Open Aviati
Solutions

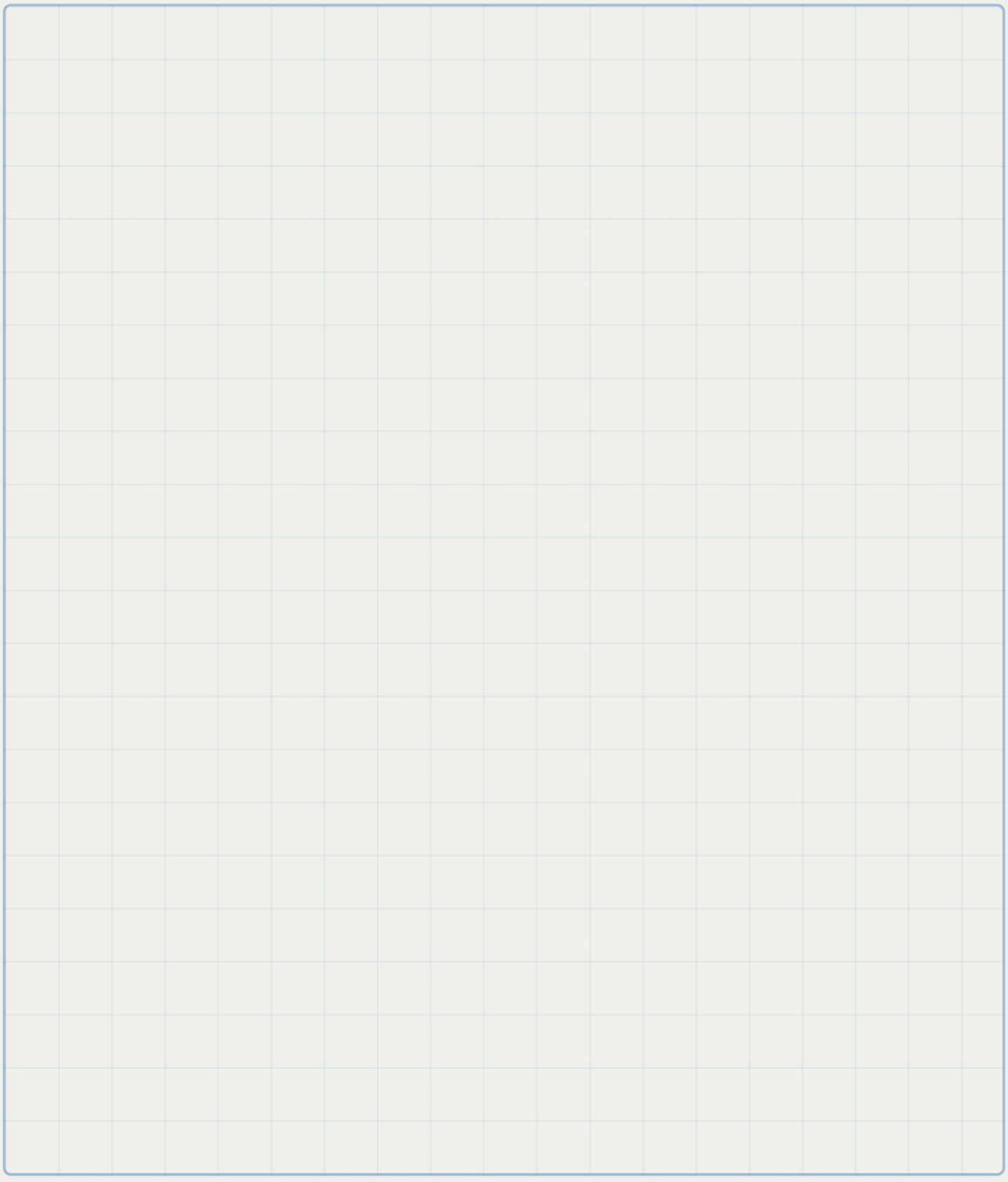
Straight and Level Flight

CASA Recreational Pilot License (Aeroplane) — Lesson 2, 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 Straight and Level.



Using these notes

At the time of the pre-flight brief, the theory session is done and the student is usually keen to fly — keep the briefing to about **15 minutes**, at the whiteboard, working interactively: **ask, draw, and listen** rather than present. Build the picture on the board together with the student using your plan.

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	3–4 min
Threats and how we'll manage them	3 min
Airmanship emphasis — lookout and handover	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:

- **maintain straight and level flight** with high, medium and low power settings
- recognise the corresponding **flight attitude** for each
- **balance and trim** the aircraft when changing power, attitude and airspeed

Write the aim (briefly) on the board — it anchors everything else you draw.

Today's flight — whiteboard walk-through

Draw — the flight as a path across the board: taxi → take-off → climb → training area → exercises → return. Fill in your local details as you go:

- Runway: _____ Circuit direction: _____
- Climb to: _____ ft Training area: _____
- CTAF / frequencies: _____
- Who taxis / handles throttle: _____ (decide now — the student should do more of the flying today)

Draw — in the training area, the exercise sequence (a simple ladder or list works well):

1. **Establishing straight flight** — visual reference point, wings level, balance ball
2. **Establishing level flight** — attitude reference, trim, altimeter cross-check
3. **Normal cruise** — 2400 RPM, settle, trim
4. **Fast cruise** — 2600 RPM, lower attitude slightly, trim
5. **Slow cruise** — 2200 RPM, raise attitude, trim
6. **Precautionary flight** — 2200 RPM, 2 stages flap, observe pitch change, re-trim

Ask — "What's the performance formula?" and "For each configuration change, what's the sequence?"

Expect — *Power + Attitude = Performance*, and *power → attitude → trim → cross-check*, the same every time. If these don't come back readily, revisit them now — they're the backbone of the flight.

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?"

Expect — Illness, Medication, Stress, Alcohol, Fatigue, Eating. Some nerves are normal at this stage; the point is honest self-assessment, done at home before even driving in.

Ask — "What does PAVE stand for? Apply each letter to today's flight."

Expect — Pilot, Aircraft, enVironment, External pressures — applied concretely: today's weather and wind _____, the aircraft's state, and any pressure to fly. Listen especially for the **External** category being skipped — "get-there-itis" and social pressure are leading factors in general aviation accidents.

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

- _____
- _____

Ask — introduce **TEAM** for each identified threat: "What are our options?"

- **Transfer** the risk · **Eliminate** · **Accept** · **Mitigate**

For this lesson the answers are usually straightforward — training aircraft, local area, no passengers — but the habit starts now.

Airmanship emphasis — lookout and handover

This lesson's emphasis: we'll spend a long time **at the same altitude in the same area** — possibly where other traffic will be.

Draw — the scan pattern: left to right, pausing to focus every 10–15°. A clock face for traffic calls is also worth a quick sketch.

Ask — "Why can't a static stare pick up traffic?"

Expect — sharp (foveal) vision is only ~2° wide; peripheral vision is what detects movement — so we scan in steps and let our peripheral vision work. Reinforce: **look out and clear the area before every manoeuvre.**

Ask — "Traffic is at our 2 o'clock, slightly high — point to it."

Expect — quick, confident use of the clock code from Lesson 1: 12 o'clock ahead, 3 right, 9 left; above the horizon is higher, below is lower.

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

Expect — "You have control" / "I have control", acknowledged on every transfer, no ambiguity about who is flying. Remind them of *follow me through*: hands and feet lightly on the controls while you retain control. Today the student flies more than in Lesson 1 — smooth, small inputs; never snatch a control.

Questions, then fly

Ask — "Any questions before we head out?"

Quick recap as you pack up the whiteboard:

- I'M SAFE — already checked
- "I have control / you have control" — every transfer
- Look out before every manoeuvre
- Power + Attitude = Performance — trim for hands-off

Confirm who handles the taxi, and go flying.