Canterbury Hang Gliding Paragliding Club (CHGPC)

Post-PG2 Paragliding Progression Guide

PDF Version

Updated: 13 May 2025

Disclaimer

This is a guide only and as such it does not cover all intricacies of free flight.

Paragliding and Hang gliding are dangerous sports and even following all flying related advice given on the pages below will not make it 100% safe. It is highly recommended to reach out to experienced locals or club site officers for further information and introduction if you are new to Canterbury flying sites.

Authors of this document and CHGPC reject any responsibility for injuries and damage inflicted while flying in the Canterbury region. By using the information in this guide, you do so at your own risk and acknowledge that this material is not a substitute for professional instruction by a certified person.

Purpose

This document is intended to support new PG2 licenced pilots in the Canterbury region to progress safely when paragliding in local sites. There are three key elements:

1. Detailed site-specific information for popular Canterbury sites, including suggested skills to practice before visiting the site and ideas to further your progression at each site. We've also included three example progressions by local pilots.
2. A skills system and site grading system to help newer pilots make informed decisions about the breadth of skills necessary for each site and identify areas to focus their progression.
3. A skills glossary with more information about specific skills to give you ideas on things to practice. There are a lot of other resources online and progression courses available locally with qualified instructors to supplement a pilot's initial training.

This is a PDF version of a webpage on the CHGPC website. The club website will have the most up to date information, which may not be reflected here. Please also remember to consult the fulsome site guide on the website, in addition to the progression guidance here, before flying a site for the first time.

Web version: https://www.chgpc.org.nz/pg2-progression

Site guides: https://www.chgpc.org.nz/flying-sites

Safety information and incident reporting: https://www.chgpc.org.nz/safety

Think like a pilot - NZHGPA

NZHGPA have published a data-driven pilot safety system called 'My Environment, My Plan, Myself.' It was written by expert pilots and based on accident reporting in New Zealand and overseas.

We can do no better in Canterbury and we highly recommend all pilots familiarise themselves with the system and associated resources on the NZHGPA website. We have developed this Canterbury guidance for local pilots, independently of the national system.

https://nzhgpa.org.nz/thinklikeapilot/

Skills for sites

This section gives you a sense of the skills you need to fly at sites in Canterbury. Every pilot is different and every day is different. It's ultimately your decision on whether you're ready to fly.

Experienced local pilots recently gave several talks on our local sites. Recordings are available on the club website (https://www.chgpc.org.nz/post/local-canterbury-flying-sites) and are highly recommended alongside the written site guides. You should also seek a site briefing from an experienced pilot each time you fly a new site, ideally on the day you're flying so they can point out any current hazards.

Your local Christchurch paragliding schools offer courses to accelerate your progression. These include courses around the area, New Zealand, and guided trips overseas. Further afield, other New Zealand and overseas schools offer a range of courses, including SIV and other programmes not offered locally. We never stop learning and we encourage you to consider seeking out continuing professional instruction.

Taylors Mistake [green]

Taylors mistake is the jewel in the crown of Canterbury flying. It is the perfect location to learn a range of techniques and skills, and to grow your confidence in the air.

Recommended endorsements: none

Each pilot is different. A basic recommendation for new PG2 pilots is to spend at least 20 hours at Taylors Mistake before venturing elsewhere. Some pilots spend longer, others progress quickly. But, every successful Canterbury pilot continues to train regularly at Taylor's Mistake - new or master.

If your confidence is low or you have been away from flying for a while, doing a number of sleddies to practise launch and landing techniques is very useful. Some pilots spend their entire career doing hike and fly flights at Taylors, and this is a perfectly valid and enjoyable way to fly.

Key skills for flying at Taylor's

Before you go:

Check the site briefing online. Check wind and weather forecast. Check current wind matches forecast

While you're there:

Practice everything (safely)! Note: Taylor's is too low to practice collapses or extreme maneuvers.

Ideas to master your skills at Taylor's

Launch

- Master different launch techniques
- Try different launch techniques in different wind strengths
- Launch from different places
- Do some awkward ground handling, regain control, launch

- Abort take off and kill the wing
- Ground handling - tip touches, kiting (up and down the hill), walk around obstacles, let the wing fall but not touch the ground,....

In flight

- Fly in the gut
- Fly to the cliffs (conditions dependent - get a site brief)
- Pitch and roll control
- Practice descent techniques
- Wingovers / other maneuvers (under instruction)
- Soar in different wind strengths and directions
- Experience thermals in the heat of summer
- Practice working your way up the hill, while keeping a safe distance from the terrain and proceeding to the landing zone when you're too low.

Landing

- Touch and go (at launch and in the gut)
- Slope landings
- Top landings (at the launch, behind the road, at the gut)
- Spot landing (top landing and at the bottom)
- Abort a top landing when low by flying back onto the ridge
- Kill techniques for the wing

Gondola – light conditions (sleddies) [blue]

The gondola can be a tricky location to fly. The launch can be turbulent and switch directions unexpectedly. The cliff above the road is also a significant hazard. The main landing can also become turbulent and dangerous in strong winds.

Recommended endorsements: **NWTO, ABRT, STO, IGH, METEO, SPOTL**

Newer pilots can experience the Gondola in light conditions with a lower risk of turbulence. Lighter conditions can also build your confidence to fly better when the thermals are on!

Most pilots (us included) take off from the Gondola because it's easier than walking to the better launches in the area. You will see several gentle grassy slopes that you can launch from instead with less risk. There have been serious accidents at the Gondola where pilots attempt to launch in rotor when the prevailing wind turns westerly and comes over the hill.

<u>Key skills for flying at Gondola in light conditions</u>

Before you go:

Check the site briefing online and arrange a site briefing from an experienced pilot.

Practice the following skills:

Launch	Ground handling	In flight	Landing
Reverse launch with wind direction change.	Pitch and roll control Ability to hold the wing steady	Pitch control Understanding of brake position (do	Can generally land within 5m of target. Comfortable being

Nil wind forward launch. Your launches need to be consistently good, since there's a cliff. Ability to abort a launch quickly.	overhead in moderate wind.	you usually fly with some brake on?).	low above trees on approach. Recent experience landing in nil wind with a long glide.

While you're there:

Match your mental weather model to the conditions on the day. Is it what you expected? Do you need to change your plan?

Get a briefing on the landing field before you try to land, since it's a tight fit.

Understand the local site rules (e.g. do not fly within 100m of the Gondola, avoid landing in the Heathcote Domain during sports games where possible).

Ideas to master your skills while flying at Gondola in light conditions

On the ground, you can practice matching your mental weather model to the conditions on the day at a new site. You can also try several new launches in the hills surrounding the Gondola.

In the air, you can practice most flight skills that you do at Taylor's. Try to stay further away from terrain than you might at your usual flight, since you may encounter unexpected turbulence.

Gondola - medium conditions (thermalling) [red]

We only cover medium conditions here. We recommend that newer PG2 pilots either do not launch in strong conditions or launch from one of the alternative locations at the saddle or upper Cass. Be aware that launch and landing aren't your only hazard - strong thermals can be dangerous without proper preparation.

Recommended endorsements: **NWTO, HWTO, ABRT, STO, AGH, ACTFLY, GAGGLE, THERM, METEO, SIV, METEO, SPOTL**

The Gondola takeoff is difficult in thermic conditions. The wind direction and strength often changes several times during your launch. It's crucial you have the skills to deal with these changes and recognise when you need to abort your launch. Taylor's Mistake on a thermic (bumpy) day is excellent practice for the Gondola. Even experienced pilots often take several attempts to launch here.

You should be especially wary of any westerly wind or gusts when considering launching from the Gondola since the rotor has caused serious accidents. If you feel westerly wind or wind coming from the Gondola building, walk 400m and launch from the westerly facing slopes near John Britten Reserve. Think carefully if you see experienced pilots with a 'messy' launch or multiple attempts - the conditions are probably not appropriate and the proximity to the gondola is the main reason they haven't selected a better launch site.

Key skills for flying Gondola in medium conditions

Before you go:

Check the site briefing online and arrange a site briefing from an experienced pilot.

Learn about thermalling techniques, active flying, and how to deal with a collapse. Videos and books are great resources. Visualisation is a great technique to help prime your reactions.

Have a working radio on club channel 40. The sea breeze can be a significant hazard and other pilots will often signal its approach.

Practice the following skills:

Launch	Ground handling	In flight	Landing
Good reverse launch skills, including: Competent at aborting your launch. Able to deal with wind direction changes during launch. Able to respond to sudden changes in wind strength.	Be comfortable holding the glider steady above your head in 45 degree wind changes. Proficient at pulling up your glider at an angle to the wind (not straight). Skills to perform tip touches are recommended.	You must understand how to react to a frontal or asymmetric collapse. Pitch and roll control in bumpy conditions, including stopping the glider from shooting forward. Practice relaxing in your harness when it's bumpy. Practice with a vario can help, but isn't a must. Understand flying etiquette in thermals.	Situational awareness of when other pilots are landing. Recognise wind strength and direction from the air. Recognise and avoid sources of turbulence. Able to land safely in different wind conditions.

While you're there:

Match your mental weather model to the conditions on the day. Is it what you expected? Do you need to change your plan? What's going on with thermals on launch (direction, strength, duration)?

Ask other pilots what they're planning! This helps you learn and gives a great idea of what to expect.

Get a briefing on the landing field before you try to land. Be familiar with both official landings in case the sea breeze arrives and the Heathcote Domain becomes dangerously turbulent.

Understand the local site rules (e.g. do not fly within 100m of the Gondola, avoid landing in the Heathcote Domain during sports games where possible).

<u>Ideas to master your skills at Gondola in medium conditions</u>

The Gondola and other Port Hills sites are an accessible place to learn thermalling skills. Lift here is generally less intense than inland mountain sites.

Some ideas:

- Practice finding and centering thermals
- Assess the terrain for potential thermal sources and test your theory by flying over them
- Notice how the wind makes thermals drift. Use your mental weather model to predict the drift.
- Practice active flying.
- Work with other pilots in a thermal - go where they rise, avoid where they sink.
- Climb a thermal, leave it, climb up it again from lower down
- Once high, try transitioning to a new thermal
- Try flying near clouds. Start slow and always stay below a 45 degree angle to the edge of the cloud.
- If you're confident with top/slope landing and identifying landing fields, you could try a mini-XC along the hills.

Allandale [green]

Allandale has a narrower lift band and more difficult landing options than Taylors Mistake. It also has the potential to blow out more quickly. It's primarily a soaring site, but sleddies and thermal flying are also possible.

Recommended endorsements: **SWTO, ABRT, IGH, METEO, SOAR, TOPL**

Key skills

Before you go:

Check the site briefing online and arrange a site briefing from an experienced pilot.

Practice the following skills:

Launch	Ground handling	In flight	Landing
Reverse launch in strong winds (20km/h+). Cobra launches are useful. Practice setting up your gear safely in strong winds.	Wing control in strong wind. Skills to perform tip touches are recommended. Techniques to kill the wing in strong winds.	Soaring in strong winds. Comfortable keeping an eye on visual indicators of wind strength while flying (wind on water, other pilots, etc).	Current top landing skills (can consistently land on target at Taylor's). Can generally land within 5m of target. Comfortable being low above trees on approach.

While you're there:

Allendale is a great site to practice your soaring skills outside of Taylor's Mistake once you're comfortable in strong winds and can top land consistently.

Towers [black]

Towers is an advanced site. The weather can be a significant hazard. Building conditions can blow out the site leaving the pilot with few options. There are no good bottom landing options and a drop in wind strength can affect top landing.

Recommended endorsements:**SWTO, ABRT, IGH, METEO, SOAR, TOPL+, SPOTL**

To soar the Towers safely, you need strong all around skills, particularly consistent top landings, competence launching in strong winds, and situational awareness of the weather.

When the wind escalates you need good strong wind landing techniques. When the wind drops,you need to be able to recognise this, and have good top landing techniques as you won't get many attempts and there are limited bottom or slope landing options.

The window for flying the Towers site can be short. As a southerly dies back, the wind conditions can go from ‘too strong’ to ‘too light’ in a very short period of time. Being on site early to assess the conditions and be ready to fly is advisable, and monitor any changes to conditions whilst flying.

Key skills to fly at Towers

Before you go:

Check the site briefing online and arrange a site briefing from an experienced pilot.

Understand the weather conditions and the causes of the dying southerly conditions recommended for the site.

Practice the following skills:

Launch	Ground handling	In flight	Landing
Reverse launch in strong winds (20km/h+). Cobra launches are useful. Practice setting up your gear safely in strong winds.	Wing control in strong wind. Skills to perform tip touches are recommended. Techniques to kill the wing in strong winds.	Soaring in strong winds. Comfortable keeping an eye on visual indicators of wind strength while flying (wind on water, other pilots, etc). You recognise when you are starting to get low, even when you’ve been flying for a while.	Very good top landing skills - you can usually top land at Taylor’s in 1-2 attempts. Ability to slope land. Can spot land within 5m of target. We recommend you try landing safely outside of designated landing areas at other sites before flying Towers.

While you’re there:

Check that weather stations in the area are consistent with safe conditions for the Towers site (dying southerly). Zephyr App is a good tool.

Practice your soaring skills at a new site.

Stretch your mental game by keeping constant situational awareness of the weather conditions. Situational awareness keeps you safe as conditions change at Towers. Observation is a core skill to master for cross country flying.

Little River [blue]

The Little River site is recommended as an entry point to thermal flying. You have more altitude than the Gondola or other Port hills sites on launch, giving you a better chance at finding lift and a clear thermal trigger from the nearby spur. The launch is also less hazardous than the Gondola.

Recommended skill badges: **NWTO, HWTO, ABRT, STO, IGH, ACTFLY, GAGGLE, THERM, METEO, SIV, SPOTL**

There are specific rules and hazards associated with Little River. Check the site guide for information on the landing options and the signs of a NE wind.

Key skills to fly at Towers

Before you go:

Check the site briefing online and arrange a site briefing from an experienced pilot.

Practice the following skills:

Launch	Ground handling	In flight	Landing
Good reverse launch skills, including: Competent at aborting your launch. Able to deal with wind direction changes during launch. Able to respond to sudden changes in wind strength.	Be comfortable holding the glider steady above your head in 45 degree wind changes. Proficient at pulling up your glider at an angle to the wind (not straight). Skills to perform tip touches are recommended.	You must understand how to react to a frontal or asymmetric collapse. Pitch and roll control in bumpy conditions, including stopping the glider from shooting forward. Practice relaxing in your harness when it's bumpy. Practice with a vario can help, but isn't a must. Understand flying etiquette in thermals.	Situational awareness of when other pilots are landing. Recognise wind strength and direction from the air. Recognise and avoid sources of turbulence. Able to land safely in different wind conditions. A good understanding of the glide of your wing and when you need to head to landing.

While you're there:

Match your mental weather model to the conditions on the day. Is it what you expected? Do you need to change your plan?

Get a briefing on the landing field before going up the hill, so you know where it is and can identify any hazards.

Understand the local site rules (e.g. landing outside of the nominated LZs is reserved for emergencies only.)

Ideas to master your skills

On the ground, you can practice matching your mental weather model to the conditions on the day at a new site. You can also try to observe other pilots or clouds in the air to identify active thermals. Try and figure out where the trigger is, taking the wind into account.

In the air, you can practice most flight skills that you do at Taylor's. Try to stay further away from terrain than you might at your usual flight, since you may encounter unexpected turbulence. If trying to join a thermal, aim to keep at least 100m above terrain, since this is generally the minimum height necessary to deploy your reserve and thermals are turbulent.

Long Spur / Mt Cheeseman [red]

The Craigieburn Range is an exceptional flying area. It can also be extremely rough and dangerous, even for experienced pilots. The information here is meant to help you be prepared, safe, and have a great flight; not to put you off!

Recommended endorsements: **NWTO, ABRT, STO, AGH+, ACTFLY, GAGGLE, THERM, METEO, SIV, NAV, SELF, METEO, SPOTL**

On a strong thermic day, you should expect to have a collapse and be prepared for it. Visualisation and mental rehearsal of the actions to deal with a collapse are a good way to practice without doing the actual maneuvers in an SIV course. Being prepared also means keeping a significant distance to terrain (minimum 100m altitude above ground) and knowing how / when to use your reserve. Coastal soaring can make us overconfident with flying close to terrain, which is very dangerous in thermic conditions - you simply don't have margin for error.

Launching can also be more difficult than coastal sites and is a common cause of accidents. Thermic air can lead to rapid changes in wind direction and strength, stronger wind a couple meters above the ground (i.e. where you pull your glider up), and turbulence at the edge of the thermal after launch. There are also rocks and bushes to catch your lines. A lot will already be new trying a new site, so it's even more important you are confident in your ground handling skills.

You can practice the skills you need to progress to the Craigieburns individually, instead of all at once in the mountains. You can practice thermic launches at all our sites (yes, even Taylors when the air is 'shifty' or 'bumpy'). You can try launching in taller grass around Taylors or near the Gondola / Castle Rock. To practice ground handling, you just need a field.

If you feel you're ready, timing can make a big difference to your safety and fun. We recommend that you try to fly in the Craigieburns (or any big mountain site in New Zealand for the first time):

- Early in the morning or late in the afternoon, to avoid the strongest thermals of the day.
- During early spring and late autumn - the Craigieburns are unsuitable for beginners in the summer due to the strength of the thermals and katabatic (downhill) winds can be prevalent in winter.
- With other experienced pilots to help familiarise you with the site and help you manage new risks.
- We also recommend you consider a satellite communication device in case of emergency (e.g. Garmin InReach, a PLB).
- Both Long Spur and Mt Cheeseman launches can be hazardous. On Long Spur, you can get an accurate feeling of the wind on launch and move quickly away from the hill, although options to abort are more limited. Mt Cheeseman has a more progressive launch accessible by walking up the hill from the base building. The main launch has a long 'shelf' after launch and you can encounter strong turbulence just off launch. The further up you walk, the more chances you have of catching a thermal too.

Key skills to fly in the Craigieburns

Before you go:

Check the site briefing online and arrange a site briefing from an experienced pilot. Aim to join a group if you can and share that you're a new pilot. Check the approved landing areas (we can't land in Castle Hill Station).

Make sure your electronics are charged - a radio is especially important since cell reception can be limited in places.

Understand the weather conditions and identify a 'flying window' for the day. Consider when the thermals might build in strength or when sea breezes might push into the Castle Hill valley. Use these times to identify when you'd like to be airborne, or on the ground and plan accordingly.

Groundhandle. Recently.

Practice the following skills:

Launch	Ground handling	In flight	Landing
Good reverse launch skills, including: Competent at aborting your launch. Able to deal with wind direction changes during launch. Able to respond to sudden changes in wind strength.	**Recent practice.** Be comfortable holding the glider steady above your head in 45 degree wind changes. Proficient at pulling up your glider at an angle to the wind (not straight). Skills to perform tip touches are recommended.	You must understand how to react to a frontal or asymmetric collapse. Pitch and roll control in bumpy conditions, including stopping the glider from shooting forward. Practice relaxing in your harness when it's bumpy.	Familiarity with the local area and how to navigate to the designated landing areas. Understand different methods to estimate wind strength and direction while flying. Familiarity with increased glide in thermic and nil-wind

Practice launching on ‘unideal’ terrain (e.g. uneven, rocks, line-snagging bushes).		Practice with a vario can help, but isn’t a must. Understand flying etiquette in thermals. Understand glider behaviour entering and exiting a thermal. Rehearsed use of a reserve parachute and understanding of the minimum altitude required.	conditions. A good understanding of the glide of your wing and when you need to head to landing.

While you’re there:

Match your mental weather model to the conditions on the day. Is it what you expected? Do you need to change your plan? What’s going on with thermals on launch (direction, strength, duration)?

Ask other pilots what they’re planning! This helps you learn and gives a great idea of what to expect.

Get a briefing on the landing field before you try to land. The golf course near Castle Hill Village has several wind indicators that local pilots can point out (e.g. flags, trees, pond).

Understand the local site rules and restrictions on landing in the Castle Hill Station (unless it’s an emergency).

Get there early in the day to observe the launch and fly while the thermals are still building.

Relax and have fun! Many local pilots have reached cloudbase and flown for >1hr for the first time at our Craigieburn sites. It’s an exciting place to fly and is a lot of fun once you’re ready.

<u>Ideas to master your skills while flying at the Craigiburns</u>

Long Spur and Mt Cheeseman are sites to help you progress your intermediate and advanced paragliding skills. You will learn a lot on your first flights here, and many flights thereafter.

The key thing is to keep your respect for the mountains before they remind you. Keep margin to terrain, be cautious about thermal strength, and stay ready for turbulence. Flying safely unlocks your progression much faster than constantly pushing the limits.

Some ideas to practice at the sites:

- Try a hike-and-fly sleddie to familiarise yourself with the area.
- Thermals often release along Long Spur - try finding one
- Once you’ve climbed a thermal, fly out of it and rejoin it.
- Practice observing other pilots flying around you - are they going up faster than you? Could you join them?

- Work with other pilots in a thermal - go where they rise, avoid where they sink (just remember thermalling etiquette).
- Try tightening your turns in a thermal - new pilots often turn too wide.
- Work your way between thermals up Long Spur towards the ridge (be careful: thermals are stronger at the ridge and there can be rotor from wind at altitude!).
- Assess the terrain for potential thermal sources and test your theory by flying over them
- Try flying near clouds. Start slow and always stay below a 45 degree angle to the edge of the cloud.
- You could try mini-XC flights to good thermal triggers in the area - Hog's Back and Leith Hill are both consistent triggers and within glide to landing areas.

Summary table of recommended skills

		Launch	Ground handling	In flight	Landing
Soaring / Sleddies	Taylor's Mistake	Great place to practice all your skills!			
	Gondola (light conditions)	Reverse launch with wind direction change Nil wind forward launch **NWTO, ABRT, STO**	Pitch and roll control Ability to hold the wing steady overhead in moderate wind **IGH**	Pitch control Understanding of brake position (do you usually fly with some brake on?) **METEO**	Can generally land within 5m of target Comfortable being low above trees on approach Recent experience landing in nil wind with a long glide **SPOTL**
	Allandale	Reverse launch in strong winds (20km/h+) Cobra launches are useful Practice setting up your gear safely in strong winds **SWTO, ABRT**	Wing control in strong wind Skills to perform tip touches are recommended. Techniques to kill the wing in strong winds **IGH**	Soaring in strong winds Comfortable keeping an eye on visual indicators of wind strength while flying (wind on water, other pilots, etc) **METEO, SOAR**	Current top landing skills (can consistently land on target at Taylor's) Can generally land within 5m of target Comfortable being low above trees on approach **TOPL**
	Towers				Very good top landing skills - you can usually top land at Taylor's in 1-2 attempts. Ability to slope land Usually spot land within 5m of target We recommend you try landing safely outside of designated landing areas at

					other sites before flying Towers **TOPL+, SPOTL**
Thermic	Little River	Good reverse and forward launch skills, including: Competent at aborting your launch Able to deal with wind direction changes during launch Able to respond to sudden changes in wind strength Note: the launch at the Gondola is hazardous and other launches are recommended. **NWTO, HWTO, ABRT, STO**	Pitch and roll control Be comfortable holding the glider steady above your head in 45 degree wind changes. Proficient at pulling up your glider at an angle to the wind (not straight). **IGH**	You must understand how to react to a frontal or asymmetric collapse. Pitch and roll control in bumpy conditions, including stopping the glider from shooting forward. Practice relaxing in your harness when it's bumpy. Practice with a vario can help, but isn't a must. Understand flying etiquette in thermals **ACTFLY, GAGGLE, THERM, METEO, SIV**	Situational awareness of when other pilots are landing and signs that the weather is changing. Understand different methods to estimate wind strength and direction while flying Recognise and avoid sources of turbulence. Able to land safely in different wind conditions. Familiarity with increased glide in thermic and nil-wind conditions For Little River and the Craigieburns: Able to navigate to the landing A good understanding of the glide of your wing and when you need to head to landing **METEO, SPOTL**
	Gondola (moderate conditions)		Little River skills, plus: Skills to perform tip touches are recommended. **AGH**		
	Long Spur / Mt Cheeseman	Gondola / Little River plus: Practice launching on 'unideal' terrain (e.g. uneven, rocks, line-snagging bushes) **NWTO, ABRT, STO**	Gondola plus: **Recent practice.** **AGH+**	Gondola / Little River plus: Understand glider behaviour entering and exiting a thermal Rehearsed use of a reserve parachute and understanding of the minimum altitude required Be conservative on when you fly to avoid the strongest	

				thermals at first **ACTFLY, GAGGLE, THERM, METEO, SIV, NAV, SELF**	

Skills system definitions

These skills are intended to be a quick way to identify the relevant competencies for Canterbury sites. Think of these like areas where you can build skills that you can self evaluate on your practice and currency.

Badge	Definition	✔️
IGH	Intermediate Ground-Handling - you can hold the glider steady overhead even in thermic (rough, shifty) conditions and reliably do tip touches on either side	
AGH	Advanced Ground-Handling - there really is no limit to master ground-handling and building a connection to your wing. To be advanced, you'd typically have looked up several exercises online or from your instructor and mastered them in all conditions.	
STO	Short Take Off - you can reliably inflate your wing, perform all checks, and launch within a 5m square with some wind. You can also launch in tall grass or where there are some shrubs.	
HWTO	High Wind Take Off - you are comfortable launching in >20km/h winds and are proficient in techniques to depower your wing on launch and landing.	
NWTO	Nil Wind Take Off - you have mastered forward launches and can control your wing overhead.	
ABRT	Abort - you check your lines on launch every time and have practiced safely aborting your launch.	
SPOTL	Spot Landing - you regularly land within 2m of your target.	
TOPL	Top Landing - you regularly top and slope land in varied conditions within 5m of your target.	
NAV	Navigation - you can navigate to an unfamiliar landing site from launch. If possible, you are also familiar with your instrument / app.	
ACTFLY	Active Flying - you can recognise when pitch, roll, and yaw occur in turbulent conditions (rotor, thermal entry/exit) and have practiced techniques to control the wing.	
THERM	Thermal Flying - you know the theory and are learning to enter, climb, exit, descend, and re-enter the same thermal reliably before moving to stronger conditions.	
GAGGLE	Gaggle flying - you're familiar with thermal etiquette and flying with others.	
SOAR	Soaring - you are a confident coastal-soaring pilot. At Taylors, this means getting low and persevering back up to the top, not just staying high!	

METEO	Meteorology and Weather - you know some basic theory and can match your expectations to the conditions. You can interpret pressure maps (Windy), weather stations (Zephyr), and flying-specific forecasts (Skew-T, Skysight).	
SIV	Simulation d'Incident en Vol - ideally you'd do an SIV course. If you can't, you can watch great videos on YouTube and visualise how you would respond. Only practice under qualified instruction.	
SELF	Self awareness - you understand how you react under stress and practice mental tools to manage your response. You manage risk well.	
MEDICAL	First-aid training - It's a good idea to learn first aid, especially trauma care. At a minimum, understand how to call for help.	
XC	Cross-country flying - All of the above, plus when to transition between thermals, manage clouds, assess new landings from the air, and navigate.	

Example progression pathways

We've asked a few local pilots how they progressed after their PG2 to give you some ideas. In general, we recommend honing your skills at Taylors for around 20 hours, trying new sites with sleddies in mild conditions, then ease into the thermal sites early or late in the day. Coronet peak and Treble Cone are great mountain sites in Queenstown and Wānaka that are perfect to progress. However you approach it, we definitely recommend a ton of ground handling - you can never have too much practice and it makes you a safer, more performant pilot.

A: Taylor's (PG2+5hrs) -> Trip to QT/Wanaka (sleddies from Coronet Peak and Treble Cone -> Back to Taylors (needed more launch and landing practice) -> Early Leith Hill sleddies -> Back to Taylor's again since launches were more difficult than expected -> FIrst thermals Mt Cheeseman -> Gondola

B: Taylor's (PG2 + 10hrs) -> Hike and fly from John Britten via Rapaki track (near the Gondola) -> Hike and fly from Upper Cass via Lyttleton -> Taylor's (+15 hrs soaring practice) -> Allandale (soaring) -> Hike and fly from Long Spur -> Hike and fly from Helicopter Hill (near Cheeseman) -> Castle Rock (first thermals - near the Gondola)

C: PG2 + several years hike and fly at many sites in calm conditions, many hours ground handling -> a number of flights at Long spur and gondola early in the day or autumn, Progress Paragliding course-> independent thermal flying in mountains 6th and 7th year flying.

These pathways are presented much more usefully on the webpage: https://chgpc.org.nz/pg2-progression#example-pathways

Glossary of skills

This skills glossary is intended to complement CHGPC information on progression in Canterbury. You could use it to help understand some of the skills you might need to

develop. Nearly all of these skills can be developed, practiced, and mastered at Taylor's Mistake.

Note that this guide is for your information only and does not substitute for professional instruction. Local schools offer progression courses that include practical experience.

Paragliding skills can be can be categorised by phase of flight:

1. Pre-flight
2. Launch
3. Ground handling
4. In-flight
5. Landing

Pre-flight Routine Checks

Each pilot's pre-flight routine is different. It's important that you have one, not necessarily that it's the same as someone else. Make it something you do every time, especially when preparing your gear. Several pilots have died from insufficient pre-flight checks. You can add to your routine over time and your instructor can guide you.

Before arriving at launch

Some things to consider:

1. Gear - Your gear is your responsibility, even if it has a Warrant of Fitness (WOF). Lines can fray or break, reserves can be packed incorrectly or not frequently enough, and harnesses can tear. Check your gear regularly. Wings can need trimming from time to time, especially when new. Follow the manual for your wing, harness, and reserve for recommended
2. Weather - Understanding the weather makes you a better pilot! Especially to build a foundation for cross-country flying. Your task is to build a mental model of the day's weather that you can cross-check with your own observations. A good process can look like:
    a. Big picture - what's going on around New Zealand? How might this affect your flying area? Any hazards? Any opportunities? Useful resources include: Windy, Metservice, Metvuw.
    b. My area - What might happen around the area I'm flying? Local weather effects like terrain and sea breezes become more relevant at this level. You can also make good use of local weather stations. Useful resources include: Holfuy, Zephyrapp, SkySight, your eyes and the sky.
    c. My site - How might the weather affect my flying? Will wind funnel or create a rotor? How is today different to when I've flown before? Is my intended launch okay? Landing?
3. Site specific information - If you're flying in a new area, check out any site information available. The Canterbury club has guides for several local sites. Also be aware of the airspace rules where you're planning to fly (or might end up!).
4. Make sure you're okay to fly! The IMSAFE checklist is a good resource to confirm you're fit to fly.
5. Some Canterbury-specific advice:

a. **Do not fly in a North-Westerly wind**. A wave pattern forms from the Southern Alps and can touch down unexpectedly and very strong. Be extremely cautious, even if the wind is NE at Taylor's Mistake when you check. The wind station at Allendale is higher than Taylor's and can give you some advance warning of the arrival of a NW.
b. Lambing season - Several sites have limited access during lambing season. Please respect access notices and take care at non-official sites.
c. Airspace - You are required to observe airspace rules and NOTAMs. Familiarise yourself before you go and be aware of any active restrictions. Some airspace can be opened and this should be posted in the Canterbury WhatsApp group.
d. CHGPC Website - Great information is available on our club website, which is regularly updated.

Preflight checks

Make a system you do each time. Some elements you could include:

- **Equipment Inspection**: Check your wing and harness for any damage, wear, or defects.
- **Line check:** ensure your lines are tangle free and laid out appropriately for launch.
- **Harness Check**: Ensure all buckles and connections are secure and functioning.
- **Reserve Parachute Check**: Verify that the reserve is packed correctly and accessible. Is the handle secure?
- **Weather Assessment**: Analyze wind conditions, temperature, and potential changes. Do the conditions match your mental model?
- **Site Familiarization**: Assess the launch and landing areas for hazards and suitability.
- **Helmet check:** ensure your helmet is securely on your head and fastened
- **Radio check: check your radio is on and set to channel 40 for Canterbury**. It's also useful to check the transmit button is unlikely to be accidentally stuck on.
- **Instruments**: check your instruments are charged, turned on, and connected where necessary
- **Airspace**: understand the airspace limitations in your proposed flight area.

Helmet and harness: We can all agree that when you need a helmet or harness, you really need them. Pilots have died because they launched and forgot to do them up. We highly recommend a simple system: your harness and helmet are either **completely on, or completely off.** Walking around launch with a partially buckled harness or unbuckled helmet builds dangerous habits that you can avoid.

Launch

- **Launch Techniques**: Execute proper techniques for forward and reverse launches. You should learn to launch in conditions from nil to strong wind conditions. For hike and fly pilots an ability to launch in light downwind conditions is useful.
- **Aborting launch:** There's a skill to aborting your launch, especially when the ground is uneven on advanced sites.
- **Timing and Coordination**: Develop timing skills for launching in varying wind conditions.
- **Situational Awareness**: Be aware of surroundings and other pilots during launch.
- **Body Positioning**: Maintain correct body position to ensure a smooth takeoff. This body position should be maintained until you are away from the hill.
- **Quick Decision Making**: Make rapid assessments regarding launch feasibility.

Ground Handling

Ground handling is a seriously underrated skill. Understanding your wing makes you a much better pilot in the air. Good control also makes you safer on the ground. A third of accidents happen in the launch phase. Taylor's Mistake is the perfect site to master skills on the ground.

Talk to your instructor if you want to get better at ground handling. There are also excellent resources online. Some ideas to get you started:

- **Wing Inflation**: Master techniques for inflation and control of the wing. You should be able to inflate your wing using different techniques for light and strong winds. This includes As only, As and brakes, As and Cs, and cobra launch. Advanced techniques include nose down launch.
- **Brake Control**: Practice effective brake input to manage wing position during ground handling. Exercises can include stall edging, Pitch and roll control,...
- **Weight Shifting**: Learn to shift weight effectively for directional control. You should be able to do tip touches on both sides in most conditions.
- **Obstacle Avoidance**: Navigate around obstacles while manoeuvring on the ground and kite your wing back up the hill.
- **Advanced ground handling:** learn advanced techniques including ground spin, kiting uphill, stall point control, figure of eight movements,..

In-flight Skills

- **Steering and Control**: Use brakes and weight shifting for effective steering.
- **Pitch and roll control:** techniques to ensure that your wing remains above your head at all times. In particular it is important that you understand the principles behind controlling the shoot of your wing so that it never gets too far in front of you.
    - You would have done some pitch control in your PG2 course and might have not understood what all the fuss is about. Pitch can be tame in smooth air like at Taylor's. We've all been there!

    - Pitch and roll gets dramatically more violent in thermic and leeside air. Mastering glider control is critical for both safety and performance. Your actions, timed wrong, can be very consequential. There are incredible resources online to help you learn more. You can also ask your instructor. Even better is attending an SIV course.

- **Active flying:** Staying in touch with the glider and reacting to what it is doing. Important for performance and preventing collapses.
- **Speed bar -** an ability to use your speed bar and understand the changes it makes to your glide ratio. Speedbar can save you when it gets windy! It can also increase the risk and severity of collapses in turbulent conditions.
- **Descent techniques** - familiarity with a range of descent techniques, including big ears, speed bar and spiral.
- **Thermal Flying**: Identify and utilize thermals for altitude gain.
- **Navigation**: Understand navigation techniques and map reading.
- **Situational Awareness**: Maintain awareness of airspace, weather, and other aircraft.
- **Emergency Procedures**: Know procedures for dealing with in-flight emergencies, including when and how to use your reserve.

Landing

- **Approach Planning**: Plan the landing approach based on wind direction and terrain. Develop multiple techniques for determining wind direction and strength; especially important for flying new or more complex sites.
- **Glide Path Management**: Control glide slope and descent rate effectively. Setting your final glide from a number of different points and under a range of wind strengths will stop.
- **Spot landing**: spot landing is simply landing on target. You need practice in a variety of different conditions and approach pathways. Many sites have smaller landings than Taylor's Mistake.
- **Top and slope landing techniques:** Top and slope landing are useful skills in a range of conditions. We're fortunate to have a great site to practice our skills in Canterbury! At Taylors, you can master different approaches like landing under brakes, brake flipping, big ears from the side, big ears from the rear over the road, swooping to land, and rising up hill to land. You can practice slope landing in several places, including the Gut
    - Top landing can be dangerous. Be patient and never force a landing, especially if you risk stalling your wing with deep brakes.
- **Rollout Control**: Manage the wing's behaviour upon touchdown. You should have a range of techniques for killing your wing particularly in strong winds. Practice killing your wing with brakes, C lines, and A lines. Develop a technique that's effective and becomes automatic.
- **Post-landing Procedures**: Safely secure the wing and equipment after landing.

Final note on intermediate syndrome

Congratulations, you've progressed as a PG2 pilot and sampled the major local sites! You've also entered the most dangerous phase of your flying career as an intermediate pilot.

Intermediate syndrome, also known as the "100-hour pilot" syndrome, refers to a cognitive bias where pilots overestimate their abilities and underestimate their limitations, especially after a certain amount of flight experience. This can lead to a false sense of security and increased risk-taking, which result in several accidents per year in New Zealand.

There are no fixed rules on when you enter or exit the intermediate window, nor is it a bad thing; we all strive to progress after all! Just be aware of the risk, manage it, and fly for many years to come.