launching at this time.

3.7.2 The standard circuit for landing on runway 12 is left-hand, as shown in figure 3.7a.

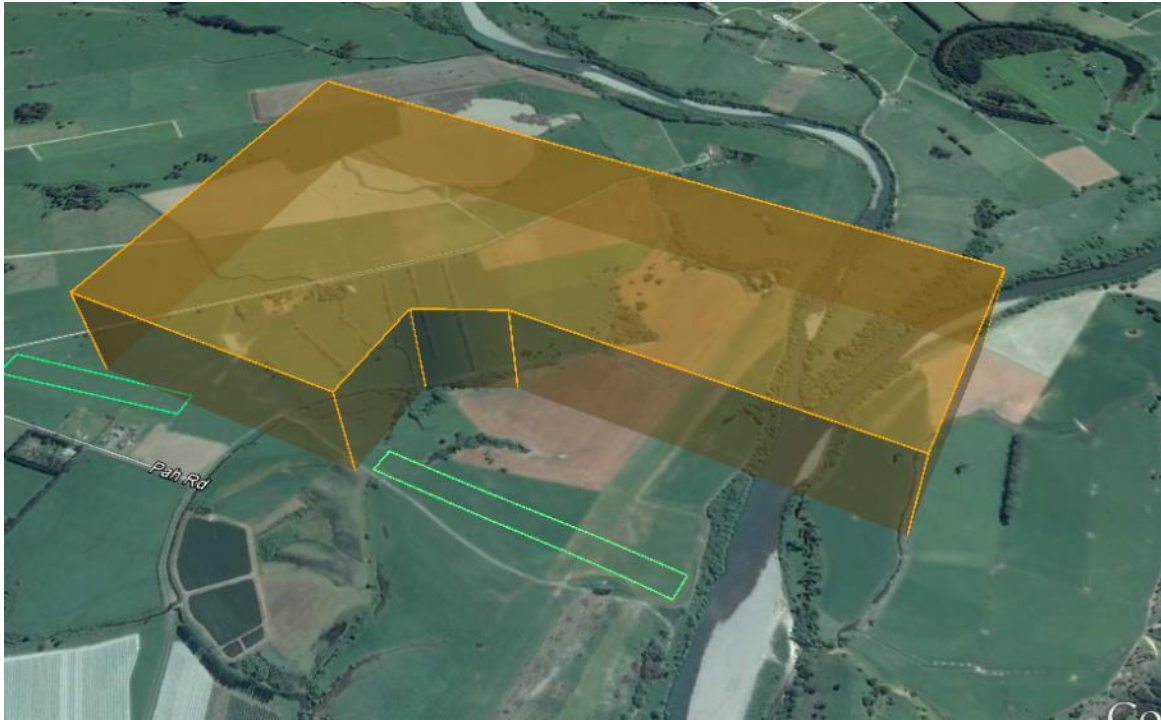


Figure 3.7a: Standard Left-Hand Circuit for Runway 12

3.8 Different Landing Points

It is conceivable that at the end of the day, gliders from different clubs may wish to land back at their respective hangars, potentially causing a conflict by adopting different circuits. The following guidelines should be used.

- Keep to the circuit path currently in use even though, for example, your 'base' leg may be the current 'downwind' leg.
- Broadcast your intentions.
- If winching is in operation, follow the procedures in 5.2.
- If intending to land on the active vector, upwind of the launch point, seek permission from the launch controller *before* starting your circuit.
- If intending to land on a non-active vector, or if intending any non-standard circuit, seek permission from the launch controller.

4.0 Grid Layout Recommendations

This section describes the rationale behind the recommended grid layouts shown in section 3. For any launch point layout, the following points must be considered.

4.1 The winch rope must be treated as 'active' at all times; crossing the rope by people or vehicles is therefore prohibited.

4.2 The launch point caravan should be placed in line with the launch threshold; no glider should launch from behind (or down-wind of) this caravan (excepting in 4.4). This point provides the best view of overall operations.

4.3 Winching and aerotowing should, if practical, take place from the same location though not necessarily from the same queue of gliders.

4.4 If winch launching is from a separate location on the same vector, keep all aircraft (that are not launching) and vehicles well away from the winch rope and, if there is any cross-wind component, preferably upwind.

4.5 The winch cable should be laid out on the non-hangar-side of the vector, so as to be clear of landing or taxiing aircraft.

4.6 Where possible, aerotows should take place when the winch cables are retracted (so that there is no danger of over-running the cables).

4.7 Where possible, try not to form a grid of gliders on the active vector. Any aircraft not launching should be kept off the runway in the nominated marshalling area.

5.0 Airspace

The Papawai Airfield sits within a large uncontrolled airspace volume, extending up to 9500'. All pilots should refer to the latest AIP VNC for details of controlled airspace in the region.

5.1 No-Fly Zones

The GSC has declared the areas shown in figure 5.1a to be "No-Fly" zones.

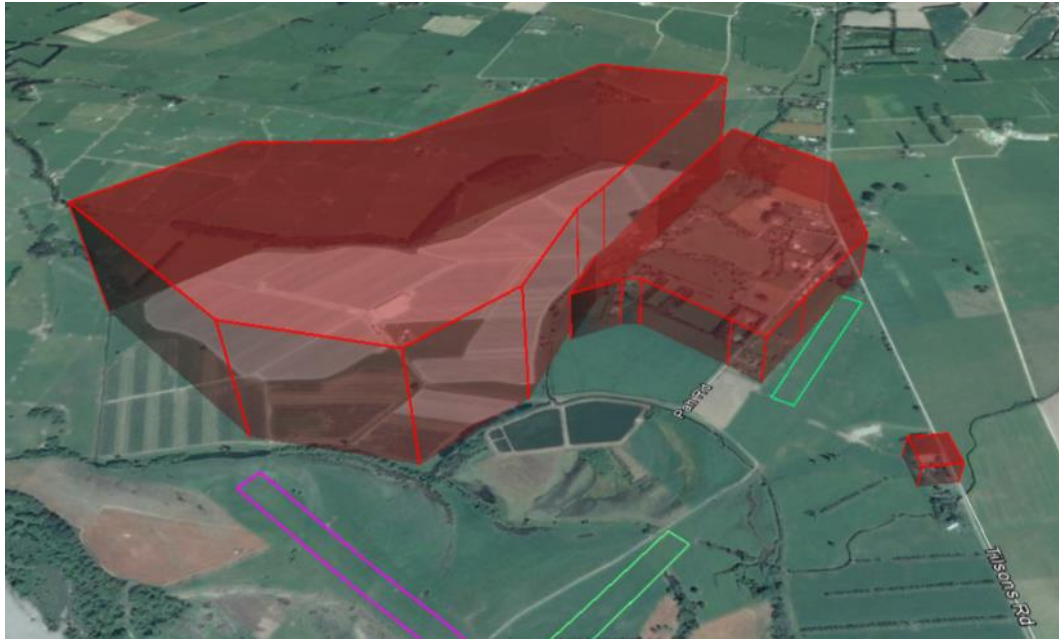


Figure 5.1a: "No-Fly" zones around the Papawai airfield

5.1.1 A large zone exists over the clearly-visible netted area of the orchard, to the SW of the airfield, with a ceiling of 1000' QNH. The orchard owner has expressed concern regarding aircraft flying low over the (extensive and therefore expensive) netting, so this zone is intended to ameliorate the owner's concerns.

5.1.2 A smaller zone with a ceiling of 500' QNH extends over Papawai Marae, the cemetery and all houses on Pah Rd, extending back to the 1000' orchard zone. This zone is in place to prevent aircraft flying low over this residential zone; please respect our neighbours.

5.1.3 The smallest area indicated has a ceiling of 300' QNH over a tall radio mast.

5.1.4 The GNZ MOAP states that no glider shall be flown within 75m of any person, building, or other obstacle (the rule is particular to competition finishes and does not apply to normal final approaches). Please apply courtesy and common sense when overflying any house or populated area not shown in figure 5.1a.

5.1.5 Outside of the limitations requested above, pilots are reminded that the rules for competition finishes and low-flying (as defined in the GNZ MOAP) apply to the Papawai Airfield.



5.2 Winch Hazard Zones

When the winch is operating, the cable can reach a height of over 3000'. As such, the areas shown in figure 5.2a should be considered 'no-fly' zones with a ceiling of 3500' AMSL if winching is in operation.



Figure 5.2a: Winch Cable Danger Zones

5.2.1 These 'no-fly' areas do not apply to any aircraft on final approach.

5.2.2 If winching is in operation from runway 03/21, then the danger zone for runway 12/30 does not apply, and *vice versa*.

5.2.4 The 'no-fly' zone for a particular active vector extends only upwind of the winch launch point. Figure 5.2a shows all possible 'no-fly' areas.

5.2.4 Overhead re-joins are not permitted on any vector unless cleared by the launch controller.

5.2.5 Crossing an active vector below 3500' AMSL is prohibited unless cleared by the launch controller.

5.3 Aerotow guidelines

The airfield sits approximately 5km to the east of Greytown, as shown in figure 5.3a.



Figure 5.3a: Location of Papawai Airfield in relation to Greytown

Gliders being towed repeatedly over a residential area could conceivably create a number of noise complaints. If at all possible, avoid tow routes or circuits that overfly the urban area of Greytown, particularly below 2000' QNH.

5.3.1 Tow-plane drop zones are not specified in these SOPs. It is expected that all pilots take reasonable precautions to avoid high-traffic and circuit areas when under tow, and show consideration for our neighbours.

5.3.3 Tow plane Noise Abatement Procedures: No take-offs on top Terrace. Deliberately vary (by as large an amount as possible) the tow-out track over ground, and also descent and landing track.

5.3.5 Tow plane should weave slightly during climb to keep clearing the space ahead, especially towing towards lift where there might be other gliders.

5.4 Ridge Traffic Area

The area shown (roughly) in figure 5.4a and extending to 2000' QNH can be a high-traffic area in certain conditions. Care should be taken when entering or transiting this area. Keep a good lookout for other aircraft.



Figure 5.4a: Ridge traffic area

Note that some circuit options pass close to this area, as shown in figure 5.4b.



Figure 5.4b: Proximity to circuit areas

6.0 Common Procedures

All clubs operating at Papawai Airfield should adopt the following common procedures.

6.1 Radio Frequencies

6.1.1 All aircraft within three nautical miles of the airfield must be listening on 134.45MHz. This is the highlighted area shown in figure 6.1a.

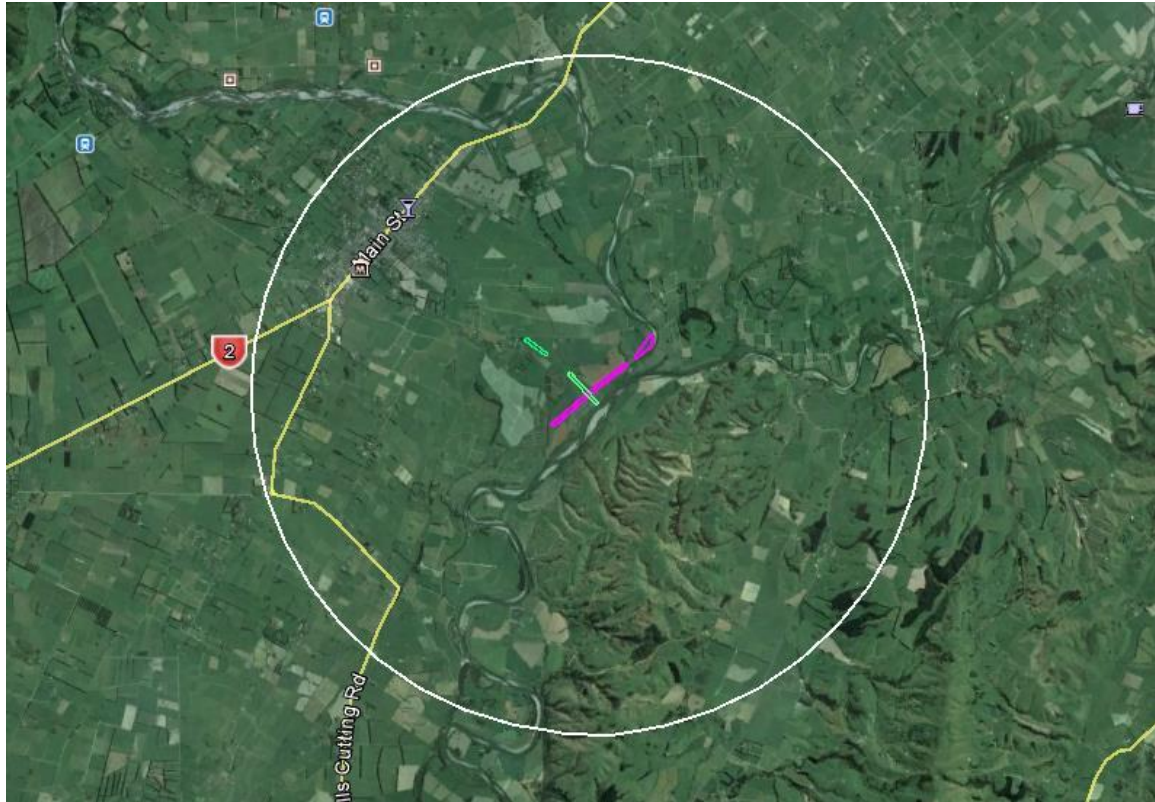


Figure 6.1a: The Three Nautical Mile Radius around the Airfield

6.1.2 Beyond a three nautical mile radius of the airfield, aircraft may switch to the glider chat frequency 133.75MHz.

6.1.3 Note that most GA aircraft operating in the South Wairarapa will be on 119.1MHz, particularly those operating near Hood Aerodrome in Masterton. It is good practice to broadcast a position report on this frequency if you are beyond the aforementioned three nautical mile radius.

6.1.4 NORDO operation is not permitted, except in emergencies; if you are experiencing an emergency, you should be landing.

6.1.5 Launching traffic has priority on 134.45MHz, followed by landing traffic. Keep all transmissions to a minimum; it is not a chat frequency.

6.2 Altitude

6.2.1 All aircraft must report altitudes in feet QNH although there is no need to explicitly state "QNH" or "AMSL". The Papawai Airfield sits at approximately 125'AMSL.

6.3 Launch Control

6.3.1 If more than one launch method or aircraft (i.e. multiple tow-planes) is in use in the same location, then one person must take on the role of launch controller.

6.3.3 The launch controller is responsible for all radio communications with tow-planes and/or winches. If there is a launch controller present, then no glider waiting to be launched can communicate directly with the tow-plane or winch (except for 6.3.6). This is to prevent multiple radio call being misdirected or misinterpreted. The launch controller will issue all hold, take-up-slack and all-out calls, since the launch controller has the best overall view of operations.

6.3.5 If only one method of launch is operating - one tow-plane or one winch – then nominating a launch controller is recommended but not compulsory. Pilots waiting to be launched may communicate directly with the tow-plane or winch if no launch controller is present.

6.3.6 If the winch queue is operating at a separate location to the aerotow queue (e.g. on Rwy 03) then the following applies.

6.3.6.1 Reliable radio communication *must* be established between the two locations. Winch launching gliders may then make their own radio calls *only* when the launch controller (at the aerotow location) gives the all-clear.

6.3.6.2 Any vehicle retrieving winch ropes must operate under guidance from the launch controller.

6.3.7 Any person at any time can call for an immediate 'all stop' if they feel an unsafe or damaging act is about to occur for any reason.

6.3.7.1 This is done by shouting "STOP! STOP! STOP!" and if possible raising one or both hands above head height. If at all possible it should also be relayed by radio on 134.45. on hearing this:

- all winch launches in progress must be immediately aborted.
- the signalling lamp on the LP caravan (and winch if fitted) shall be set to 'STOP'.
- aerotows should abort, but only if landing directly ahead is a safe option for both aircraft.
- the winch shall be taken out of gear / drum de-selected and braked rapidly to a stop.
- all vehicle and people movements must stop.
- the towplane on approach should go-around.
- gliders on approach should continue with 'plan A' but with caution.

6.3.7.2 Only once the cause for the 'all stop' has been identified and remedied should the 'all clear' be given.

6.3.8 Landing aircraft have right of way. Launches underway have priority over ground movements. Ground movements have priority over launch initiation i.e. launch movements are to be held until there is no conflict with either aircraft on approach or ground movements.

6.3.9 Standard Universal signals (as follows) should be used if possible.

Meaning	Voice Signal	Arm Signal	Light Signal
Continue slowly Take up cable slack Slow down	"Take up slack"	Swing one arm below shoulder height	Slow flash; 1 second on, 3 seconds off.
Continue normally Launch Speed up	"All out. All out"	Swing one arm above shoulder height	Fast flash; 1 second on, 1 second off.
Stop Don not proceed	"Stop. Stop. Stop."	One or both arms held above the head	Continuous on.
Come here I need help		Arms held crossed above the head	
Disconnect Shut down We are finished It's broken Not correct		Arm drawn across throat.	
Expect practice launch failure. Prepare to come and retrieve me.		Finger drawn across throat	
I'm ready. Connect. OK to begin. That worked correctly		Thumb up with arms held horizontally.	

6.4 Visitors

6.4.1 All clubs operating at Papawai Airfield should have procedures in place for greeting and directing visitors to the airfield, making them aware of current aircraft operations, making them aware of airfield hazards and making them welcome.

6.4.2 When aircraft are operating, dogs on the airfield must be on leads. There should be no possibility of a dog breaking free of its owner and running onto the field. Dog owners are responsible for removing all dog waste from the airfield. If cows are nearby, dogs must be kept on leads even if no aircraft are operating.

6.4.3 Horses are not permitted anywhere near the active runway if aircraft are operating. At other times, horse owners are requested not to ride over any soft ground on the airfield. Deep hoof prints can damage a glider's undercarriage.

6.4.4 If another gliding club wishes to visit the Papawai Airfield for a period of time, please direct their inquiry to the GSC.

6.4.5 If any club wishes to operate a gliding contest out of Papawai Airfield, please inform the GSC. As the airfield operator, the GSC is responsible for ensuring that the contest is run by a competent contest director, and for negotiating sole use of the airfield with the other airfield occupants, for the duration of the contest.

6.5 Ground Vehicles

6.5.1 All vehicles approved to operate on the airfield must contain a radio capable of receiving 134.45MHz.

6.5.2 When an approved vehicle is on the airfield, the driver must maintain a listening watch on 134.45MHz.

6.5.3 All vehicles on the active airfield are to be left with the keys in the ignition or on the dash in front of the steering wheel. Vehicles may be left locked around the hanger areas.

7.0 Other GSC Responsibilities

The GSC is responsible for maintaining the Papawai Airfield in good condition for the use of all member gliding clubs. If any clubs require remedial work to be done, for things like roading, drainage, mowing or signage, please contact the GSC.

7.1 Emergency Planning

Even though all clubs operating at Papawai are required to have an emergency plan as per GNZ rules, it makes little sense for different plans to be in place on the same site. The GSC has therefore published the document "GSC Emergency Plan" which all clubs should display at their respective sites, and which all club members should know where to find. Any club may request an alteration to this plan and the GSC will promulgate such changes to all clubs.

Clubs may have site-specific aspect of their emergency plans (e.g. locations of fire extinguishers) which they can add in addition to the overall plan.

Version	Issued	Alterations
1.0	24/8/15	Initial version created
1.1	13/11/15	Amendments to grid layout Removal of alternate circuit directions Modification of circuits for two separate landing areas
1.2	1/12/15	Minor amendments. Addition of 7.1, emergency planning.
1.3	1/4/16	Addition to 6.4.2 regarding cows. Change of name of emergency plan in 7.1. Change of CFZ to 3NM in 6.1. Added 6.1.6. Update of figure 3.0a. Change of grid layout diagrams. Simplification of 3.7. Updated diagrams to reflect final alignment of Rwy12/30. Add caution note to 5.2.1. 5.3 renamed and sections added for tow pilots. Removal of 6.1.2.
1.4	5/5/16	Added 6.3.6 regarding separate launch points. Simplification of section 4. Change of airfield altitude in 6.2 Change section 3 to reflect runway and launch point layouts. Addition of 6.3.7. Changes of several diagrams to reflect new runway layouts. Addition of 3.1, describing runway names. Addition of 6.3.9, light signals.
1.5	16/3/17	Modifications to 03 launchpoint diagrams. Addition of "North", "Centre" etc. to fig 3.0a Addition of "Hangar Side" and "River Side" descriptions