Pointing to safer aviation

Summer 2025

vector

AN OIL LEAK'S JOURNEY THROUGH SWISS CHEESE

How to improve flight test pass rates

FOD in the cockpit

CAA
CIVIL AVIATION AUTHORITY OF NEW ZEALAND
Te Mana Rererangi Tūmatanui o Aotearoa

// FOD IN THE COCKPIT

// NON-LICENSED, NON-AIRWORTHY

// HOW TO IMPROVE FLIGHT TEST PASS RATES

Cover: Over-familiarity, contempt, and a raft of Swiss cheese external factors led to a plane in a paddock. See our cover story, "An oil leak's journey through Swiss cheese" on page 13.

Cover design by Gusto.

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// AN OIL LEAK'S JOURNEY THROUGH SWISS CHEESE

vector

CIVIL AVIATION AUTHORITY OF NZ

PUBLISHED BY THE Safety and Security Education team of the Civil Aviation Authority of New Zealand, PO Box 3555, Wellington 6140.

Tel: +64 4 560 9400
Fax: +64 4 569 2024
Email: **education@caa.govt.nz**

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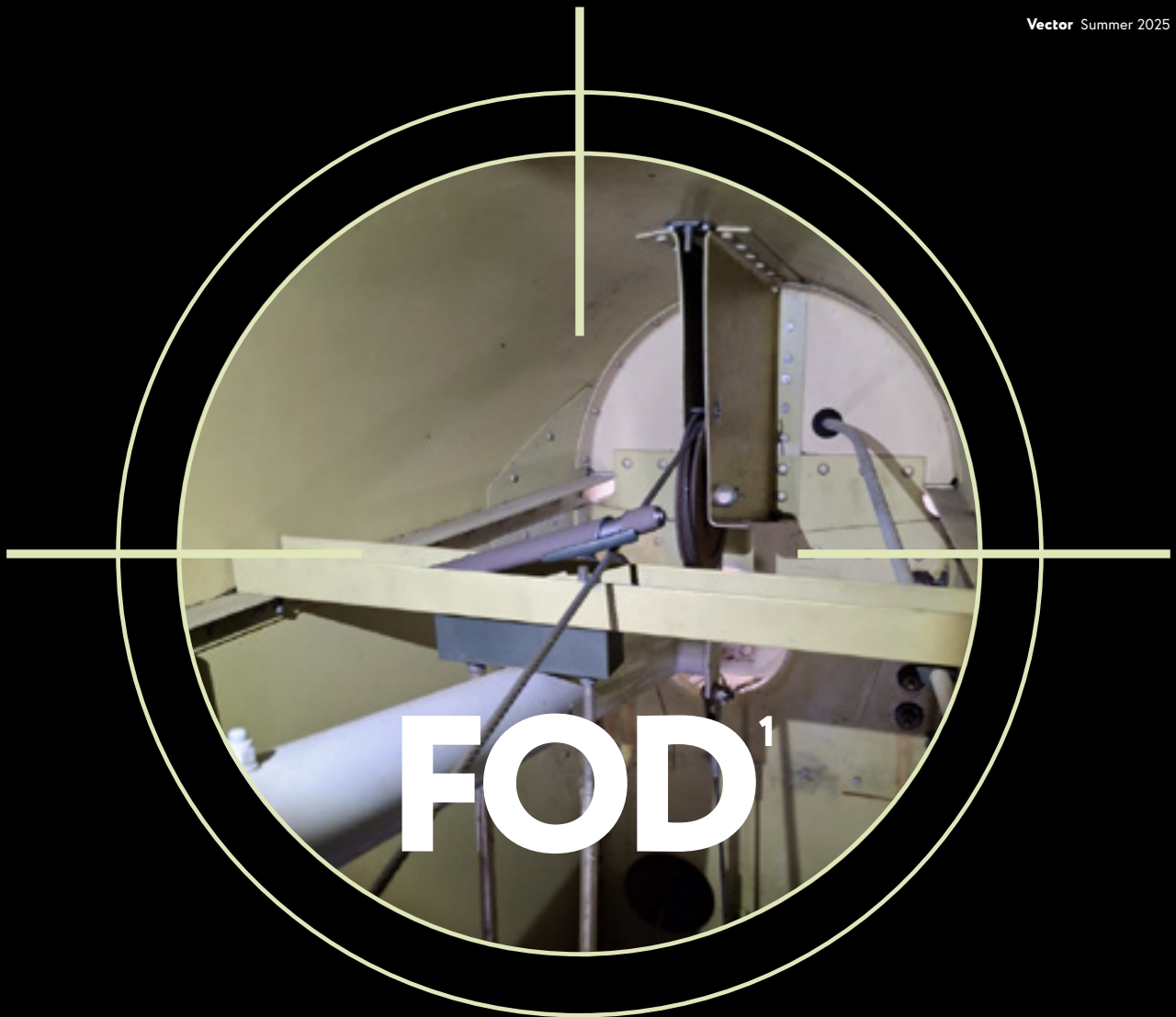


FOD[1] IN THE COCKPIT

Everyday items lost in the cockpit can jam essential controls. Two such incidents occurred in 2025.

Earlier this year, a PPL-holder was carrying out training towards their CPL.

They were flying solo, and at about 650ft AMSL, they rolled out of a right-hand turn. Suddenly, their control stick became difficult to manoeuvre in any direction.

The pilot advised ATC of the problem. They then attempted to free both control sticks on the training aircraft using full force, in every direction. It was unsuccessful.

Facing a life-threatening situation and requiring immediate help, they declared a MAYDAY.

Even with restricted elevator and aileron control, the pilot could control the direction using rudder inputs. Likewise, altitude and speed could be controlled using power and elevator trim inputs.

The pilot lined up for a 2.5NM final to give themselves time to stabilise the approach. The aerodrome-based emergency services were brought online, while Fire and Emergency NZ and the ambulance service were notified. ⟫

1 Foreign object debris.

This virtually unscathed pencil caused a life-threatening event.

Photos courtesy of the training school.

“I’ve done a lot of spinning in that aircraft, so I know what’s normal and what’s not”

The pilot was in contact with senior instructors from the training organisation. They advised a flapless landing, as increased airflow over the aircraft would improve the effectiveness of the pilot’s remaining control inputs.

At 50ft AGL, the pilot initiated a go-around, as they were too high and too unstable. A second 2.5NM final was attempted – this time with approach flaps extended to allow them to reduce their speed slightly.

This second attempt at a slightly slower speed of 65 to 75 knots was successful.

When the aircraft contacted the runway, it bounced slightly, freeing the control stick slightly. The pilot used force to completely free it.

The aircraft then taxied to the hangar without further incident.

Grounding the fleet

Following this incident, the training school’s entire fleet was grounded, says the organisation’s safety manager.

This decision was costly.

“We lost an afternoon of flying on a beautiful day, but we didn’t know what had happened, and we just couldn’t take that risk.

“There was a comprehensive check of the aircraft in question. When the seats were removed, a pencil was found under the right-hand control stick mechanism.

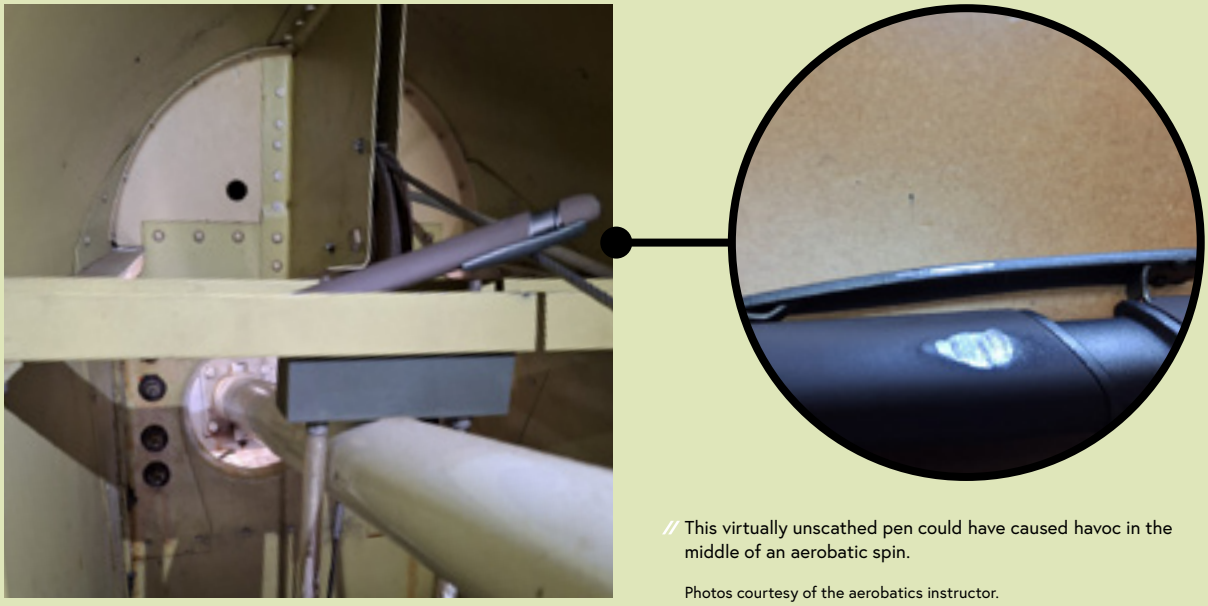
“This pencil had indentations on it consistent with it being jammed in the control stick mechanism.

“It was a relief finding that pencil. But I know we made the right call grounding the fleet, just in case.”

The safety manager is unsure how the pencil made its way down into the control mechanism.

“The control stick is protected by a leather sheath.

“FOD in the cockpit is something everybody needs to be aware of.”



This virtually unscathed pen could have caused havoc in the middle of an aerobatic spin.

Photos courtesy of the aerobatics instructor.

April fool's

Several months earlier, a similar event took place during a dual flight training exercise.

A senior aerobatics instructor was teaching a student how to recover from a spin. The student was training for their own instructor rating.

"I was demonstrating the manoeuvre first," the instructor says. "They were going to perform it afterward.

"During pre-take offs, everything was normal. I always triple check the controls before aerobatics.

"Nothing peculiar happened during straight and level flying, or during climbing and turning."

But during the first spin and recovery, the instructor noticed something was wrong.

"I've done a lot of spinning in that aircraft, so I know what's normal and what's not," she says.

"On this occasion, the stick forward pressure – for the recovery of the spin – required more than normal. I thought, 'This doesn't feel right'."

The instructor wondered if the trim was out. She adjusted the setting to remove pressure from the control stick and performed another spin.

"It made no difference. I had to make the call. I said to the student, 'Look, the pressure that's needed to be held isn't right – we'll have to cancel the lesson for today'.

"On the way back in, the controls felt normal again. When the engineers had a look over the aeroplane, they couldn't find anything."

The instructor almost let it go but instinct told her to double-check.

"I said to the engineers, 'That's all the more reason to look a bit further. Open it up and have a look inside'.

"I didn't think they were going to find anything. When the engineers called me over and showed me the pen they'd recovered from the empennage, I thought it was a prank. It was the first of April.

"When I realised it wasn't a joke, I was actually shocked."

The instructor isn't sure how the metal pen made its way to the back of the aircraft.

"It was wedged in between a bolt and the wire elevator control. The marks on the pen suggest it'd been there a while.

"The best policy to avoid something like this happening, is to to make *certain* you take anything away with you which you bring into the cockpit.

"It's also a lesson to follow your instinct. If something doesn't feel normal, get it checked out. You shouldn't just dismiss it."

The instructor also agrees with the training organisation in the first FOD instance, that safety should be prioritised over profit.

"In the end, commercial interests are protected by prioritising the safety of the flight.

"The cost of something going horribly wrong would be significantly greater."

Positive outcome of a CLOSE CALL

The silver lining of a near-miss was the improved safety – and communication – between flight operators at Motueka aerodrome.

iStock.com/LazingBee

In March 2025, a Cabri helicopter and a fixed-wing Nelson Aviation College aircraft had a near-miss at Motueka aerodrome.

Both aircraft were on training flights – the Cabri instructor taking their student for 180-degree autorotations, and the NAC aircraft approaching from the nearby low-flying zone.

A few moments later, the NAC aircraft landed just ahead of the Cabri, which was on final.

"I aborted the operation at about 300 feet," says the Cabri instructor, "and terminated on the eastern helipad away from the vector.

"It wasn't a great situation."

The bright side

Despite the possibility of conflict over the close call, engagement after the incident between NAC and the helicopter instructor has been very positive.

"I wanted to try to improve this so that it didn't happen again," the Cabri pilot says.

"I thought, 'I'll go and have a coffee and a chat with the guys' – and they were all good. There was no blame or anything.

"We also set up some new procedures for our 180-degree autorotations and talked to our students about it."

The Cabri instructor met NAC's Safety Manager, Jackie Day, to discuss safety between the two types of operations.

In a follow-up meeting, the Cabri instructor briefed the college instructors and students about the various helicopter operations in the circuit.

"We went over all the emergency procedures we practise – things like low-approach simulated tail rotor emergencies and hydraulic failures," he says.

Jackie says the improved communication has been a long time coming.

"There haven't been many helicopter operations at Motueka for a while now. This means our current instructors and students are not that used to rotary operations.

"When helicopter operations ramped up in October last year, we held a meeting with our students on operating safely near rotary-wing aircraft."

// Motueka aerodrome.

Photo: CAA

> // Engagement after the incident has been very positive //

Jackie had asked her students if they knew where the helicopter pad was on the airfield.

Only half knew there was one.

"We thought, 'Okay, this is a starting point', and we've been monitoring this closely with our instructors and in safety briefings," she says.

"The CAA's *Work Together, Stay Apart* campaign visited us afterward and we discussed it again – that was really good.

"Awareness about helicopter operations has really improved among our students."

The Cabri pilot says the response from the college was great.

"They're very proactive with safety.

"We might have another break in operations and probably start up again in summer. And since, for me, it's not just about improving safety, but wanting to be courteous to whoever else is using that airspace, I'll head back over to Jackie and say, 'Hey, we might just do another briefing".

FLYING THROUGH PARACHUTE LANDING AREAS LIKE, DON'T

If fixed- and rotary-wing pilots keep flying through the airspace above parachute landing areas, a collision could well be a matter of when, not if.

Early in 2025 an aircraft took off from Wānaka and flew straight through the airspace above the nearby parachute landing area (PLA).

The Operations Manager of Aircraft at Skydive Wanaka, Hamish Brown, says the skydive pilot had radioed the aircraft beforehand to let the pilot know a parachute drop was under way.

"It's a real safety issue," says Hamish. "It's happened a few times a year for the last 30 years.

"Pilots should know that this is a regular drop zone. We've been parachuting here for a long time."

Hamish says the issue is caused in part by itinerant pilots, because some of them are not reading the AIP.

"We've got a massive shaded area just north of the airport. Our parachute symbols are there. "I don't think that symbol triggers anything in some pilots' minds."

A transiting pilot, however, may not refer to the Wānaka VFR arrival/departure pages of the AIP, so the PLA could be missed.

The same applies to all PLAs not associated with an aerodrome.

But the message is that even transiting pilots should carefully check the AIP and VNC. For Wānaka, look for the parachute symbol and 'P912'.

"For PLAs near aerodromes, if pilots read up about the local procedures, I believe we can substantially reduce the number of close calls in the airspace above the parachute drop area," Hamish says.

iStock.com/AscentXmedia

Advice for flying near PLAs

There are 25 parachute landing areas listed in the AIP. When active, the amount of parachuting activity at these PLAs can be intense. Temporary PLAs may also be set up for a specific event, and are notified by NOTAM.

"The airspace near an active PLA is like a danger area," says Doug Hamilton, former CAA Flight Operations Inspector. "This includes airspace above and upwind of the PLA, where parachutists might fly downwind to land.

"Pilots should include checking all the relevant AIP information as part of their preflight planning.

"Also, specifically check the visual navigation charts (VNCs) for PLAs along your intended track. They are designated with a parachute symbol and the code Pxxx."

AIP New Zealand ENR 5.3 has the details of all current PLAs, including the appropriate frequency for general use in the area. This is usually the aerodrome frequency.

"Have this noted on your flight log or VNC," says Doug.

"Study the aerodrome chart notes for further information, including AWIB frequency and instructions for use.

"Some AWIB can advise if parachuting operations are taking place. Pilots who are flying NORDO need to be even more cautious around PLAs.

"Without a radio, or in the event of radio failure, you cannot hear the drop aircraft call."

In that situation, pilots should never join overhead – their best option is to transit the area at least three nautical miles from the PLA.

"Pilots should also be aware that things don't always go according to plan. Situational awareness is critical," says Doug.

"Malfunctions happen, parachutists don't land on the predicted spot, and so on.

"Anyone on the ground with their prop or rotor turning within 100 metres of a PLA should operate extreme caution.

"Before you start your engine, listen for information and look for canopies in the air."

Hamish Brown also advises pilots who don't understand a radio call from a jump pilot, to ask for clarification.

"If you think you've missed a call, feel free to ask if there's any skydiving traffic in the area.

"We're happy to help."

What happens in the PLA?[1]

The first signs of parachute activity in the PLA will normally be radio calls from the drop aircraft.

In controlled airspace, all drop operations will be co-ordinated with the local ATS, and all drops, including dropping through cloud, require an approval. »

1 Some of this information is republished from "Parachute Landing Areas" in the March/April 2014 issue of *Vector*.

In uncontrolled airspace, standard radio procedures apply, and jumpers must remain clear of cloud.

Both pilots and parachutists should be complying with the published VFR MET minima for the class of airspace they're using (see the GAP booklet, *New Zealand Airspace* at **aviation.govt.nz/education** > GAP booklets).

The drop plane will call when taxiing, and will usually inform local traffic of drop details. Listen carefully, make notes on your log, then talk to local traffic to advise them of your presence and intentions.

Times for the cycle of climb, drop, descent, and landing vary depending on the type of aircraft – turbine or piston-powered. It can be anywhere between 15 and 30 minutes.

The drop plane will call, "Two minutes to drop" and will state the number of canopies.

This is the cue to plan your approach to the field, or your transit out of the PLA. The drop plane will also advise, "Jumpers away" when the parachutists exit the aircraft.

The drop point will normally be upwind of the aerodrome, and, depending on the wind strength and direction, may be up to three nautical miles from the PLA.

Parachutists in free fall are descending at close to 10,000 feet per minute.

A typical tandem jump from 16,000 feet to canopy open at 5000 feet is about one minute of free fall, and about five minutes under canopy.

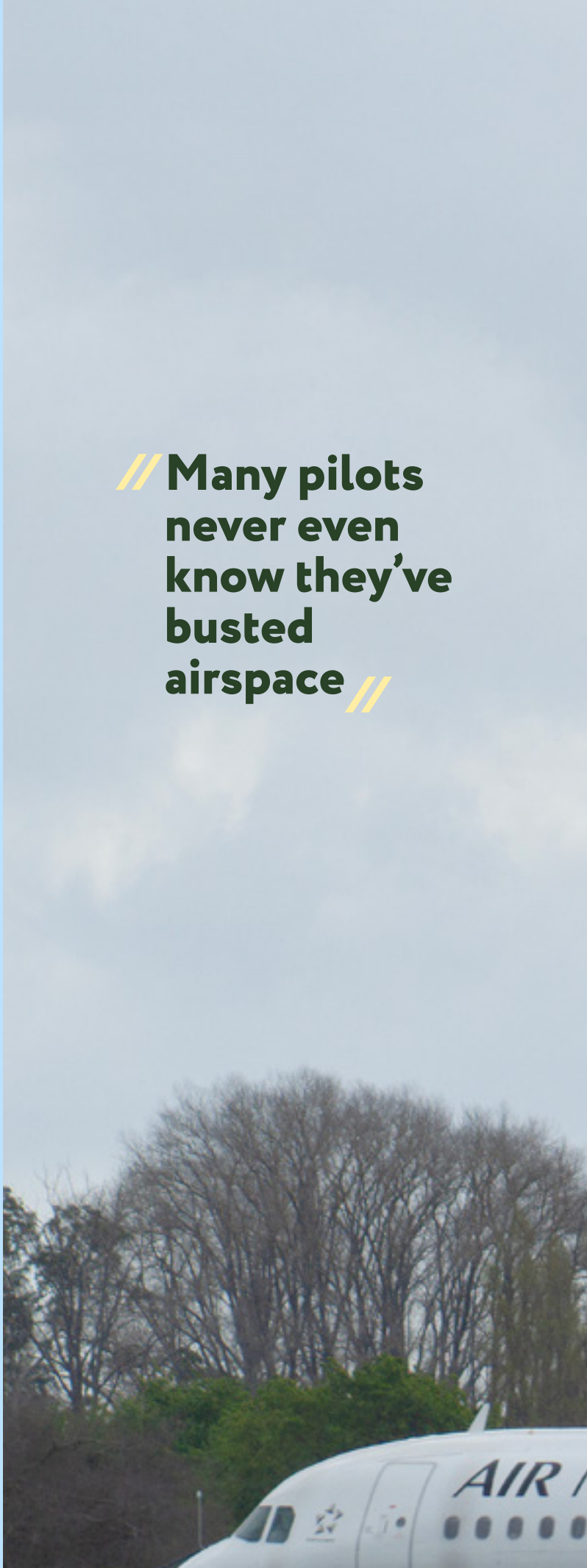
Sport jumpers will open lower at 2000 to 3000 feet, and will enjoy up to three minutes under canopy.

Use these times to plan your next steps. At aerodromes with PLAs, you might join downwind or straight in, to avoid parachutes in the air.

You could also hold clear of the PLA until all canopies are on the ground, and then complete an overhead join.

Not all PLAs are on aerodromes, however. So keep well clear when transiting the airspace near parachute landing areas – at least three nautical miles from the drop zone.

// Many pilots never even know they've busted airspace //



ZONED OUT

Controlled airspace incursions are a hazard to everyone's safety.

An air traffic controller in Hamilton Tower observed a VFR helicopter tracking towards the control zone boundary. They attempted to make contact with the pilot, but received no response.

The controller then switched from the tower frequency to the Common Frequency Zone (CFZ) frequency, says Scott Cowley, Team Leader, Hamilton Tower.

"The controller made a general broadcast but still received no response.

"The controller suggested that if the pilot could hear the tower, they should track toward the north to avoid controlled airspace, or contact Hamilton Tower for clearance through the control zone."

The aircraft made a course change but it was now indicating 400 feet above the maximum altitude of the northern VFR transit lane, and was again at risk of entering controlled airspace without a clearance.

"Further calls were made on the CFZ frequency, suggesting alternative tracking to avoid tracking through the northern control zone," says Scott.

"They did adjust course, but still flew over the corner of the control zone.

Fairly common

"Controlled airspace incursions are fairly common, not just in Hamilton but also in other areas of controlled airspace throughout the country. They pose a hazard to other aircraft operating within controlled airspace," says Scott.

Most airspace incursions will be into controlled airspace (although a smaller proportion, about 10 to 15 percent, will be into military or danger areas).

"Even where these scenarios do not result in an airspace incursion, they can impact controller and pilot workload.

"The airspace immediately around a control zone can often see high concentrations of VFR aircraft as they enter or leave the zone. At Hamilton, this can often be the case in the vicinity of Temple View to the west and Cambridge to the east.

"Everyone is trying to do the right thing, but pilots transiting close to the airspace boundary, and aircraft entering or leaving controlled airspace, may be on different frequencies in the same airspace," Scott explains.

The role of technology and flight planning

Part of the challenge may come from the technology some pilots are relying on.

"There is excellent technology available today, with GPS navigation providing pilots with valuable tracking information. But it's important not to become over-reliant on the 'magenta highway'. Pilots should also consider how tracking tightly around controlled airspace may impact other users," says Scott. »

Photo courtesy of Scott Cowley.

"Ensuring maps and charts are kept up-to-date is critical."

Another potential factor is the size and shape of control zones and VFR transit lanes.

"Control zones, in general, are quite small these days. So, if you're transiting around the immediate boundary, you may be close to the aerodrome circuit or the airfield itself."

VFR transit lanes are designed to allow transit through control zones without reference to ATC. However, Scott notes that pilots need to remain aware of the lateral and vertical boundaries of these transit lanes.

"Transit lanes are critical areas near controlled airspace that often see multiple aircraft passing through. They are typically designed to fit beneath IFR approach profiles, meaning they may have relatively low ceilings with lateral boundaries that are not always easy to determine visually.

"In Hamilton, both transit lanes extend only up to 1000 feet, which translates to a maximum of 800 feet AGL. Pilots should also remember that transit lanes (active by day only) are uncontrolled airspace where they are responsible for maintaining separation from other aircraft.

"If pilots want to operate within controlled airspace itself, they need to get clearance from Airways."

Scott encourages pilots to contact the appropriate tower or surveillance controller, if they're unsure about anything, including what airspace they're in.

"It's free to call us. You're charged only if you enter controlled airspace.

"We're on the same team, and we're here to help whenever we can."

The bigger picture – flight planning and situational awareness

Airspace infringements are a nationwide concern, says David Wiman, Operational Safety Advisor for Airways.

"A lot of it comes down to flight planning. When pilots do not have full situational awareness of their location, they may not allow themselves a sufficient buffer or margin for error.

"Many pilots may be flying down the line because their GPS tells them they can, but this increases the risk of airspace incursions.

"Each airspace incursion presents a safety issue. It creates significant workload and distraction for controllers," says David.

"We have to ensure that controlled aircraft remain clear of the infringing aircraft. We don't know if the aircraft that has entered controlled airspace is going to climb, turn, or descend.

"Controllers must shift their attention to the infringing aircraft, which can divert focus from other critical tasks.

"Many pilots never even know they've busted airspace.

"It can have a big impact on them when they find out. Sometimes they just can't believe they've made such an error.

"They'll tell us afterward they realise they have done something really bad. They have a sense of impending doom about the potential consequences."

However, Airways only ever wants to establish two-way comms with pilots and offer a solution.

"It's about avoiding that worst possible outcome, so we need to know if you need assistance and what your intentions are," says David.

A collaborative approach to airspace safety

Airways says maintaining situational awareness and communicating effectively creates a safer airspace for everyone.

By planning flights carefully, staying within designated airspace boundaries, and using ATC support when they need it, pilots can improve both their safety and that of others.

Airways would like to continue to collaborate with pilots on operational procedures, and airspace design and safety. Use the 'Contact us' page at **airways.co.nz**.

An oil leak's journey through Swiss cheese[1]

Photo courtesy of JEM Aviation.

Over-familiarity with a task can catch out even the most experienced engineer.

On an otherwise routine Saturday morning earlier in 2025, long-time LAME Jay McIntyre received a worrying call.

It was from a client who had only just flown off. "Jay, I'm in a paddock near the coast. Had a prop overspeed. I pulled back on the throttle, but it only sped up.

"The engine quit and I ditched on a stop bank. We're okay, but the plane's a bit munted."

Jay – Director of Omaka-based JEM Aviation – admits he was confused while driving out to the site of the damaged Piper Arrow, as a prop overspeed would normally be caused by a lack of oil.

His company had only just completed the aircraft's 100-hour annual. A new oil cooler, oil hoses, and quick drain valve had been fitted.

JEM Aviation had performed all the usual checks and tests before returning the aircraft to its owner. To ensure everything was working fine, Jay had asked the pilot to perform several circuits before they headed back to Auckland.

When Jay arrived at the stop bank, he saw signs of oil in the engine bay and on the belly of the Arrow.

"I checked the dipstick, and sure enough, there was no oil in the engine.

"But the cooler and hoses looked fine and the quick drain had been correctly lock-wired. I pushed the oil drain up and a little bit came out. That was very odd.

"Then I noticed some marks on the quick drain valve and I thought, 'Those guys have used a pair of pliers to put it in!'

"Literally, five seconds later, it hit me. I thought, 'Oh no... the undercarriage linkage has hit the quick drain and opened it during flight'."

Jay went home that night and googled, 'quick drain valve and Piper Arrow'.

"It popped up straight away. There had been an AD out since 1980 warning about installing non-compliant oil valves on the Piper Arrow." ⟫

1 See SKYbrary.aero and search on 'Swiss Cheese Model of Accident Causation'

CAA ACTIONS

The CAA has reviewed the AD schedule for the Piper Arrow following this event, says Principal Advisor of Airworthiness, Warren Hadfield.

"The CAA cancelled DCA/PA28/174 and issued FAA AD81-11-02 R1 on 25 September 2025.

"The AD in question does not mandate a repetitive inspection. However, it is critical to understand the associated placard is *not* a fit and forget item.

"It's the operator's responsibility to ensure that the aircraft complies with all applicable AD requirements.

"This includes ensuring that mandatory placards are fitted and legible.

"The CAA has contacted the affected operators to remind them of the AD. We have also released CAN 05-017 which explains AD compliance requirements."

Over-familiarity

Jay's a very experienced engineer. His career began back in 1989 with the Royal New Zealand Air Force.

"I've worked on a lot of Piper aircraft over the years, and drained oil countless times – over-familiarity with the task probably led to complacency.

"When one of the guys asked if we should install a quick drain on the Arrow, I thought, 'Yeah, that makes sense'."

Quick drain valves allow an engineer to hook up a hose to the oil valve and route it away to a bucket.

"It's much cleaner," says Jay. "Otherwise, the oil can end up all over the airbox and so on. It can be quite a job to clean up.

"The original oil drain plug on this Arrow was a real swine to get to as well, so it seemed like a good idea at the time."

Jay checked the compatibility of the quick drain valve against the engine make on the McFarlane website, and it checked out.

"But if I'd gone to the website of the company that makes the valve, I would have seen a warning about not fitting them to certain aircraft.

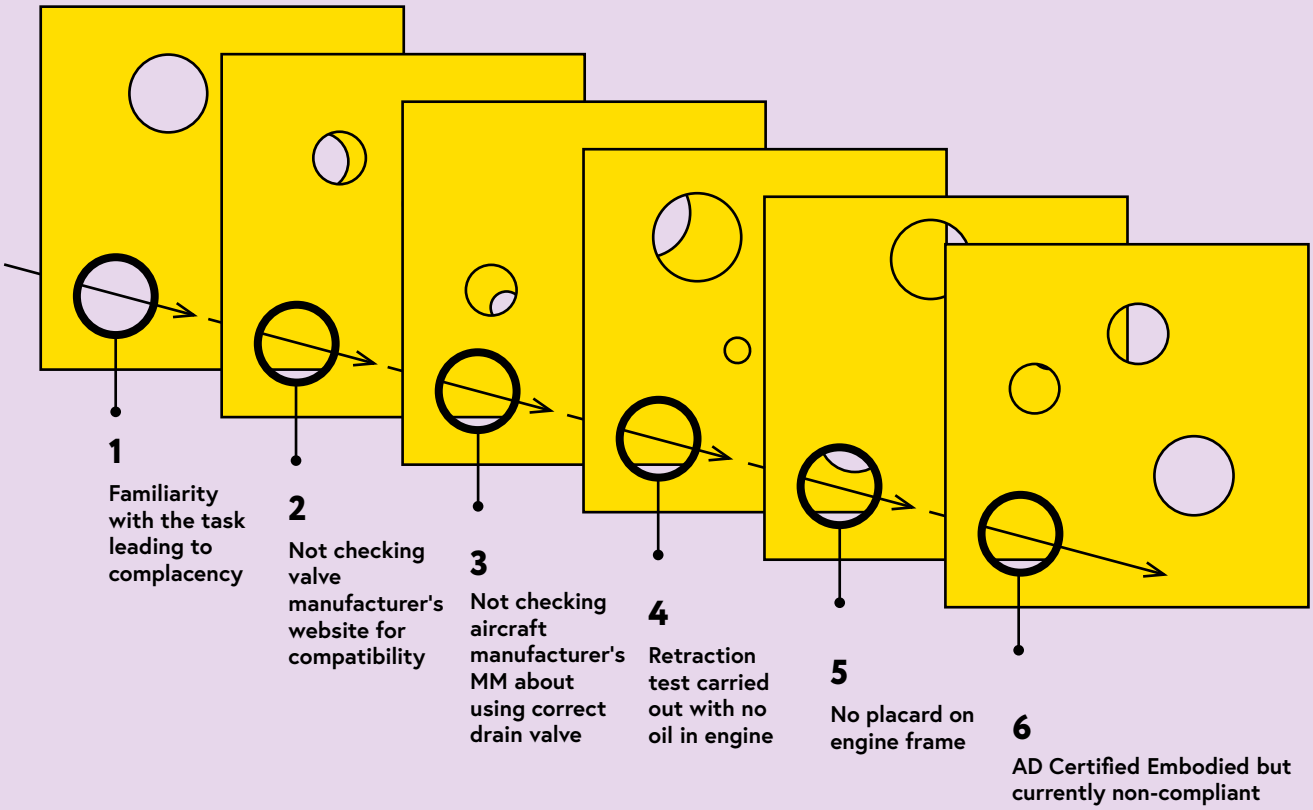
"Likewise, there was a generic warning in the aircraft maintenance manual, about using the correct drain valve.

"However, in the approved Piper check list for the inspection, the warning was not repeated. This was something you would think would be a no-brainer!"

Over-familiarity with a certain task, however, breeds a level of contempt, says Jay.

Photo courtesy of JEM Aviation.

Illustration: Gusto



Swiss cheese

Several other factors led to the prop overspeed.

"It was very, very definitely a Swiss cheese situation," says Jay.

To start with, Jem Aviation completed the inspection including landing gear retracting tests, without any oil in the engine.

"We were waiting for the replacement oil cooler to arrive from offshore," says Jay. "That took about a month, and we completed as much of the inspection as we could in the meantime.

"That was never going to show us the problem.

"It wasn't until the pilot retracted his landing gear as he performed those circuits that the Arrow began to lose oil."

A couple of minutes after the pilot set course for Auckland, all the oil was all gone.

"It was all over by then," says Jay.

Another hole in the cheese was the absence of the warning placard on the engine mount frame that formed part of the AD.

"The AD requiring the placard was signed off in 1981 as being embodied. I'm guessing it was never refitted when the engine was overhauled, the engine mount non-destructive tested, and repainted in 2008 – if not before," says Jay.

"If the warning placard had still been there, we never would have fitted the quick drain."

After the incident, Jay checked another Arrow at his local aerodrome.

"That was missing its oil drain warning placard as well. And I know of another Arrow in Auckland that doesn't have one any more."

"It's a tough one.

"On reviewing the ADs when we took over the maintenance of the aircraft in 2024, I looked through the AD listings and saw that everything was signed off as having been embodied.

"ADs that were listed as 'Repetitive' by the CAA were recorded appropriately, but this particular AD is not classed as a Repetitive AD."

Jay wonders if perhaps this AD should be repetitive.

"Maybe when a new type comes into the shop, I need to fully review all the ADs so these little traps can't catch us out again.

"Having said that, it doesn't absolve me from not having followed the procedure in the maintenance manual.

"Ultimately, the responsibility rests with me."

Vector is very grateful to Jay for his story. It takes courage and professional maturity to publicly share what went wrong, so other LAMEs can learn from his story.

NON-LICENSED, NON-AIRWORTHY

Reporting unsafe behaviour can avoid accidents and injuries.

Early in 2024, a pilot with a history of non-compliance with the civil aviation rules crashed for the third time in his 50 years of flying. The aircraft was totalled. The pilot – the sole occupant – survived but suffered severe head, chest, and leg injuries.

The pilot had been flying since 1976 but had never been licensed nor certificated. Instead, he'd logged more than 500 hours as a student pilot.

Over the years he also repeatedly flew aircraft without a certificate of airworthiness (CoA).

The pilot's first aircraft was a gyrocopter. He crashed that into a paddock. He purchased another aircraft in 1992. After a propellor flew off it during flight in the mid-1990s, he put it in storage for 22 years. During the 2000s the pilot was flying yet another aircraft, which was written off after he crashed it into a tree.

In 2017 the pilot was attempting to make that second aircraft airworthy – the aircraft he'd bought in 1992, then stored.

In 2024 the CAA identified nearly three dozen unaddressed issues with this aircraft, and a review of airworthiness could not be undertaken.

Despite this, the pilot conducted a 'test flight', during which he once again crashed – this time hitting a paddock fence and flipping upside down.

The pilot had been repairing his last aircraft himself. A lot of it was just balsa wood and glue, says CAA Investigator Steve Wilson.

"He'd even secured his seatbelt with self-tapping screws. An engineer then convinced him to replace them with a suitable bolt and anchor plate fixture.

"That saved his life."

Steve says there wasn't much left of the wreckage.

"The fuselage structure was cracked across its width. I'm amazed he walked away from the crash."

Others would have known

Steve questions how comfortable other pilots were, sharing the sky with this pilot.

"If the pilot had been flying this way for 50 years, somebody must have known something.

"But until they share that with us, we cannot take the appropriate action.[1] The CAA cannot monitor every flight, of every pilot, everywhere in the country. Whether this pilot – or anyone else like them – get into the air again depends on how everyone else reacts.

"If you're sharing airspace with someone like this and that worries you, little will change unless you speak up."

Photo courtesy of Fire and Emergency NZ.

ONE OF TWO

The CAA took the pilot to court for flying without a PPL, for flying an unairworthy aircraft, and for "flying recklessly".

At the pilot's prosecution, the summary of facts noted he'd taken a flight path across, "...at least two state highways, numerous farms, occupied dwellings, and possibly several other settlements".

For flying without a licence, without a CoA, and for unnecessarily endangering others' safety, the pilot was found guilty and fined $13,350.

Such CAA prosecutions are rare but are necessary in cases of repetitive and unsafe behaviour.

For example, the CAA has received more than 5500 accident and incident reports so far this year, and over 1000 ARCs in the same time frame.

Of these, just two have been brought before a judge.

// AND NOW READ...

"Everybody knew" (*Vector*, Winter 2023) for some tips on how to approach someone whose flying is concerning you. Go to **aviation.govt.nz/vector**.

1 Report your aviation-related concern at **occurrencereporting.services.aviation.govt.nz/arc**, email **triage@caa.govt.nz**, or contact one of the CAA's aviation safety advisors – see page 25.

HOW TO IMPROVE FLIGHT TEST PASS RATES

One training organisation is making big changes to its flight test programme – and the results speak for themselves.

Flight test failures are frustrating to the student, their instructor, and the external examiner.

Like many training schools, the New Zealand Airline Academy (NZAA) in Oamaru faced repeated first-time flight test failures – but is now turning that on its head.

The aviation examiners, Aspeq, say that improvement is going against a nationwide trend of increasing test failures.

"While some schools have always performed well in terms of their passes," says Aspeq's Deputy Aviation Manager, Paul Kearney, "flight test pass rates have generally been declining across the country over the past five years.

"But NZAA is going against that trend, after putting in some big changes to the way it approaches flight tests."

The academy's head of training, Celroy Mascarenhas, says the new approach to flight testing came after he attended a CAA chief flying instructor seminar in Christchurch in June 2025.

"I talked to Guy Brooking (CAA Flight Examiner) about what we could do to improve our first-time pass rates.

"What he told me turned our flight test failures completely around."

Guy gave Celroy two pieces of advice. Firstly, get to the root cause of the student's difficulty, and address that issue first in remedial training. Secondly, choose one instructor to take all mock tests. (The academy's normal practice was to have several instructors conducting them).

"That solution was sort of sitting there right in front of me all along," says Celroy. "But I just needed someone to say it out loud and I thought, 'That makes total sense'."

"The mock tests also became much more comprehensive – more even than the actual flight tests. Rather than assessing only manoeuvres in the air, our mock test assessor looked at logbooks, making sure they were complete and compliant. »

Photo courtesy of NZAA.

Photo courtesy of Sakthi Ganesh.

"We also made sure the student's groundwork was up to speed. A significant amount of time was spent assessing that, including going through all the knowledge deficiency records. The instructor asked every question that's ever been asked or could possibly be asked. All this made the mock test much longer – and more stringent – than the actual flight test."

Celroy said the students were unhappy to start with.

"Some of them had been gaming the system a bit. Previously, if they perceived their assigned mock test instructor was going to be really strict, they'd be away that day, then unavailable until they would get someone they perceived as likely to go easier on them.

"They thought having one instructor for all their mock tests was 'unfair'. But I'd made a decision, and with Guy's assurance he'd back me on this new approach, I stood my ground."

Celroy says another advantage to having one instructor dedicated to mock testing is that the students don't get multiple interpretations of how a manoeuvre should be carried out.

"Even with standardised mock tests, it can be difficult to offer the same test to everyone, when you have different people involved."

Celroy says the feedback from students now has been generally very positive. The students recognise their mock tests are harder than their flight tests, which Celroy says is intentional.

"With one person conducting the mock tests, students now understand what our expectations are – that they are going to be held to a high standard."

The academy also changed the emphasis in remedial training from just the things the student was struggling with, to starting with the root cause of the problem and then doing the entire mock test again.

"The instructor might have said to the student, 'Go and practise some max rate turns and forced landings, but apart from that, everything is good'. Then we would take them up for just a revision of max rate turns and forced landings, and that would be it.

"Whereas now, if you fail even for one thing, you've got to do the entire mock test again – just like the flight test would be.

"I had one student who failed their first mock test, did some remedial training, went up twice more, and failed twice more. But each time, the reasons they were failing were getting fewer and fewer – and they passed their fourth mock test. They then went for their flight test and passed first time."

Celroy says some students would say, "I need to go and do my flight test right now, and I'm confident I will pass".

"That's not based on competency," he says. "That's based on a false sense of security that because they've completed their 200 hours, they think, 'I'm ready. I will go and pass'."

"And then they don't pass. While more of our students pass their second flight test, it all costs them money – a second flight test fee, living costs, and a heap of revision flying. Saving money is a very good incentive for them to pass first time. And if they failed three mock tests, but passed the fourth, in just over a week, they've not wasted so much time or money."

Celroy has told the mock test instructor – ironically named 'Harsh' – "Go in with a stone-cold face. They should feel that you're not their friend. You're not there to be friendly. You're there to look like a hawk at every small thing they do.

"And don't instruct them!"

Let the students decide

Despite the strict approach, Celroy says forcing students to do remedial training when they don't want to, can be counterproductive.

"You've got to get them to buy into this. If they think they need minimal remedial flights, I might say, 'Okay, that's fine – but, you know, the actual examiner will look at how much remedial training you've done. Are you sure you want to go out for this test because you've done only the one remedial flight?'

"It seems that's enough for them to reflect on their chances of passing the next flight test. Then they'll often make the decision to do more remedial training."

Celroy says some students can be surprisingly mature and self-aware.

"I had one student tell me, 'Can you please book me in for max rates? I looked at the mock brief and I said, 'Your max rates were well within CPL limits as per your debrief', and the student said, 'I don't know how I fluked that, but I'm not confident, so I'd like you to book me in for max rates'.

"So rather than us directing the student on what they should be doing, we've found it's a good idea to get the student to weigh up what they can and cannot do."

Celroy has also reviewed his own practice.

"I used to pride myself on sticking to a good schedule. If I booked flight tests with Aspeq, on a certain date, I didn't like the idea of cancelling those flight tests because the flight examiner would have booked their accommodation and their transport. I wanted to act in good faith so I'd just try to make sure the students were ready.

"But I've changed that. Now I don't book a flight test until the student has passed their mock test. That means the pressure is off the instructor to claim the student is ready, just because the test date has arrived.

"I say to the student, 'You pass the mock test, and only then will I book a flight test. I'll try to get you the earliest possible date, and you just need to do a little bit of revision in between to keep your skills current'."

A change of heart

Celroy says he's also changed his attitude towards the flight examiners.

"I was pretty much shaped by my mentors, who I'd seen having some, almost aggressive, discussions with examiners, pushing back on their decisions.

"What I now realise is that if you push back, the examiners don't open up as much and you miss out on some great guidance.

"But if you ask for feedback and advice, they open up and give you their time.

"The advice I got from Guy, and this improved relationship with the examiners – it's just made a world of difference."

// Knowledge is confidence. //

Tips from the examiners

One of Celroy's observations about the academy's new approach to flight tests is that he can say to the student, "You've passed the mock test, which everyone is saying is harder than the actual flight test. You can now be confident of your ability to pass the flight test'."

Aspeq Examiner Dave Brown says this chimes with one of his first pieces of advice to both student and instructor – *prepare well*.

"Knowledge is confidence," he says. "It will help to counter the nerves that can destroy a student's ability to pass. So make sure the student knows really well what they need to do and show."

Dave says flight test preparation is similar to handling an emergency.

"The stress level is high, but don't rush. Sit on your hands and think before you act. Use your checklists, and rely on known procedures. Don't go 'off-script' – that's where errors creep in."

He advises instructors to encourage students to practise ground work on bad weather days, and he advises instructors to, "Train to the syllabus, not to the *Flight Test Standards Guide*. The syllabus is designed to teach a student how to safely operate an aircraft so the context of the lesson is important. It's not about exercises in isolation, which is what can happen if the FTSG is the focus."

Finally, Dave advises, "Tell your student they would not have been put up for the test if their instructor didn't think they could pass."

A piece of advice that now guides Celroy and the vastly improved first-time flight test pass rates at the NZAA.

// NOW READ...

"Remedial training to prevent repeated flight test failures", (*Vector*, Autumn 2025) at **aviation.govt.nz/vector**.

I learned about preflights

(and about securing loose items)

from this

What happens when a canopy slams back, right at the moment of take-off? This unfortunate pilot found out.

In August 2024, a pilot was getting ready to take off from Waihī Beach in his Sierra Tecnam.

The weather was a little chilly, so the pilot rolled the canopy forward a little earlier than he normally would, but failed to lock it.

"I carried out my preflight checks and placed my maps and gear on the spare seat," says the pilot.

"I performed a final check outside, made my radio call and lined up on the runway."

The pilot powered up to full throttle.

As the nose of the Tecnam was about to lift off the ground, the unsecured canopy slammed backward.

"All hell broke loose.

"In an instant all my maps and other gear in the cockpit were airborne."

The distracted pilot attempted to shut the canopy, at the same time a slight crosswind took effect.

"I didn't reduce power or apply brakes," says the pilot."

Like any other conventional aircraft, the Sierra requires significant right rudder on take-off.

"I veered to the left and made contact with a parked aircraft."

The pilot was hospitalised for several days. Both aircraft were damaged and required repairs.

"I didn't know at the time, but the Tecnam will still fly with the canopy open. So in hindsight, I could have left it alone, after it opened.

"Or I should have reduced power and brought the aircraft to a stop."

Stay calm, maintain control

GA Flight Examiner Aaron Pearce agrees that aborting the flight would have been best practice.

"If required, aborted take-offs are okay and demonstrate good airmanship.

"Don't take a machine airborne if you're not happy, or if something changes on the take-off roll," says Aaron.

"But never try to fix it while rolling."

Pilots must be wary of anything interrupting their normal flow of checks, says Aaron.

"If you do elect to close your canopy early or leave it cracked due to temperature, make sure your DVAs or pre-take-off checks are going to capture it again before take-off," says Aaron.

"Most pilots will have experienced a canopy or door opening during take-off or during flight.

"If it happens, stay calm and maintain control of the machine."

The pilot says he will never again forget to lock the aircraft canopy.

"I've learned a lesson here. I'll be more careful in future with preflight preparation."

Photo courtesy of Tecnam.

CAPPING A PREFLIGHT

Distraction during the preflight checklist led to a close call for a student pilot.

In July 2024 a pilot fuelled up at Tauranga Airport before making a cross-country trip of about 45 nautical miles.

Before leaving, the pilot conducted a preflight check – but didn't recheck his fuel.

"My trip out from Tauranga went smoothly," he says. "But during the preflight before my return journey, I was shocked to see I was missing the fuel cap.

"I couldn't find it and I had no idea when or how I'd lost it.

"I didn't know if I could even fly without it, but at the same time, I was feeling a bit rushed to beat evening civil twilight."

Pressure was mounting and the pilot started talking himself into making the flight home.

"I started giving myself excuses to fly. That the fuel wouldn't spill out as the flight would be mostly level flight, that I just couldn't get stranded 'out here', that it wouldn't be a big problem.

"I also decided that if I was going to fly back, then I shouldn't waste any more time on the ground."

The pilot allowed embarrassment, in part, to influence his decision to fly, says Tauranga CFI James Churchward.

"Embarrassment, combined with time constraint, led him to make the wrong choice.

"He didn't ring us, he just flew back. I don't think he fully understood the risks.

"He should have called to advise us the fuel cap was missing, and we would have arranged accommodation for the night."

During the flight, the pilot started to reflect on his decision to make the return journey, thinking, "This is probably not a good idea". But, of course, it was too late for such thoughts.

iStock.com/BanksPhotos

However, the pilot did land safely and afterwards reported to his instructor.

"We walked to the fuel pumps and there it was – the missing fuel cap on the ground," he says.

Not a new type of incident

"I had a chat with the instructor," says the pilot, "and I came to agree with him that I had been suffering from 'get-there-itis'. I put myself under a lot of pressure to make that flight back to Tauranga."

The aero club grounded the pilot for two weeks.

"We also made him aware of the risk of fuel exhaustion, and gave him a theory lesson in aerodynamics – how fuel can be sucked out of a tank without a cap," says James.

"The pilot had become distracted during their preflight check, which is not an uncommon precursor to incidents.

"So, as an organisation we now require students to conduct a full, uninterrupted preflight check in the moments before departure.

"This, obviously, is aimed at reducing the risk of this type of occurrence happening again."

The pilot says he's learned a lot from the experience.

"I risked engine failure by flying back. Whereas the worst that could have happened if I'd chosen *not* to fly back is spending the night in the aircraft.

"Now, when even small problems occur, I ask myself, 'Could this cause a safety issue?'

"And I'm definitely more mindful about fuel caps!"

THE VALUE OF DOUBLE-CHECKING DOUBLE-CHECKING EVEN THE BASICS

A pilot carrying out a pre-purchase inspection took a little more time to investigate a potential issue. It may have saved his life.

A friend asked me a few years back if I would carry out a pre-purchase inspection of a Cherokee.

If all was up to expectations, I would then fly it back to our base.

We were both experienced owners of this type of aircraft in the recent past.

The Cherokee had just had its 100-hour annual inspection completed.

All was good and a purchase price was agreed.

At the last moment the seller passed on a message saying there was a small amount of fuel dampness.

He didn't indicate where it was and stated it was not of any concern.

He also hadn't mentioned it during or before inspecting the aircraft and we weren't able to ground run the aircraft because, at that stage, it was blocked in at the back of the hangar.

By this stage the seller had departed. The buyer was also supposed to sit the law component of their PPL that evening, so we had a bit of 'get-home-itis'.

However, I wasn't current and really wanted to check out the possible fuel leak issue.

So before I flew the plane home, I completed my circuits, then pulled up to meet the new owner at the pumps.

As I did, my friend made dramatic hand motions to cut the engine.

On inspection, a large flow of fuel was exiting from the engine lower cowl.

We pulled the aircraft to a maintenance facility and, following cooling, removed the top cowl for inspection.

With the electric fuel pump on, an engineer and I received a copious fuel shower.

Tightened by hand

We discovered that the fuel line from the auxiliary fuel pump to the carburettor had been replaced at the 100-hour annual.

Our best guess is the carburettor union nut had been tightened by hand only, resulting in the leak.

After we tightened the nut mechanically, I flew the Cherokee back to base.

I often think about what could have happened if I'd been able to fly straight home before checking the leak issue.

At the top of my list of flying fears would be a fire in flight.

I was perhaps lucky enough to be doing just my circuits, and not on a cross-country, prior to the issue being identified.

I honestly don't know what the seller knew. I contacted both him and the LAME who'd conducted the 100-hour annual, but I never heard back.

The whole situation has taught me how important it is to double-check everything.

Even if you think it's not a biggie, it's just not worth the risk.

UNEXPECTED DANGER
AT THE FUEL BOWSER

This chief pilot was astounded by an unlikely event that was nevertheless hazardous.

When I arrived at the base before dawn recently, I thought I saw our engineer at the fuel bowser. But a few steps later, I found him inside the hangar, busy on an aircraft. That meant someone else was outside in the dark.

With torches in hand, we went to check. What we found was both strange and alarming. A woman was kneeling by the bowser, her face pressed against an exhaust vent, inhaling the fumes. She ignored our questions so we called the police, who arrived quickly and took her into custody.

A check of the facility revealed that several valves and the fuel nozzle had been tampered with. This interference might easily have gone unnoticed – and that's what concerned us most.

In our routine risk reviews we'd never considered that someone might interfere with our fuel installation in this way. It's a reminder that even unlikely scenarios can present real hazards.

We want to alert all Part 135 and 137 operators that, if you have unattended mobile fuel tankers or fuel trailers at off-airport job sites, this could happen to you, too.

Photo: CAA

Letter to *Vector*

Switched on with an ELT (or PLB)

Referring to the Winter 2025 *Vector* article "Switched on", I've had two engine failures. The first aircraft had an ELT. My first action was to push that little red switch before getting on with the forced landing stuff.

The second was in a single-seat microlight. I had a PLB in my pocket, but nowhere enough time to set it off. Like most single-seat microlights, this one could not be flown hands-off. Activating the PLB was a two-handed process and had to follow touchdown.

Part 91 permits flying microlights with PLBs. But in my opinion, an ELT with its little red switch is superior to a PLB. It's easy and very quick to operate, and allows more time for decisions and actions during the forced landing process.

And if the pilot is injured or incapable after landing, would the passenger know where the PLB is, or how to operate it? It might still be in the hangar. ELT installations are fixed in the aircraft, controls are well-labelled, and most ELT units respond automatically to impact g-loads.

In each of these incidents, the emergency response to the distress signal was most impressive. Within 30 minutes, fire, police, and ambulance people had arrived, RCCNZ had spoken to my emergency contact, and within the hour, the police had reported my situation to my wife.

The service is there to be used. It's free and I've found it very effective. It's of no help to anyone if there's no ELT or even PLB on board, or contact details are out-of-date.

Max Saunders
Wellington

Vector notices

OCCURRENCES DASHBOARD

These are the number and type of occurrences reported to the CAA, 1 July 2025 to 30 September 2025 (Q3) compared with 1 July 2024 to 30 September 2024.

Occurrence type

Aerodrome incident
Q3 2024 **39** Q3 2025 **95** ↑

Aircraft accident
Q3 2024 **14** Q3 2025 **11** ↓

Airspace incident
Q3 2024 **554** Q3 2025 **620** ↑

Aviation-related concern
Q3 2024 **327** Q3 2025 **419** ↑

Bird strike
Q3 2024 **390** Q3 2025 **308** ↓

Dangerous goods
Q3 2024 **19** Q3 2025 **18** ↓

Defect
Q3 2024 **194** Q3 2025 **135** ↓

Hang glider accident
Q3 2024 **12** Q3 2025 **1** ↓
(1 paraglider accident Q3 2025)

Navigation installation occurrence
(for example, a transmitter failure)
Q3 2024 **8** Q3 2025 **4** ↓

Operational incident
(for example, encountering severe icing)
Q3 2024 **628** Q3 2025 **400** ↓

Parachute accident
Q3 2024 **1** Q3 2025 **1** ⊖

Promulgated information occurrence
(for example, inaccurate weather information)
Q3 2024 **8** Q3 2025 **6** ↓

Total occurrences
Q3 2024 **2194** Q3 2025 **2018** ↓

The number of occurrences in each category sometimes increases after we publish each dashboard. That's because some occurrences from that quarter are reported after the quarter ends.

Want to dive into these stats even further? Head to **aviation.govt.nz/dashboard** to check out our occurrence and activity dashboard for details on occurrence rates, trends, aircraft activity, and more.

YOU SPOKE, WE'RE LISTENING

More than 1000 of you responded to our CAA safety education survey. You're pretty happy with our products, but some of you suggested improvements – which we're now working on.

Results

Almost 90 percent of you recommend *Vector* magazine to colleagues, and more than 70 percent rate GAP booklets as 'very' or 'extremely' useful. More than 60 percent of you have attended a CAA course or workshop, and nearly all of you found them useful.

You expressed a clear preference for printed materials, but more than 80 percent of you are also interested in e-learning modules. More than 70 percent of you are keen on online courses and workshops.

You also told us that while you love our printed resources, you also want digital options – from downloadable PDFs and mobile-friendly web pages to short videos.

Many of you are also interested in regular podcasts, especially incident analysis. And some of you called for more technical, sector-specific content in *Vector* magazine.

What we're doing in response

- Exploring concrete options to use more video and audio to promote safety, which will be published on the *Vector Online* pages of our website.
- Looking at how we can create e-learning modules, and at options to develop online courses/workshops (alongside our in-person offerings).
- Exploring the idea of a pilot hub and engineer hub on our website to centralise all the material you're likely to need.
- Launching *'Vector Technical'* – a website-only feature, for more operation-specific articles. Our first article is aimed at helicopter pilots and is about recognising incipient vortex ring state, before you get into it. It's at **aviation.govt.nz/vector-online**.

If there are any technical topics you'd like us to cover in more detail, email **education@caa.govt.nz**

AIRSPACE OCCURRENCE

Airspace occurrences can be read on the CAA website, **aviation.govt.nz > safety > airspace occurrence briefs.**

A Cessna was reported to have arrived in the Rangiora MBZ without making any radio calls, then conflicted with two other aircraft in the circuit, before landing on a NOTAM-closed section of runway.

The subsequent CAA investigation revealed the aircraft's track included a poorly flown standard overhead join (SOJ), including making a 'shortcut' diagonal track from the downwind to final leg.

The pilot later said his headset cable had had an intermittent fault, not identified until after the occurrence. At the time of the event, he hadn't realised his radio calls were not being transmitted, and he'd only heard some unintelligible 'low strength' radio calls. He advised he'd made all the required radio calls and that he'd seen the other circuit traffic. He's currently using a second headset while the faulty headset has a new 'flexi' cable fitted to it.

After reviewing the track he'd flown, the pilot agreed he needed to follow the published SOJ standards accurately. The CAA investigator sent him reference material from the *AIPNZ*, section AD 1.6, regarding circuits and SOJs, as well as a link to the CAA's Good Aviation Practice videos which includes the topics *Circuit Certainty* and *Standard Overhead Join*.

The pilot also agreed that it was good airmanship, and safer, to slow down before joining at any aerodrome. His aircraft had entered the MBZ at approximately 132 knots groundspeed and was still slowing on the downwind leg.

He also appreciated that the operating airspeeds of other aircraft in the vicinity of any GA aerodrome may typically range between 50 to 110 knots.

As to the landing in a NOTAM-closed section of the runway, the pilot indicated he would make sure that, in future planning, he would check, and comply with, any NOTAMs.

CAA advice

This is one of many recent occurrences reported to the CAA where radio calls have not been heard, as a result of faulty equipment or an error by the pilot.

Among the most common are:

- volume turned down
- cable, jack plug, or microphone issues
- boom mic incorrectly positioned
- squelch used incorrectly
- wrong frequency selected.

Pilots should consider unexpected silence as a trigger to wonder why they did not receive a reply – and to re-check things. They should also occasionally ask other known aircraft for a radio check to confirm normal radio operations.

YEAR-END LICENSING REMINDER

The last day for issuing licences in 2025 will be Tuesday 23 December. Licences will again be issued from Wednesday 7 January 2026. Time is getting short for licence processing but please don't call the licensing unit – it won't give your application priority, and only takes staff away from processing applications.

23 DEC 2025

AVIATION SAFETY ADVISORS

Contact our aviation safety advisors for information and advice. They regularly travel around the country to keep in touch with the aviation community.

Carlton Campbell – Operations, South Island
027 242 9673 / carlton.campbell@caa.govt.nz

Richard Lane – Airworthiness, South Island
027 269 5796 / richard.lane@caa.govt.nz

Pete Gordon – Operations, North Island
027 839 0708 / peter.gordon@caa.govt.nz

John Keyzer – Airworthiness, North Island
027 213 0507 / john.keyzer@caa.govt.nz

ACCIDENT BRIEFS

More accident briefs can be read on **aviation.govt.nz/safety** or scan this QR code.

Robinson R22 Beta	
Date and time:	29-Jan-2024 at 19:15
Location:	Mt Hyde
POB:	2
Nature of flight:	Private other
Pilot licence:	Private pilot licence (helicopter)
Age:	80 yrs
Flying hours (total):	8246
Flying hours (on type):	1104
Last 90 Days:	6

On the final touchdown section of landing, a slight quartering tailwind gust from the right skewed the machine slightly, so that on actual touchdown, one skid dug in slightly and the machine instantly rolled over onto its side. There were two people on board, but they didn't sustain any injuries, and they were picked up by a rescue helicopter. The aircraft was recovered the next day.

CAA occurrence number 24/728

Vans RV-7	
Date and time:	05-May-2024 at 11:27
Location:	Ruamaro
POB:	1
Damage:	Substantial
Nature of flight:	Private other
Pilot licence:	Private Pilot Licence (Aeroplane)
Age:	80 yrs
Flying hours (total):	900
Flying hours (on type):	400
Last 90 days:	10

During the landing roll out, the pilot lost forward visual reference with the airstrip due to the high nose attitude of the aircraft. The aircraft began to veer to the left which wasn't detected by the pilot. The left wing subsequently struck a fence post on the side of the airstrip, damaging the leading edge of the wing.

CAA occurrence number 24/3627

ACCIDENT NOTIFICATION

24-hour 7-day toll-free telephone

0508 ACCIDENT (0508 222 433)
aviation.govt.nz/report

Micro Aviation B22 Bantam	
Date and time:	10-Mar-2024 at 11:00
Location:	2km N Ashley River
POB:	1
Nature of flight:	Private other
Age:	51 yrs
Flying hours (total):	132
Flying hours (on type):	66
Last 90 days:	5

The pilot had practised a beach landing approximately 2km north of the Ashley River mouth. At about 40 feet AGL on take-off, an onshore wind gust lifted the right wing and turned the aircraft left over the sand dunes. It then lost speed and started to descend. The pilot managed to get the wings level before it crashed into the sand dunes. He was not injured and no emergency services were called. He described the aircraft as a write-off.

CAA occurrence number 24/1924

Canadian Home Rotors Safari	
Date and time:	02-May-2024 at 14:10
Location:	Omaka
POB:	2
Nature of flight:	Private other
Age:	58 yrs
Flying hours (total):	32
Flying hours (on type):	5
Last 90 days:	12

During hover taxi the nose dropped and could not be controlled with rear cyclic input. The nose also veered to the left which could not be controlled with the right-hand pedal. Control was then lost. On rearward momentum, after lowering the collective, the helicopter rolled over onto its right-hand side. The pilot received minor injuries and the helicopter was substantially damaged. No cause for the loss of control was reported.

CAA occurrence number 24/358

REPORT SAFETY AND SECURITY CONCERNS

Report your aviation-related safety or security concern at **occurrencereport.services.aviation.govt.nz**.
Or email **triage@caa.govt.nz**.

The CAA's safety reports are at **aviation.govt.nz/safety-reports**.

GA DEFECTS

GA defect reports relate only to aircraft of maximum certificated take-off weight of 9000lb (4082kg) or less. More GA defect reports can be read on **aviation.govt.nz/aircraft** or scan this QR code.

KEY TO ABBREVIATIONS:

AD = airworthiness directive
NDT = non-destructive testing
P/N = part number
SB = service bulletin
TIS = time in service
TSI = time since installation
TSO = time since overhaul
TTIS = total time in service

Pacific Aerospace Cresco 08-600

After take-off the pilot noticed that the low hydraulic pressure warning light was illuminated and the pump run light was on. He attempted to dump his load but the hydraulically-operated hopper doors did not respond/open. He diverted to an airstrip, landed safely, and contacted engineering to investigate.

On arrival, a significant hydraulic leak was noted at the hydraulic pack. The hydraulic pack was inspected and the accumulator on the emergency side was found to be loose.

The accumulator was tightened, and all other connections were checked for tightness with no other defects detected. The motor and pump were inspected for signs of overheating and or damage, with none detected. The reservoir was replenished, and functional tests carried out without further faults detected.

Modification work is under way to install a reservoir sight glass, a low-pressure warning light (<850PSI), and a pump run warning light at the top of the instrument panel/under the light bar. The low-pressure light will be a caution light alerting the pilot to a potential low-pressure situation 350PSI in advance of an actual low pressure scenario.

Operators have been reminded of the risks around losing hydraulic pressure and the corresponding ability to dump. Until the additional pump run warning light can be installed, operators need to be conscious of the pump run light, and if noticed to be on longer than expected, further investigation is required.

CAA occurrence number 22/8037

Hughes 369E

T/R swashplate bearing

Part model:	369E
Part manufacturer:	Aerometals
Part number:	AM369D21832
ATA chapter:	6700

During a 100hr scheduled inspection, the tail rotor swashplate was inspected and the swashplate bearing was rotated to listen and feel for any abnormalities. The bearing sounded, and felt, rough.

The swashplate didn't show any signs of moisture and the seals didn't appear to be damaged. It had sufficient grease and was also on an increased greasing schedule of every 12 months as per the operator's operations and maintenance manual (OMM) compared with every 24 months as per the manufacturer's instructions.

The swashplate was removed and replaced with a serviceable unit. The removed swashplate was cleaned as per the manufacturer's re-greasing schedule for inspection. The noise and roughness of the bearing felt the same after cleaning. The swashplate was then sent to an overhaul agency component shop for inspection. The component shop found that the bearing was starting to break up. The bearing was replaced with a new bearing assembly.

An additional 100hr rotational serviceability check was added by the operator to their OMM to inspect the tail rotor swashplate bearings for any abnormalities on the MD 369E Helicopters.

CAA occurrence number 22/8061

Robinson R44 II

Mixture adjustment

Part model:	RSA-10AD1
Part manufacturer:	Precision Airmotive
Part number:	2576630-4
ATA chapter:	7320
TTIS hours:	1700

After landing, the pilot moved the throttle control towards the idle setting. The engine then had an uncommanded shutdown. Subsequent attempts to restart were unsuccessful.

An engineering inspection discovered that the mixture control arm had detached from the throttle arm. Although the retention spring was in place and intact, the mixture control adjustment spindle had wound out enough to disconnect the throttle and mixture control arms. When the pilot moved the throttle plate towards the idle position, the mixture component remained in the max flow position causing an over-rich condition. Both clevises, retention spring, and adjustment spindle in the mixture control assembly were replaced with new items.

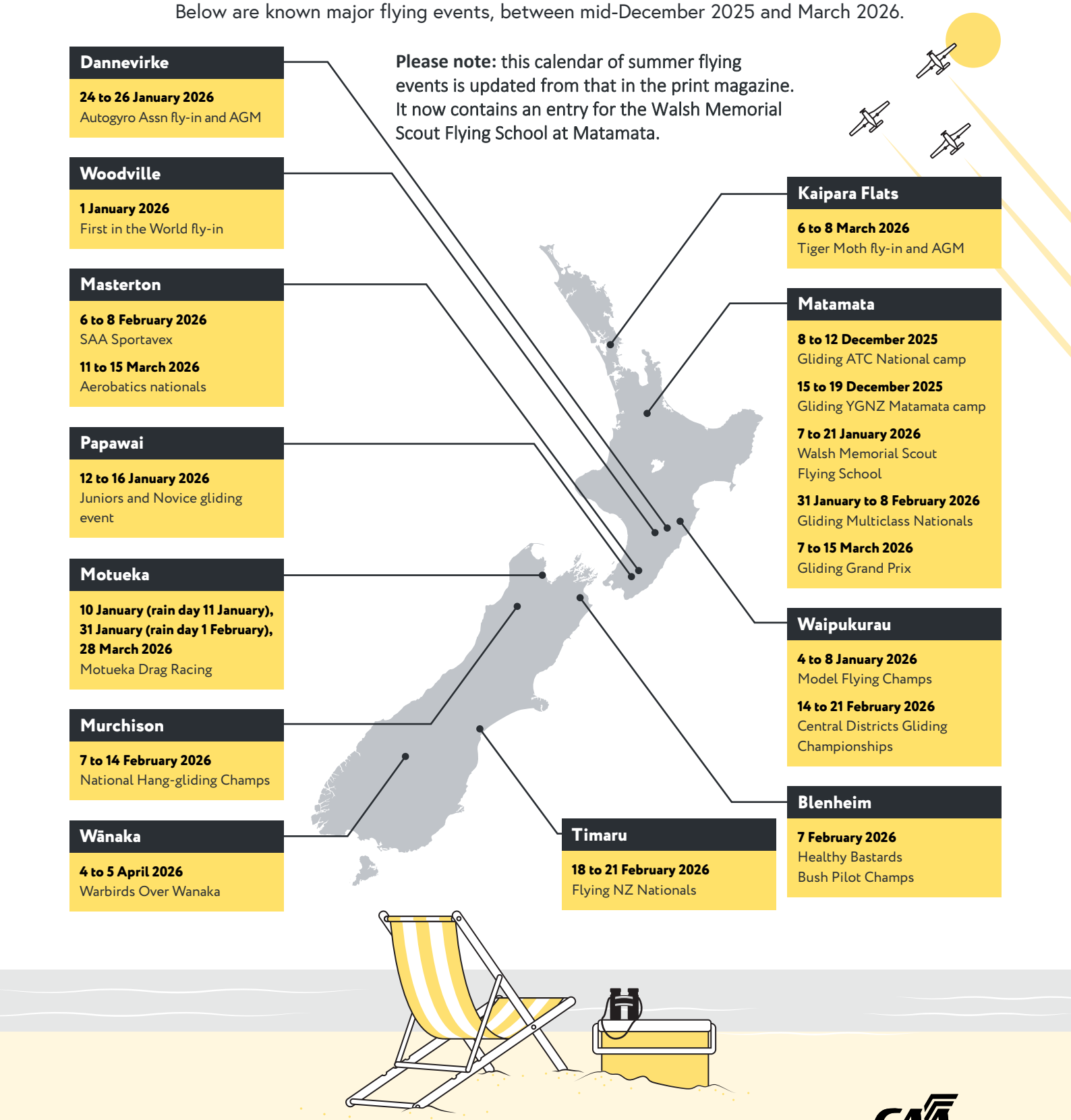
CAA occurrence number 23/1702

SUMMER TRAFFIC BUSY SPOTS

Don't inadvertently fly into an aviation event – check AIP Supplements for planned events, and check NOTAMs on the day. You can download AIP Supplements from aip.net.nz and NOTAMs from ifis.airways.co.nz.

Below are known major flying events, between mid-December 2025 and March 2026.

Please note: this calendar of summer flying events is updated from that in the print magazine. It now contains an entry for the Walsh Memorial Scout Flying School at Matamata.



Dannevirke

24 to 26 January 2026
Autogyro Assn fly-in and AGM

Woodville

1 January 2026
First in the World fly-in

Masterton

6 to 8 February 2026
SAA Sportavex

11 to 15 March 2026
Aerobatics nationals

Papawai

12 to 16 January 2026
Juniors and Novice gliding event

Motueka

10 January (rain day 11 January), 31 January (rain day 1 February), 28 March 2026
Motueka Drag Racing

Murchison

7 to 14 February 2026
National Hang-gliding Champs

Wānaka

4 to 5 April 2026
Warbirds Over Wanaka

Kaipara Flats

6 to 8 March 2026
Tiger Moth fly-in and AGM

Matamata

8 to 12 December 2025
Gliding ATC National camp

15 to 19 December 2025
Gliding YGNZ Matamata camp

7 to 21 January 2026
Walsh Memorial Scout Flying School

31 January to 8 February 2026
Gliding Multiclass Nationals

7 to 15 March 2026
Gliding Grand Prix

Waipukurau

4 to 8 January 2026
Model Flying Champs

14 to 21 February 2026
Central Districts Gliding Championships

Blenheim

7 February 2026
Healthy Bastards Bush Pilot Champs

Timaru

18 to 21 February 2026
Flying NZ Nationals

KEEP THESE EVENTS IN YOUR CALENDAR

CAA
CIVIL AVIATION AUTHORITY OF NEW ZEALAND
Te Mana Rererangi Tūmatanui o Aotearoa