



Open Aviation Solutions

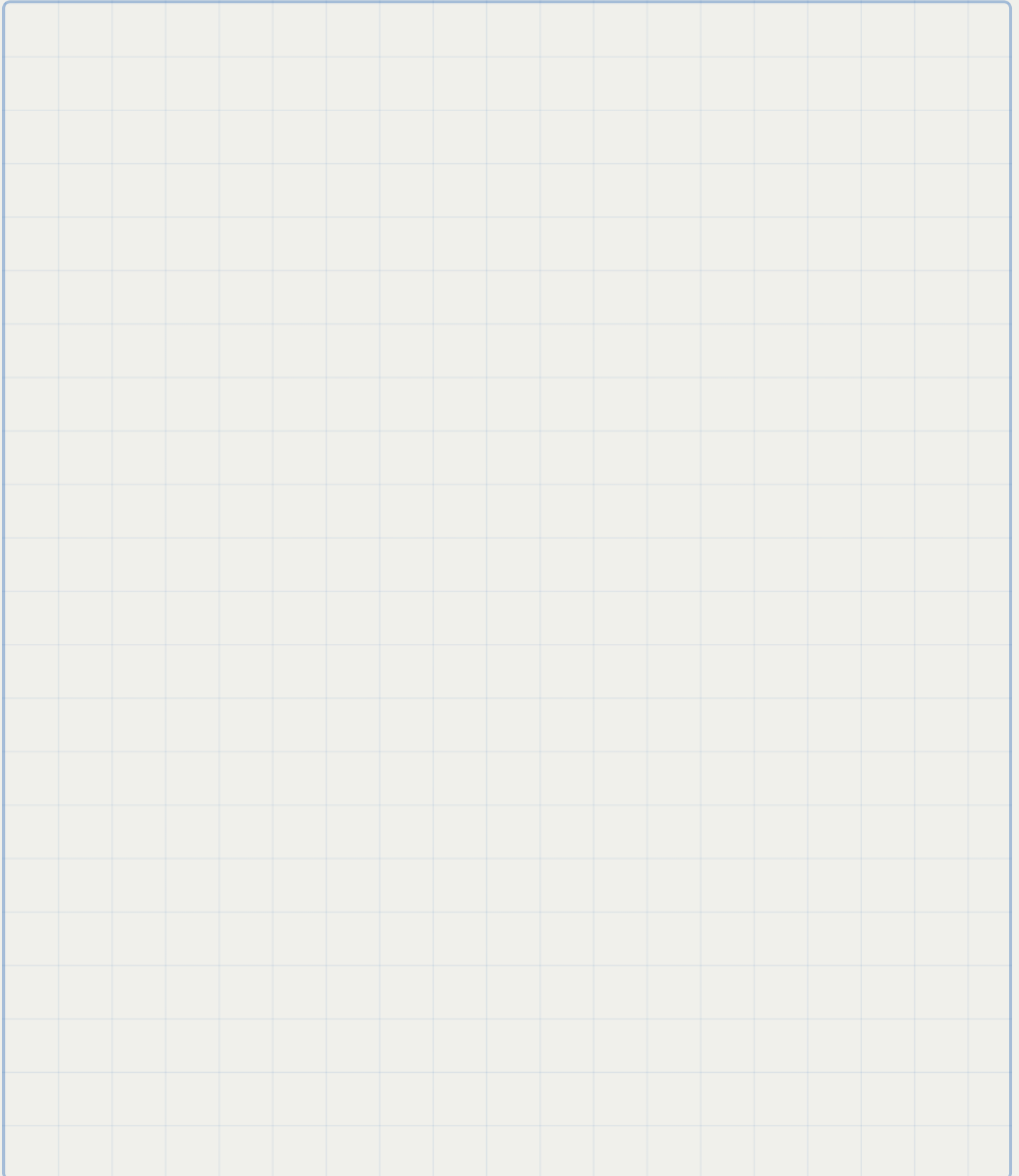
Climbing and Descending

*CASA Recreational Pilot License (Aeroplane) – Lesson 3, Pre-flight
Briefing Notes*

These notes help you plan and run an interactive **whiteboard briefing** immediately before the flight – they are components to draw from, not a script to read.

My whiteboard and running order

Before the lesson, read the sections that follow, then come back here: note *your* running order and approximate timings, and sketch the whiteboard you'll draw – your aerodrome, your training area, today's weather and traffic. For inspiration, see the [NZ CAA Flight Instructor Guide whiteboard for Climbing and Descending](#).



Using these notes

The long briefing (theory) is done and the student is keen to fly — keep this to about **15 minutes**, at the whiteboard, working interactively: **ask, draw, and listen** rather than present. We covered the performance formula and the PAT/APT sequences for climbs and descents in theory; today we practise them in the air.

The components (choose your own order on the planning page):

Component	~ time
The aim of the flight	1–2 min
Today's flight — whiteboard walk-through	3 min
Threats and how we'll manage them (incl. the TAF)	3 min
Airmanship emphasis — lookout and level-off	2–3 min
Questions, then fly	1–2 min

The aim of the flight

Ask — "From the theory session: what are we trying to achieve today?"

Expect — in the student's own words, something close to:

- **Enter and maintain climbs** at cruise, best rate, and best angle speeds
- **Enter and maintain descents** — powered, glide, and with flap
- **Level off accurately** from both climbs and descents
- Apply **Power + Attitude = Performance** throughout

Today's flight – whiteboard walk-through

Draw – the flight as a path across the board: taxi → take-off → climb to _____ ft towards the training area → climbing and descending exercises → return. Fill in your local details as you go:

- Runway: _____ Circuit direction: _____
- Climb to: _____ ft Training area: _____
- CTAF / frequencies: _____
- Who taxis / handles throttle: _____

Draw – the exercise sequence (a simple ladder or list works well). On the way to the training area:

1. **Normal (cruise) climb** – entry and level off

In the training area:

2. **Best rate of climb (VY)** – _____ KIAS
3. **Best angle of climb (VX)** – _____ KIAS; brief demonstration
4. **Powered descent** – entry and level off
5. **Glide (power off)** – best glide speed _____ KIAS
6. **Approach descent with flap** – stages and re-trim

Ask – "What's the entry sequence, and what's the level-off, for each?"

Expect –

*Climb: entry **PAT**, level off **APT***

*Descent: entry **PAT**, level off **PAT***

Ensure the student can recite both sequences before heading out – these are the critical memory items for today.

Threats and how we'll manage them

I'M SAFE and PAVE are standing checks before **every** flight — by now the student should walk through them, not be taught them.

Ask — "Run me through your I'M SAFE — any flags today?"

Ask — "What does PAVE stand for? Apply each letter to today's flight." (Pilot, Aircraft, enVironment, External pressures.) If any category flags a hazard, **assess it before you fly** — not after.

Draw / Ask the weather — pull up today's **Terminal Area Forecast (TAF)** for your nearest forecast aerodrome and read it together:

- The Bureau of Meteorology publishes TAFs ([BOM Aerodrome Forecasts](#)), but pilots access them through the official [AirServices NAIPS](#) site.
- The BOM has a good [PDF explanation of all the terms](#).
- Start familiarising with the codes and terms used — is the forecast within your personal limits for today?

Draw — list the genuine threats you and the student identify for *this* flight:

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- ---

Ask — introduce **TEAM** for each threat: **Transfer** · **Eliminate** · **Accept** · **Mitigate**.

Airmanship emphasis – lookout and level-off

This lesson's emphasis: the nose-high climb attitude **hides the area ahead**, and we'll be changing altitude repeatedly.

Ask – "Why must we clear the area, and lower the nose for lookout, before and during every climb?"

Expect – the high nose reduces forward visibility; we **look out and clear the area before every climb entry**, and lower the nose periodically during a prolonged climb to scan (and to help the engine cool).

Ask – "How early do we start the level-off, and why?"

Expect – anticipate the target altitude by **50–100 ft** (about 10% of the climb or descent rate), so we arrive smoothly on altitude rather than overshooting.

Ask – "Run me through the control handover phrases."

Expect – "My aeroplane" / "Your aeroplane", acknowledged on every transfer, no ambiguity about who is flying.

Questions, then fly

Ask – "Any questions before we head out?"

Quick recap as you pack up the whiteboard:

- "My aeroplane / Your aeroplane" – every transfer
- Look out and clear the area before every climb entry
- Entry sequence: **Power** → **Attitude** → **Trim**
- Level off: anticipate the altitude by 50–100 ft

Confirm who handles the taxi, and go flying.