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  Ardmore, 10 March
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Cover photo: Looking to the future – Holly and Loren at HB&ECAC.
Photo credit: Anna Mackenzie

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Regular Columns

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Deadline for ads, articles and photos for the next (Winter) issue: **20 April 2024**.

President's Comment

Happy New Year to all our members. I hope you have all enjoyed a relaxed and enjoyable festive season, and hopefully also some flying. While I was hiking over the summer break, I found myself reflecting on the many changes that have occurred in different areas of our lives and, in particular, in aviation.

A significant aspect of the modern aviation world is a constant and renewed focus on safety. Shortfalls in this arena were explored thoroughly in the Heron Report, released in August of last year, which was initiated by CAA and undertaken by Mike Heron, KC. The report reviews CAA investigation and enforcement functions and contains wide-ranging considerations and recommendations. You can find the report on the CAA website (https://www.aviation.govt.nz/assets/about-us/news/CAA-Independent-Review-1-August-2023.pdf) and I recommend taking a look.

One consequence of the review will be more stringent safety requirements. Changes will be informed by adherence to a Just Culture, which has "the purpose of ensuring that the Authority's investigation and supporting functions are working in a cohesive, coherent, and effective manner – meeting the Authority's strategic and regulatory obligations and goals in accordance with CAA aspirations to be a values-based, modern regulator."

We must all remain vigilant of developments within our modern regulatory framework.

A salute to one of our life members, Brian Hore of Nokomai, who celebrated his 80th birthday last December. Brian remains a regular contributor to AOPA NZ issues.

A wave of thanks also to Richard Bradley, Murray Paterson and Kevin Anderson, our ever-dependable life members who we recently relied on to set up the AOPA NZ booth at the Wings over Wairarapa Airshow, ably assisted by Peter Armstrong and Ian Sinclair, and who will soon be repeating their efforts at Warbirds over Wanaka.

I'd also like to take this opportunity to welcome Karen Williams, our new AOPA NZ member services administrator. She will be the person who in future responds to your enquiries to admin@aopa.nz and will be happy to answer or redirect questions.

It is not long now before we gather for the 2024 AOPA NZ AGM. I look forward to seeing you at Timaru Airport on 9 March; the AGM begins at 1330, and will also be viewable via Zoom for any members who are unable to attend in person but who are still keen to particpate. The meeting agenda and supporting documents, together with further details of the additional events and activities on offer over the AGM weekend, can be found on the AOPA NZ website.

Sue Kronfeld, President

From the Editor

Sometimes at aviation events, one could be forgiven for thinking that GA is going a bit grey. Inevitably, time and finances play a part in the stage of life during which we're able to enjoy a recreational activity that requires high inputs of both.

The heyday of GA was arguably the 1960s and '70s, when aeroplanes were cheap, leisure was a growth industry, and the increasing use of fossil fuel was apparently without consequence. Many of our members took up flying, or developed the dream of flying, through those decades and continue to enjoy it today. But increasingly our membership also includes a different group of pilots; those who are younger, urban, dotcom savvy, and who look to a future in which they expect change in the industry and are not alarmed by that.

I recently chatted to two pilots at the HB&EC Aero Club. One learned to fly through the Club, the other through the Flying School based there. Both fizz with enthusiasm about aviation – as a career, as a hobby, for the sheer joy of it. Club trips take on an entirely different aspect when the average age of attendees drops by a decade or two.

A challenge for all of us lies in how we keep our organisation relevant, how we ensure it is accessible and welcoming to all, how we encourage newcomers to not only participate but to take a role in shaping the future of both our organisation and the wider industry. The energy of youth and the wisdom of age is often declared the perfect combination – but it's not always an easy combination to pull off. Worth it though, if you do.

In this issue John Evans continues his series addressing the impact on aviation of changing trends in District Plans, exploring the relevant legal rights and responsibilities of all the parties involved, while Grant Bisset shares observations on safety gleaned over decades in the air. As well, Jay McIntyre looks at oil temperature, Chris Hoffman shares his love of IFR, Neville Bailey speaks out for the commonsense DL9. We also launch a new column offering 'How to...' guides for maximising use of the AOPA NZ website, social media platforms and apps. If you feel you're not yet on the ball with all that, let us know where you'd like a little guidance.

Thanks to all those members who regularly contribute, and please don't be shy: I'm sure there are many more stories and opinions worth sharing.

Hope to see you in Timaru.

Anna Mackenzie, Editor

AOPA NZ AGM – March 9 in Timaru

It's not too late to register to join us in Timaru over the weekend of 9-10 March. With far more than just the annual meeting on offer, the weekend is sure to be action-packed!

A morning of local strip flying is planned for Saturday, while the town offers plenty of alternatives for those who would prefer to stay on the ground. You might, for example, visit the Artisan Farmers Market in George St from 9am, or take a wander through the Botanic Gardens or around Caroline Bay.

The whole crew will be gathering for lunch at Browns Hangar at Timaru Airport, with the AOPA NZ AGM scheduled to take place in the same location at 1.30pm. Transport to and from the airport will be provided and, with plenty of accommodation available in town, there's no reason not to make a last minute decision to join in – but please do register on the website so the organisers have accurate numbers for catering purposes.

A Zoom connection will be available for those who are unable to attend in person.

Drinks and the AGM dinner will kick off from 6pm Saturday evening. Additional details are on the website.

And while you're in town, why not grab a group and extend your trip to include add-on flying excursions, or simply spend more time discovering the many pleasures Timaru has to offer. For a bit of culture you could consider the South Canterbury Museum, Aigantighe Art Gallery and Maori rock art tours; or for a little less culture, perhaps a tour of the DB Draught Brewery will appeal. There are a number of beautiful coastal walks, including the opportunity to see Little Blue Penguins coming ashore, and of course plenty of dining and other urban delights to be experienced. See you there!

AOPA NZ Awards 2024

Each year AOPA NZ presents annual awards to members and aviation service organisations used by members in recognition of their effort and to show appreciation of the service and support provided over the past year.

The recipients are selected by a panel of our life members from nominations made by the membership. If you would like to nominate a member, control tower, maintenance shop or eatery that in your experience has gone the extra mile over the past year, please visit www.aopa.nz and fill out the quick and simple nomination form.

Recipients of the awards are announced at the annual AGM dinner, this year on Saturday 9 March in Timaru. Then come along and join the fun!

New Southern Sky showcase

A decade of progress on the New Southern Sky Programme, which aims to integrate new technologies into our aviation system, will be showcased at the Majestic Theatre in Wellington on 21 March. All stakeholders are welcome; reserve your seat on the CAA website.

Welcome to new members:

William Leipnik, Palmerston North; David Signal, Auckland; Ross Stratford, Brightwater; Stewart Bufton, Rangiora; Eric Stierna, Christchurch; Martin Taylor, Whakatane; Bryce Kingan, Ohaupo; Simon Teague, Waikite Valley; Rudolph Bosman, Paraparaumu; Raymond Bremer, Brockville; Dion Buchanan, Alexandra; Warren Matthews, Diamond Harbour; Karen Williams, Masterton; Laurel Smith, Ohaupo; Corin Miller, Westend; Fred Bain, Waiuku; Andrew Gormlie, Mount Maunganui; Jonathan Powles, Hamilton; Stuart MacPherson, California USA; Bryn Atkin, Bulls; John Gorringe, Omarama; Simon Cameron, Haast; Charlie O'Rourke, Richmond.

Supporting the folk who support us

In this issue we have two new advertisers: Tinshed Aviation Aircraft Restoration and Maintenance, based in Alexandra, featured on page 10, and Pukaki Airport accommodation and hangaring, on page 9 for the simplest possible stopover on your next visit to the Mackenzie Basin and environs.

All our advertisers help to ensure that the magazine is financially viable. When you're on the hunt for the various products or services they offer, please consider offering our advertisers some reciprocal support by sending your business their way.

Vice-President's view

A lot of work has gone into organising social activities in recent months, only to be thwarted by the weather. The Turangi Christmas get-together as well as the Back to Basics at Lake Heron were both cancelled, the first because it was too wet and the latter because it was too dry. Fire risk is something we all need to be aware of this summer, especially when camping next to our aircraft.

We did manage to put on a couple of successful one day events prior to Christmas. In November we hosted a fly-in to Paraparaumu in conjunction with the Kapiti Aero Club, and in December a Christmas lunch at Timaru. We are learning that one day events put together at short notice are the easiest to organise as well as the least likely to be disrupted by weather.

In January Johan Vlok hosted a brunch at his property near Darfield after the cancellation of the Back to Basics. Although the weather was forecast to worsen over the Back to Basics weekend, there were a few hours of nice weather predicted for the Saturday morning and Johan seized the opportunity to make the most of them. With only a couple of days' notice, a successful event was enjoyed by all who managed to attend.

The Executive Committee continue to enjoy a productive relationship with CAA. We offered to include *Work Together, Stay Apart Plane Talking* sessions at the Kapiti and Timaru fly-ins. Some members expressed doubts about social functions being mixed with education, but the events were planned so that members could choose to attend the CAA seminar or to head home early.

In February AOPA NZ joined with representatives from across the aviation community for the formal signing of the *Work Together, Stay Apart Statement of Commitment*. This Statement has been established by CAA to acknowledge the positive response and participation with the safety campaign thus far. Signing the Statement is an opportunity for individuals and organisations to publicly demonstrate their commitment to safety to their peers and the wider aviation community.

Advertising and marketing opening

After many years spent handling advertising and marketing for AOPA NZ, Don Ryder has indicated that he is ready to pass the job on to someone new.

The role involves liaising with *Approach* magazine advertisers in the lead up to each edition, and also running our marketing and recruitment programmes in external publications.

None of the current Executive has much advertising or marketing experience, so it would be great to hear from a member who is willing to help. Taking on this type of role could be a great stepping stone into the Executive Committee in the future, but this is not compulsory; it is a position than can equally be filled from outside the Committee.

The International Aircraft Owners and Pilots Association (IAOPA) are holding a World Assembly in Washington DC in May 2024. This is the first World Assembly to be held since the highly successful Queenstown event in 2018. AOPA NZ is planning to have at least one representative in Washington to foster connections with our international colleagues.

I was recently talking to former AOPA NZ President, Ian Andrews, and he explained some of the benefits that come from attending such meetings.

"New Zealand pilots ride on the coat tails of AOPA USA and its 400,000 members," he says. "Initiatives such as the move towards private pilot medicals based on driving licence standards would not have been possible without international collaboration through IAOPA."

The IAOPA World Assembly in Queenstown set a high benchmark for subsequent gatherings, and was enjoyed by a record numbert of delegates from around the world, as well as by a strong number of local attendees.

I hope to see you all in Timaru for the AGM weekend, which will soon be upon us. Here's hoping the weather is co-operative this time round, so that members from around the country are able to join us and participate in both the formalities and the fun that these AGM weekends generate.

Fly safely,

Ross Millichamp, Vice-President

Australia by air

By Murray Smith

Having flown the Tasman (see *Approach* Summer 2023) and reunited with Laurel, on 20 May we set off for Coonabarabran to meet the group with whom we would be sharing our first Australian air safari.

With cloud over the higher ground, we headed up the coast towards Newcastle before tracking inland, passing several large coal mines, and arriving early afternoon. Coonabarabran, population 3000, ('Coona' to locals) is widely recognised as an ideal place for stargazing thanks to its pristine air, high altitude (505m) and low humidity. There are several observatories in the area and we were fascinated by our visit to Siding Springs Observatory.

Next day the group set off for Thargomindah, 356NM away over mainly cattle country. In 1893 the tiny outback settlement was the first Australian town to install electric street lighting.

Destination on day three was Innamincka, stopping en route at the Dig Tree at Nappa Merrie. The blazed tree records one of several low points in the Burke and Wills expedition of 1860. Charged with forging a route from Melbourne north to the Gulf of Carpenteria, a journey of around 3250km, neither man, and only one of their party, survived the undertaking. The Dig Tree carries instructions for locating a food cache left for them, while 15m downstream the Face Tree carries an image of Burke's face, carved in 1898 by John Dick. Both are poignant reminders of the harshness of the outback.

Our next night was spent at the smallest township in outback Australia, William Creek, our western-most destination on this trip. The route took us over Kati Thandra (Lake Eyre) which, at 49ft below sea level, is the lowest natural point in Australia. Due to high rain fall earlier in the season the lake was holding water; it is spectacular both dry and wet. The William Creek Hotel was established in 1887 as a boarding house, the town becoming a stop on the old Ghan railway, later moved to Marree, the following year.

En route the Arkaroola wilderness sanctuary at the northern end of the Flinders Range, we first headed southwest for the Anna Creek Painted Hills. Anna Creek has the distinction of being the largest cattle station in the world — at 24,000km^2 it is slightly larger than Israel. The Hills are a 30km by 10km area of sandstone outcroppings of vivid colours that emerge suddenly out of the desert, the result of 50 million years of weathering that has laid bare the desert's oxidised rock strata. An hour later we come across Marree Man — a modern geoglyph depicting an Australian indigenous man with a boomerang or stick. Over 4km tall with a 28km perimeter, mystery surrounds the figure's origins which appeared suddenly in 1998.

We were all ready for a rest day. A half day ridgetop tour saw us learning about the fascinating geological history of the region. The fractured granites were impregnated with uranium 440 million years ago, since dissolved from the rocks and dumped on the eastern plains where it is recovered at the Beverley uranium mine.

From the Sillers ridgetop lookout you can see Freeling Heights, a ring of saw-toothed blue mountains that fringe the Mawson Plateau at the northern extremity of the Flinders ranges and the 1000m deep Yudnamutana Gorge.

Newman iron ore mine in the Pilbara region; Ormiston Gorge, Alice Springs.

On day seven a relatively short flight took us to the 'frontier' opal mining town of White Cliffs. Founded in the 1880s, White Cliffs is Australia's oldest commercial opal field, one of just a few places in the world where white opal is found and famous for its rare 'pineapple' opals with their distinctive spiky shape. Accommodation was White Cliffs Underground Motel – the second time I've slept underground!

On the subsequent day we farewelled our fellow travellers as they headed eastward for home while we headed southwest. Departing White Cliffs at 9.30am we were overhead Packsaddle Roadhouse, an oasis in the middle of nowhere, 45 minutes later. There we met a Kiwi managing the surrounding cattle station whose relatives live not far from us at home. After an entertaining few hours talking to locals it was time to head on. Next stop was Tibooburra, a former gold mining settlement and one of the furthest reaches of NSW, where we spent the next three days due to exceptionally high winds, 60Kts – one of just two weather hiccups throughout the whole trip around Australia.

When the wind finally dropped we flew northwest 448NM to Mt Dare Station on the Western edge of the Simpson Desert, just 10km south of the Northern Territory border. Locals promote Mt. Dare Station as being equidistant from all Australian coastlines. It offers the first point of contact after a four or more day

roadtrip crossing the Simpson Desert from Birdsville.

The 7770km² Mt Dare station was purchased in 1984 by the South Australian National Parks and Wildlife to protect and rehabilitate Dalhousie Springs. The Hotel lease is 400km², owned and operated as a tourist destination.

Rain held us up for two days due to the airstrip surface being 'Gibber Plain' – a surface of packed interlocking angular and rounded stone ranging in size from 20–60mm with coarse sand as a binder. Quite a good surface when dry, it turns soft after rain and takes a couple of days to dry out. The area had considerable rain prior to our arrival and the Simpson desert road following the French Line (named for a French Petroleum company who bulldozed it in 1963) from Mt Dare to Birdsville had just reopened. There is absolutely no human settlement or services

at any point across the Desert. While we were there a group of motorcyclists arrived heavily encrusted in mud; later a family turned up with about 300kg of thick mud all over the Landcruiser and trailer.

From Mt Dare it's a 350NM flight to Alice Springs. We followed the road (Binns Track), which was busy with Grey Nomads heading north for the winter. We stayed three days in Alice Springs with a further night at Tennant Creek before crossing the Tanami Desert to Kununurra, where our next safari would beghin.

Most of our flying west of the Great Divide was between 4000 and 10,000ft, and we had less trouble with turbulence than on previous trips. The Tanami Desert is described as one of the most arid and uninhabited areas on earth. Partway across two big green circles came into view: centre pivot irrigators and cattle yards, so maybe not uninhabited!

Flying around the outback it is recommended to carry 10l of water per person, PLB with GPS capability, satellite phone, space blanket, energy foods, mirror, brightly coloured cover that can double as a sunshade and be visible to search and rescue, plus the usual onboard safety equipment you normally carry. We also filed a sartime with Brisbane centre and monitored the area centre frequencies. An hour and a half southeast of Kununurra, Lake Argyle appeared over the horizon and soon after an extensive green oasis of lush farmland came into view. This is a result of the Ord River irrigation scheme, set up mainly for arable farming.

Closer in we began to hear other members of our group inbound for Kununurra, some from the southest, others from the west, none from the North – Indonesia isn't all that far!

Kimberly safari

Drysdale Station was our base for the next two days. The group consisted of twelve people in six aeroplanes – Glasair Sportsman, Jabiru, Cessnas and an Arrow. The Station is not far from the Gibb Highway and is well set up for tourists; the station operates its own air-charter company – their Kiwi pilots quickly recognised the ZK rego!

Day one began with a short 60NM flight to Mitchell Plateau airstrip where helicopters transferred the group to Mitchell Falls. Fording the river we walked to Little and Big Mertens Falls, also seeing some fine examples of early Aboriginal rock art. One rock in the Wandjina complex depicts Tasmanian tigers, extinct on mainland Australia for 3000 years. Known as Punamii-Uunpuu to the Wunambal people, the falls were carved through sandstone by the Mitchell River, producing layers of mesmerising emerald pools from which the waters tumble from one to the next.

After refuelling at Drysdale Station via pre-ordered drums of fuel, we were ready for the next day's flight to Derby.

The Bungle Bungles, Purnululu National Park (left) and Mitchell Falls in the Kimberlys (right), two of Australia's twenty World heritage listed sites.

The scenic route took us past Mount Hann then along the Prince Regent River and its many gorges to the spectacular Kings Cascades waterfall, where the river cascades over ancient terraced rock formations. The distinctive Mount Trafalgar was only a short distance on and offered spectacular coastal scenery including Montgomery Reef. At 300km^2 the world's largest inshore reef, it is regularly exposed by massive tides.

After a night in Derby we visited Broome, just a short flight away and enjoyed a tour of local beaches, wharves, the Japanese Cemetery and Chinatown, which provided an interesting overview of Broome's history, particularly its pearling industry. Broome experiences a 10m range of tide at certain times of the year.

Cygnet Bay was the destination on day four, with our departure timed for half tide at Horizontal Falls, when the greatest volume of water passes through the horizontal falls. Due to restricted airspace allocated to local commercial ops we had to remain above 2500ft. The view of thousands of tonnes of water passing through a narrow channel between two islands was nevertheless spectacular. Continuing on via Koolan and Cockatoo Island we overflew the Buccaneer Archipelago, a beautiful area consisting of some 800 to 1000 rocky islands offering small bays and secluded white sandy beaches. On arrival at Cygnet Bay, we were collected from the airstrip, and the rest of the afternoon was spent settling into our Glamping accommodation.

Our subsequent rest days saw us introduced to the power of the world's largest tropical tides and the whirlpools and standing tidal waves they create, and learning about traditional coastal hunting and gathering from Terry Hunter, a fourth-generation pearler and Bardi Aboriginal.

The Cockburn Range, a vast round fortress of orange rock that rises more than 2000ft above the plains, was a high-point of the following day's flight back to Kununurra. From a distance, there's no hint of the deep gorges and permanent pools which lie hidden within.

A land and water based day followed. From Kununurra we went on boat trip up the Ord River to Lake Argyle, enjoying both bird and marine life, including freshwater crocodiles. After a visit to the historic Durack homestead museum we enjoyed a cruise of North Lake Argyle, often referred to as the inland sea – being eighteen times larger in volume than Sydney Harbour at full capacity.

The next day we flew on to Mount Elizabeth Station, a mere 1791km^2 stocking about 6000 head of cattle, and a well-known stopover on the Gibb River Road, where we had an enjoyable rest day talking mostly to Grey Nomads who venture up this way every year in transport that ranges from SUVs and tents to six-wheel drive trucks and semi-trailers.

Back in the air, a relatively short 118NM flight soon had us at El Questro, from where we bussed to Chamberlain Gorge Lake, which we found very commercialised and expensive; not on our 'to do again' list!

The following day included a challenging walk into Emma Gorge, set beneath 65m cliffs with a droplet waterfall, as well as a smaller aquamarine coloured waterhole, followed by a visit to Zebeedee Springs, where some chose to swim.

Day 13 saw us flying south to Bellburn and the Bungle Bungles, our last stop of the tour. Noted for their distinctive striped beehive domes, the Bungle Bungles are very impressive from the air. Officially Purnululu National Park, the region was 'discovered' by a film crew in 1983.

As the safari drew to a close it was time to make our farewells, fuel up, detour to Broome for a passenger drop-off then to start heading for home. We'd made good friends with one couple, Jim and Andrea, and they'd invited us to stay at their farm at Serpentine near Jarrahdale on the southwestern outskirts of Perth – a couple of long days and 1745NM distant.

The route took us from Sandfire through Mt Newman in the Pilbara region (home of the largest single open-cut iron ore mine in the world; image on page 5) with an overnight at Nallan Station. Cattle stations in WA are becoming increasingly reliant on tourism due to increased costs and poor cattle returns. All the roadhouse and station airstrips we landed at were of a good standard. Most are used by the Flying Doctor Service; they say nowhere in Australia is anyone more than two hours from medical help.

Jim had given us a good briefing on the location and idiosyncrasies of his airstrip, orientated north-south on the side of the escarpment – plan B, if we didn't like the look of the strip or there was too much tailwind, was the airfield at Serpentine. The Mulga, desert and bush had given way to thousands of hectares of Canola crops. Jim's briefing was spot on and we touched down on one of the shortest (500m) and greenest airstrips in Australia! We landed with a slight tailwind uphill to the south, parked up in a spacious near-new hangar and turned to enjoy their wonderful views west to the Indian Ocean.

Aircraft noise – whose business is it?

By John Evans

As Part 3 in our series on District Planning and aviation, this column looks into the wider regulatory basis relating to aircraft noise.

Our aviation activities are regulated by the Civil Aviation Authority (CAA). The Civil Aviation Act has a mandate to consider noise, to an extent that it is a consideration when aircraft are certified (CAR 91.803), and when/if your aircraft can generate a sonic boom (CAR 91.805).

In practice, when it comes to noise, the Civil Aviation Authority does not get into it far beyond Part 93. Part 93 is Special Aerodrome Traffic Rules and Noise Abatement Procedures which, as listed in Part 93, apply at only Auckland, Wellington, Christchurch, Paraparaumu, Matamata, Ardmore and where directing a right-hand circuit is deemed appropriate for noise abatement. Part 93 sets the rules that are additional to and exceptions from the general operating and flight rules for aerodrome traffic prescribed in Part 91, so as to achieve the noise abatement outcomes.

There was a subtle change to the Civil Aviation Act 2023, replacing the previous 1991 version, allowing that noise abatement procedures can apply anywhere, not just in the vicinity of aerodromes. Subtle being the addition of the word 'including'. Previously, the rules only applied in the vicinity of aerodromes, but now the wording is 'including in the vicinity of aerodromes'. Whether such measures would be applied within Part 93… who knows?

The other area in practice where the CAA gets involved is in the management of airspace, through designations, i.e. restricted airspace. Restricted airspace can be designated when the Director considers it necessary in the interests of aviation safety, or security, or in the public interest. A good reason for its implementation may be to exclude aircraft from the vicinity of a bird colony. There are no restricted airspace areas existing to enhance amenity values, more on that soon.

The Civil Aviation Authority does however point out that noise management issues, more applicable from a workplace perspective, are required through compliance with the Health and Safety at Work Act.

So, what about the Department of Conservation (DOC). They can and do enlist the CAA to create restricted airspace, which, as observed in practice, is only to manage environmental effects, not amenity values, i.e. visitor experience. Overflight is one thing, but landing (and therefore legitimately below 500' AGL) on conservation land requires a concession, with these concessions granted considering effects on not only the environment, but on the experience of other park users' 'amenity values'.

Perhaps, most importantly, is what is managed voluntarily, avoiding the need for everything to be legislated and in the rules. Aircraft operators voluntarily agree on flight paths around the likes of Fox Glacier and Mt Cook, and no-fly areas, for example over the Milford Track. Aircraft operators, specifically tourism and agricultural, subscribe to their own schemes such as Aircare, Fly Neighbourly and Codes of Practice, for example, operations at Milford Airport. They agree on flight paths and areas to avoid, especially at low level. They have also updated their aircraft over the years to have quieter noise footprints. There are also Wilderness Areas; areas which aviators also voluntarily avoid, particularly at

low level, and, generally speaking, DOC will not issue concessions to land in Wilderness Areas.

Obviously General Aviators (that's us) should be up with those aspects too when we operate into these areas, and anywhere else for that matter. Commercial operators are more than happy to share their agreed operations and being aware of these will help you integrate with the traffic flow.

The Resource Management Act (RMA) is the fundamental piece of legislation to which Territorial Authorities (District Councils), as well as National Policy Statements and National Environmental Standards issued under the RMA, refer when creating rules, i.e. District Plans.

So, on what basis are they able to write rules concerning aircraft activity? Well, there is no hard and fast answer, but the origin appears to be from three rules within the RMA legislation.

Section 9 of the RMA (restrictions on use of land) provides for controls in respect of overflying aircraft to where noise emission controls have been specifically set for airports, as designated in the relevant plan.

Section 16 of the RMA requires an operator to avoid unreasonable noise by adopting best practicable options to ensure that the level of noise does not exceed a reasonable level.

Section 7 of the RMA requires regard for amenity values which are defined as those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes.

How about RMA Part 326: Excessive noise, you ask? Part 326: any noise that is under human control and of such a nature as to unreasonably interfere with the peace, comfort, and convenience of any person. Well, RMA 326 specifically excludes aircraft that are being operated during, or immediately before or after, flight. The RMA also specifically excludes any control/jurisdiction concerning overflying aircraft (i.e. those not landing or taking off), not otherwise captured by S9(5), in the same way it excludes noise generated by trains and vehicles on public roads.

Most larger regional airports will have an Aerodrome Noise Management Plan commissioned by the respective territorial authority. These plans detail land use, i.e., zoning, noise contours, hours of operation, movement limits, ground testing and other activities occurring on the aerodrome, as permitted under RMA Section 9. If the management plan required aircraft to operate in a manner contravening CAR Part 91, then that would call for inclusion in CAR Part 93.

It is likely that rules in District Plans concerning rural airstrips are possible under Section 9: Restrictions on use of land, (5), "where noise emission controls have been specifically set for airports" is applied.

Does a movement or a setback limit in the District Plan constitute 'noise emission controls'? It also requires applying the RMA definition of airport to a rural airstrip.

The broader District Council Noise Control Chapter controls seemingly do not apply to aircraft activities unless they have been specifically set under Section 9(5) to airports.

All this aside, in general, our aviation environment is fairly free and relies on us as operators being respectful, courteous and neighbourly. In turn, we have regulators that are generally permissive in their approach. Territorial Authorities have really started engaging with aviation activity in the rural zone with their new plans, presumably to ensure they have control if they need it, through enabling Section 9. The CAA has not yet gone down the path of getting involved in restricting airspace based on amenity values under the guise of public interest, and one can only imagine it is an area they do not want to get into, nor do we; it would have a whole string of unintended consequences for aviators. But remember, they can.

Aircraft noise, whose business is it? Clearly the answer is a few different agencies, in what is all a little grey. But at the end of the day, as aviators, it is our business as much as anyone's. Irrespective of the ins and outs of the regulatory framework, we owe it to our community (both our own aviation one and the wider community with which we share the environment), to be respectful. But it is important to defend aviation activity as an important recreational activity and a legitimate mode of transport, and to push back against excessive reverse sensitivity (i.e. a lifestyler moves in and starts complaining, or the new subdivision pops up next to an airport).

How aircraft noise is measured is even more complicated. We have collected data from a variety of aircraft and with the help of an acoustics engineer, we will see how that noise measures up with a variety of standards.

More on this in the next issue.

Lost and found

The third in our 'Stories an aircraft can tell…' series

By Anna Mackenzie

Few aeroplanes can claim a history as bizarre as that of Cessna 150D ZK-CGI which, alongside a regular lifetime of club flying and private recreational use, includes theft, lengthy submersion and a phoenix-like return to the air.

Built from 1958 to1977 and powered by a Continental O-200-A rated for 100hp, the C150 hit the market at the start of a two-decade boom in GA which saw more than 24,000 C150s manufactured, making it the world's third most widely produced aeroplane, after the C172 and Piper Cherokee.

For all that, C150 NZ-CGI is unique. During its life as a trainer with the Otago Aero Club it hosted many eager students, among them 19yr old truck driver, Robert Bakhuis. With 30 hours logged towards his PPL, Bakhuis was described as a capable and confident student who had a fear of flying over water.

Early on 3 February 1970, instructors arriving at the Otago Aero Club discovered the hangar doors open and CGI missing, but initially assumed it had gone out on a legitimate flight. Only when a topdressing pilot reported his helmet missing and another pilot reported missing life jackets did they ring the police.

There were sightings: CGI was spotted over Garston at 7am and Dipton at 7.30am. The course was erratic, but the plane was carrying enough fuel for four hours of flight, ensuring reports that placed the aircraft all over the South Island added to the confusion. CGI was last sighted flying up the Routeburn Valley.

Robert Bakhuis, on bail awaiting sentences for car conversion and theft, became the main suspect when acquaintances told police that Bakhuis had talked of stealing a plane, ditching it in a Fiordland lake and 'going bush'. After an extensive search using fixed-wing aircraft, helicopters and ground parties, the search was called off on 8 February 1970. A chance discovery of wreckage looked like being the only route to finding any answers.

Then, two years later, on 12 July 1972, Bakhuis visited his mother, who had given him up for dead.

Later that day he turned himself in, telling police that he had flown to Fiordland and ditched his aircraft in Lake Duncan, on the Esk Burn, at an altitude of about 1500m, leaving it to fate to determine his future. Surviving the crash was no small feat for an inexperienced pilot. After spending 35 days in the bush, some at a well-stocked NZ Forest Services hut at Lake Te Au, he walked out to Te Anau – another challenging feat – and made his way to Australia, travelling and working there for two years before loneliness brought him back to New Zealand.

Sentenced to six months' imprisonment, Bakhuis later returned to the Otago Aero Club to offer an apology.

When contacted by the Otago Daily Times in 2022 he expressed a wish not to revisit the past, saying "I'm not proud of what I did. It's something I'll regret for the rest of my life."

CGI's story has a happier ending. Once the plane's location was known, Mike Clark, who had also flown with the Otago Aero Club, approached the New Zealand Insurance Company, who had paid out on the Club's claim, and they allowed that he could carry out a search at his own expense. Permission was

NZ-CGI's rescued fuselage arriving in Te Anau, care of experienced Fiordland helicopter pilot Bill Black, it's two and a half year submersion apparent!

also required from the Commissioner of Crown Lands, as Lake Duncan lies within an area protected for takahe.

After speaking with Robert Bakhuis in prison, Clark walked in from Te Anau only to find the lake partly frozen. Trying to visualise exactly how Bakhuis would have ditched, a few days later, on 3 August 1972, he rowed out in a rubber dinghy and dropped a long length of twine weighted with a rock, intending to drag the lake bottom. He snagged the plane on his first run. Clark dived in and followed the line down, finding CGI sitting on a roughly even keel 59ft under the surface, one side buried in soft mud.

The discovery sparked considerable interest and the insurers eventually sold CGI 'as is, where is' to Mike Kelly, an aircraft engineer based in Taieri, who had a soft spot for CGI as it was the plane in which he had first gone solo.

Clark played a significant role in the salvage operation, diving to attach tractor tyre inner tubes that were inflated to lift the plane from the lake bottom. Once ashore, Kelly removed the instruments and immersed them in water so that they could be restored and eventually reinstalled. The motor, undercarriage, a window and one wingtip had been damaged, but the plane seemed otherwise sound. Renowned Fiordland helicopter pilot, Bill Black, made two trips in a Hiller UH-12E, bringing out first the wings then the fuselage and engine.

Back at Taieri, the plane was stripped down and restored to airworthiness by Southair Aviation Services before being purchased in mid 1974 by JV Hodge of Dunedin. A year later it returned to the Otago Aero Club and was based at Balclutha.

Early in 1981 GA company Airwork purchased CGI, intending to sell it or scrap it for parts, whichever came first. Steven Elliott of Feilding came across it in late 1982 and, having checked it out and learned of its backstory, purchased it early in 1983.

Accompanied by a local instructor, one of his first flights was to Lake Duncan, retracing the flight made by Robert Bakhuis. Flying into the remote, mountainous area proved a challenge, he recalls, even with several hundred hours of flying experience and an instructor beside him.

From there CGI's future was significantly more settled. In more than 2000 hours of flying time in ZK-CGI, Steven never had any doubts about his purchase. "It was just right for me. It was a good aeroplane that never let me down."

He does, however, recall one quirk: "On a warm day, you could almost smell the bottom of the lake in it."

Eventually, after wearing out the engine and unable to find a suitable replacement, Steven in 2013 decided to park the aircraft at the Classic Fliers Aviation Museum at Tauranga airport, where it remains, hanging from the ceiling in a prominent position.

If you happen to be in the vicinity, pop in for a look – and be sure to go on a warm day to catch a real whiff of the past.

Riding high in the blue!

By Chris Hoffman

One of the advantages of obtaining an IFR rating as a PPL is the ability to climb through cloud and enjoy the clear blue sky that often exits above a band of stratus cloud that hangs low to the ground. This cloud often blows in over the Kapiti Coast and can stretch out into the Cook Strait, sometimes down to as low as 700ft. This makes a flight from Paraparaumu (NZPP) to Takaka (NZTK) a challenging one if attempted VFR.

Sally and I have enjoyed making the trip many times over the last twenty years; Sally's dad lives in Takaka and we have flown over for many weekends and holidays. We always worried about getting stuck when we went for a weekend, and this was one of the reasons I completed my IFR training. We initially flew in ZK-EIF, a Piper Arrow II which we co-owned with Brian Souter. It was refurbished in 2012 with a new IFR panel with a Garmin GT650 GPS at the centre of a Performance Based Navigation certified panel.

The problem with the GPS routes at that time was that the approved routes went from NZPP initially towards Nelson (NZNS) before turning west towards NZTK. This meant the track crossed over incoming IFR airline traffic and the controllers often redirected us to climb and fly overhead NZNS, often as high as 9000ft, to leave the airline traffic undisturbed.

A recent addition to the Airways routes has been a low-level route that connects Takaka's nearby waypoint MARKO with waypoints MENOV then RIWUT then on to TPAPA, a mid-strait waypoint abeam NZPP. This route addition has been facilitated by AOPA and the NZ Aviation Federation, with the assistance of Golden Bay Air Ltd who fly NZTK-NZWN. It provides a near direct route out of Paraparaumu to Takaka with minimum route sector altitudes of between 1300ft and 3000ft.

A return flight from NZPP to NZTK I took recently provides a great example of the benefits of IFR flying. After arriving at the airfield and checking the weather, I filed the flight plan with Airways using the IFIS website. This website allows users to store favourites, so I pulled up my NZPP to NZTK file, amended the route altitude and ETD and filed it. This has to be done thirty minutes before ETD, so I then had half an hour to preflight the plane, pack up, refuel, and program the GPS. Sally helps with loading gear, cleaning and tidying the plane and opening the hangar – a team effort.

The weather was overcast 8/8, base at 1200ft, tops between 3-4000ft, freezing level 7000ft, with a light northerly wind, so a departure from runway 34 was required. The Standard Instrument Departure (SID) requested was the GUGAK FIVE departure, Paraparaumu transition (there is not a charted route sector from GUGAK to TPAPA so we have to climb into controlled airspace above 4500ft and then at 5000ft be "cleared direct to TPAPA – radar terrain" by the controller). The SID was selected and made part of the route in the GPS; it would take us north of the airfield 10 miles to waypoint GUGAK before turning us back over the field. As part of the pre take-off checks I set the autopilot climb limit to 5000ft and ensured it was in the TOGO mode (Take off, Go around). I called the NZPP Flight Service to seek clearance. We taxied to the holding point and waited for the clearance to be validated. The clearance validation came with the usual request to contact Wellington Approach on 122.3mHz on passing 2000ft. We checked for approaching aircraft, then made our radio call – entering runway 34 and rolling, IFR departure to the north.

The take-off roll was short with one notch of flap and DWX climbed away easily with just the two of us and two weekend bags. Once established in the climb I wound back the prop from max 2700rpm to 2500rpm to reduce the noise – when we passed 200ft we were about halfway down the runway, the flap was raised and, at 500ft, the GPS course was active so I selected NAV function and turned on the autopilot. As the climb speed reached 105kts, I armed the vertical speed mode on the autopilot using the Indicated Air Speed (IAS) option, which then allows the autopilot to adjust the pitch to maintain the climb at 105kt, and we continued the look out as we climbed out of the circuit through 1000ft. I ran through the 1000ft checklist – all looking good and we continued into the cloud, IMC, at 1200ft. With no view out the window, Sally always puts in her earplugs and plays soothing music and closes her eyes.

At 2000ft I called the Wellington Approach Controller and told them I was there – "Wellington Approach, DWX climbing through 2000ft for 5000ft on a GUGAK FIVE PARAPARAUMU transition." Sometimes, due to traffic, they request I double back over the NZPP airfield, but on this occasion I got the "DWX identified, on reaching 5000ft track direct to TPAPA." Perfect. We were light and climbed out of the cloud layer at 4000ft, reaching 5000ft well before GUGAK. I then manually amended the flight plan, programming a DIRECT leg to TPAPA. The autopilot turned the plane and off we headed. The autopilot controlled the flight to Takaka,

reminding me every thirty minutes to change fuel tanks. We were in clear blue sky flying over the cloud layer in smooth air all the way across to D'Urville Island then passing to its north with Separation Point and Golden Bay visible in the distance.

The RNAV approach in to Takaka was selected and the autopilot Vertical Navigation function armed. This gave an audible warning one minute prior to the Top Of Descent (TOD) it had calculated. I checked it with a manual calculation and it looked fine to me. I managed the engine in the descent and then disconnected the autopilot as we lined up with the NZTK airfield Runway 36 at 1000ft. I needed to terminate the plan on the ground with Nelson Tower; a simple radio call. We packed the plane away and tied it down and headed off for a great weekend.

The Sunday afternoon return looked like more of the same on the weather forecast. NZPP was covered with a low overcast that extended about halfway to D'Urville Island. I was pleased we were not trying to fly under that! We followed the same process and procedures as before except this time, after filing the plan on the IFIS website, I rang the Nelson Controller on the direct phone line. We got a clearance time frame validation and a request to contact the tower once airborne and prior to entering IMC. No problem, there was not a cloud in the sky.

After a routine start and preflight checks and briefs, we departed out to the north to the MARKO waypoint and I called Nelson Tower as requested. We were cleared as per our flight plan to NZPP at 6000ft and proceeded across to TPAPA, passing to the Christchurch Controller then the Wellington Approach Controller. He gave us the updated NZPP weather and, with cloud down to 700ft, it looked likely that we would not meet the Minimum Descent Altitude for the Runway 34 RNAV approach (it requires a cloud base above 860ft and 4500m visibility). This would be a problem for the Air Chathams Saab aircraft that are unable to do circling approaches but, like the Sounds Air Caravans, we can make use of a circling approach. The MDA for Runway 16 RNAV approach from the north is 540ft, as is the minima for a circling approach. A circling approach is flown in with a tailwind against the traffic flow using the active Runway 34, so requires a clearance to make sure no-one is taking off IFR. Once visual with the runway, the approach is broken off and the plane joins the circuit to fly on to the downwind then makes a normal landing into the wind on Runway 34. I was informed there were several VFR training aircraft in the circuit practising low level procedures.

Standard arrival from the north into NZPP for runway 34 with ADS-B showing other aircraft.

Circling approaches are practised each year as part of the IFR renewal and I regularly use this approach in to NZPP, given the difference on the MDA at each end. On this occasion, I asked the controller for a TPAPA 1 HOTEL arrival (the approval to take us from TPAPA to NOKIX, the beginning of the approach in to Runway 16) and then from NOKIX asked for an "RNP Approach Runway 16 Circling 34 to land." This was approved, the autopilot was programmed with Vertical Navigation (VNAV) activated. The GPS calculates the TOD and the descent is flown by the autopilot. I monitored the airspeed and rate of descent and controlled this with the power settings.

I called the controller once established and was instructed to call the Flight Information Service on the local frequency, informing them of our intention to circle to land. The autopilot captured the glide slope and we headed down into the clouds, the cockpit abruptly growing darker without the sun shining in. Constant attention was required to ensure the autopilot was managing the descent correctly then, just as quickly, the cockpit lightened up as we dropped out of the clouds. The Flight Information Service called with the location of the circuit traffic and the ADS-B displayed them on the moving map. All good. I levelled off and joined the circuit. Sally is slowly becoming less stressed with letting the technology run the flight. My job is to run the technology.

Like most of the IFR flying I do, I avoid a lot of IMC time. Cloud levels, especially in the North Island and over the east coast of the South Island, tend to be in stratus layers and it is usually smoother flying above the murk when there is a lot of cloud about. Icing can be an issue in a single engine aircraft with no protection. Avoidance is the game.

IFR can be challenging but the modern RNP approved GPS avionics/autopilots make it more achievable than ever before. I encourage you to have a go. If you're flying PPL IFR and have a story to tell, let us know.

In the next issue, Chris will consider more complex IFR flights and identify some shortcomings in current IFR routes for private operators.

DL9 – a commonsense option

By Neville Bailey

What is a DL9? Simply put, it's a commercial drivers licence medical; the standard medical used by bus drivers, truck drivers and taxi drivers. So, what does it have to do with aviation?

Several years back, CAA made a rule change to allow pilots to use the DL9 medical if operating recreationally. To recap, the three standard licences – PPL, CPL, ATPL – need a medical to validate them. Most CPL and ATPL holders will chose to hold a Class 1 medical as it allows the 'for Hire or Reward' to be exercised. Until recently, most PPL holders chose a Class 2 medical, however many are now opting for the less expensive and more straightforward DL9.

Reduced cost

The DL9 offers two major advantages over a Class 2. The first is cost. Most doctors charge around $60 for a DL9, and there is no CAA fee. CAA don't issue a medical certificate as such either, you simply email them the front and back page of the form within seven days then carry the signed DL9 form with you as evidence once the doctor has completed it.

The second major advantage is its simplicity. It's an assessment of fitness to drive, not fitness to fly. Medicals don't become any easier with age, so this is an area where the DL9 shines. Your doctor is assessing your fitness to pass the medical used by all commercial drivers, rather than specifically assessing fitness to fly, as with the Class 1 and Class 2 medical.

That's not a loophole either, it's the new commonsense approach that CAA have applied with the introduction of the DL9.

Professional to recreational

The DL9 is also very appealing in the common case where a professional pilot retires and continues to fly recreationally. The CAA allows CPL and ATPL holders to exercise the privileges of a lower licence if they choose, with a correspondingly less stringent medical.

This was the exact situation that I found myself in a few years ago. I was an ATPL holder, but I didn't want the expense of continuing to hold a Class 1 or Class 2 medical. Fortunately, the DL9 covered everything I needed. Thus $60 and 20-30

minutes later, I was up and running. This then allowed me to use my ATPL licence, and to exercise privileges to a PPL level.

DL9 restrictions

The DL9 does have a couple restrictions. It doesn't allow the holder to fly IFR, fly gliders, or to perform aerobatics below 3000ft. But it does allow the holder to operate either a single- or twin-engine aircraft, with up to six POB. For many recreational pilots, this makes the DL9 very appealing.

Retired Air NZ Captain Des Lines was instrumental in pushing for change, leading to the DL9's introduction. Speaking about the merits of switching to the DL9, Des points out that the holders of an instructor's rating are still able to exercise the privileges of that rating, albeit with the caveat that they can't charge money for flight duties (that would require a Class 1 medical). This is an important point for older pilots, and for the profession as a whole. It allows those pilots who may no longer hold a Class 1 medical, to continue, with the DL9, to instruct pro bono and pass on a career's worth of experience.

Des also notes that although CAA rules prevent an instructor who operates with a DL9 Medical from charging for flight time, there is no such restriction around charging for ground time, such as a pre flight briefing and post flight debrief.

AOPA member and recently retired Air NZ Captain, Tim Ward, adds that the DL9 will suffice for a PPL as the Recreational Certificate is no longer issued (though obviously not for 'Hire and Reward'). "The cost of renewing my ATPL (Class 1) is $800 per year, or more if something isn't right, and may be every six months over 65, which would mean an annual cost of, minimum, $1600. The cost of a DL9 is about $60 every two years with a GP."

Long time PPL holder Richard Eberlein, who previously held a Class 2 medical, transferred to the DL9 as soon as the DL9 became available. "There was a significant cost saving and no downside for me. Renewals typically take 20-30 minutes."

Uptake

CAA's website (with three-year old figures) shows initial uptake was slow, but it seems likely that more will take advantage of the DL9 as word spreads.

Applying is easy. Simply make a booking with your local GP, specifying that it's for a DL9. Most medical centres have the forms on hand; it's a very common check. There is no requirement to specify that it's for aviation. Once completed, CAA require that a screenshot of pages 1 and 4 are emailed to them; in the past CAA has not replied, but this may be changing. Finally, always carry the form with you in your flying kit. Too easy!

CAA's Manager Licencing & Standards, Mark Boyle notes that the DL9 was introduced in 2009, with a number of changes in 2021 aimed at making the DL9 even more user friendly and effectively lowering barriers for entry. He points out that before the age of 40 a DL9 lasts for five years, while over 40 it has a two year validity. The exact wording is that once you turn 40, you must have done a DL9 medical check 'within two years'. Something to keep in mind, to ensure your DL9 remains current.

Mark also notes that if there are any changes to your medical condition, you must seek clearance from a doctor prior to flying again. As always, it relies on an element of commonsense.

Google CAA DL9 for lots of helpful information, including FAQS.

Grant has enjoyed a wide variety of aviation experiences as both a commercial and recreational pilot: fixed and rotary wing, instructing, aerobatics and warbird displays, he's done it. Recreationally, Grant flies his Bearhawk aircraft from his home base in Wanaka.

Safety observations

Aviation is a refreshing, exciting and fun way to spend your time. The laws of physics are immutable: the relative airflow to your aerofoil is what keeps you airborne. Anyone who thinks they can't have an accident is delusional. An accident can happen to any one of us.

Accidents can have many consequences. We have a responsibility to our families and friends who will be affected by our poor decisions, but also to innocent third parties, such as passengers or bystanders, who may become victims of an event.

Risks vary in likelihood and consequence. Understanding and managing risk is part of our PIC duties. You might run out of fuel, or be hit by a meteorite, or have a medical event. Some things we can control and others we can't. However, statistically, it is the things we can control that are the common causes of incidents, and therefore that is where we can make a difference. Identifying, understanding, mitigating and minimising risk is how we maximise our odds of a successful conclusion to our day.

Let's for a moment think about the insurance consequences. The latest figures I could find on the CAA website were to the end of Q3 2020. We are crashing private planes at the rate of 30 per 100,000 flight hours, the predominant cause being pilot error.

As far as insurance premiums go, we all pretty much swim in the same pool and have a responsibility to our fellow swimmers to not pee in the pool. If too many of us do, we have to vacate the pool and may not be able to swim anymore.

Every time we fly, our highest priority should be to put the aircraft back in the hangar undamaged at the end of the day. As the pilot, our focus should always be on safety. Having said that, prosecutors love non-compliance and don't necessarily consider or understand safety when laying charges. Just culture and good reporting can be unintentional sacrificial victims of health and safety actions; another story there altogether.

The modern world has a focus on compliance which can sometimes conflict with safety. Just because in your mind you are compliant with all relevant requirements doesn't mean you actually are. And even if you really are, you might be unwittingly exposed.

As an example, if you are overtaking a vehicle, you may briefly exceed the speed limit and be non-compliant to minimise your risk of being in the oncoming traffic lane. That's called risk assessment and management. What you don't know is whether the next oncoming car is going to come around the distant bend at the speed limit, giving you sufficient room, or twice as fast, thereby increasing the risk inherent in your choice to accelerate past the vehicle – a speed you previously determined as sufficient. To avoid a crash, you then have to exceed the speed limit more than you had previously anticipated.

You get the picture, compliance doesn't always assure safety, it can have the opposite effect and encourage complacency – the "I'm compliant so must be safe" mentality.

No one intentionally has an accident, so what can we do to mitigate and minimise the risk of our flying operations?

First and foremost: pilot discipline and situational awareness. These attributes are key to our risk assessment, identifying our mitigations, our judgement and our decision making. Doing things like a self-brief when you're setting up for landing, identifying things like wires, other traffic, or other hazards. Sadly, about two thirds of wire strike accidents involve wires the pilot knew were there. Think about that. We are flying into something we know is there, we forget, become distracted, or lose situational awareness.

If flying with others, always stick to the briefing and don't be disruptive to your fellow aviators. It's critical that pilots do what others are expecting us to. Don't surprise others by getting out of sequence or doing things that can overload an already maxed out pilot or ourselves. Our experience levels, currency and competence are all different, and you shouldn't apply your personal limits to others. Simply be considerate and respectful. Breathe through your nose if you find you are getting ahead of yourself; it helps slow you down.

Training

Do not confuse experience, competence, aptitude and good training. Load shedding under stress and reverting to primacy of training is typical for pilots under pressure. That's why good training is so important, especially considering how hard unlearning or relearning stuff is, and it is harder as we age. Seek good training and keep current.

Mountain Flying

The airflow in the mountains behaves in a similar fashion to water around rocks in a stream with areas of laminar flow, turbulence, standing waves, rotor, etc. New establishing wind flows can be confused and very turbulent, whereas established stable flows, although potentially stronger, are typically more predictable. Try to visualise what's going on, and always have an escape route.

Remember the fickle light winds are the ones that can catch you out. Whether you are taking off on a tight backcountry strip in your fixed wing, or landing your light helicopter on a ridge, a puff up the bum at the wrong time can be catastrophic and ruin your day.

The FAA rule of thumb for fixed wing take-off is to have 70% of your lift off speed by 50% of your length available. If you don't, then abort the take-off.

If you've been taught not to descend your helicopter at a rate greater than 300ft/min below translation to avoid Vortex Ring State (VRS), remember that is a vertical speed of only about 3kts; 10 kts is 1000ft/min. Beware of the upslope tailwind.

Terrain intimidation

There have been many lives lost through pilots not being competent mountain pilots and failing to realise they had plenty of room to turn in a valley avoiding collision with terrain. If you want to fly in the Southern Alps, get proper training before doing so. If you really want to know how to fly in the mountains, go and do some glider time.

Stall/Spin (loss of control)

These accidents are a leading cause of fatalities and yet seem to be poorly understood. Stall speed responds to demand for lift irrespective of attitude. You can still stall/spin at high speed and high G. At zero G your stall speed is zero, so if you are losing control, unload the G.

Unless you are intentionally side slipping, always keep the ball in the middle.

Understand the risks of stalling in turns. Typically, training consists of stalling in a balanced turn, recovery being the check forward, full power and reducing bank angle. So why do people

still spin in? The answer is often that they skid or try and rudder the aircraft around a turn at low speed. Or find the aircraft pitches up on a go around out of trim, and out of balance. Skidding turns are dangerous, don't do them.

Controlled Flight into Terrain (CFIT, water as well as terrain) has been a killer in New Zealand for years.

Inadvertent IMC and loss of control is right up there with CFIT. Unless you're flying IFR following published routes and procedures, ATC instructions, etc, you have no business being IMC. Just don't. Apart from being illegal, if you removed all the VFR IMC accidents from the mountains of New Zealand, you would have comparatively few left.

Loss of Directional Control usually applies to taildraggers but not always. Understand and use control inputs correctly. Again, get good training and maintain currency. Do a stop and go, not a touch and go. Use the grass, not the seal, where possible. If you're not comfortable, get some dual instruction.

Poorly executed beat ups claim lives. Well trained display pilots understand the risks of pointing energy at the ground at low level, and that only occurs after thorough planning, practice and discipline. Unless you're trained in low level display flying, just don't do it.

Pilot discipline and situational awareness are where it starts.

Our BFRs put a lot of emphasis on technical flying skill and emergency procedures. While these things are important, overwhelmingly, the cause of accidents is almost always poor judgement, poor decision making, and lack of discipline.

Prepare for your flight or mission well. Ensure your aircraft is fit for purpose, the weather is suitable, you have sufficient fuel, equipment and daylight. Do your pre-flight the same way every time. Keep your windscreen and aircraft clean. Cleaning your aircraft is when you often find a defect.

Have a last walk around the aircraft after you have loaded pax or cargo, and check all catches, latches, seatbelts hanging from doors, fuel caps for security, etc, before you jump into the hot seat. Look out, look out again, and listen out to maintain situational awareness.

Pay attention if something changes in your aircraft handling, sound or performance; it is often a symptom of something serious to come.

Be aware that youth is wasted on the young. As we age, we aren't as sharp, our ears and eyes, amongst other things, might not work as well as they used to. Hopefully experience and cunning offset our physical decline to a degree.

When accidents do occur, emotions can run high, speculation can be rife, and facts won't stand in the way of good stories. Be wary of what you might hear, as it is a natural tendency of a pilot who does not fully understand what has occurred in someone else's accident sequence to say 'Oh, that guy screwed up; it won't happen to me.'. And just be aware that it might be any one of us.

Always remember that risk has no memory. Just because you got away with it last time doesn't mean you will next time.

We owe it to ourselves and to everyone else to keep the insurance claims to a minimum. Be disciplined, be careful and, if possible, be lucky too.

AOPA NZ member airstrip directory

By Ian Sinclair

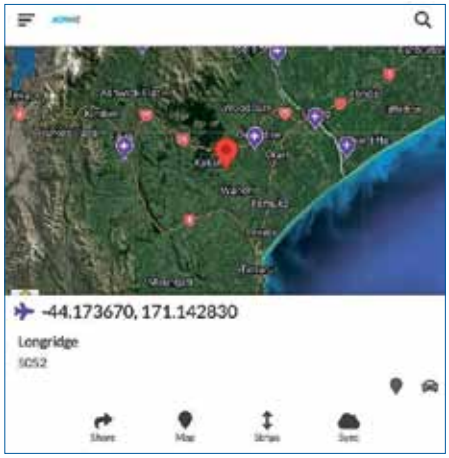
AOPA NZ is fortunate to have members with their own airstrips who are happy to share them with others. The following is a brief 'how to' guide for using the fly-in app to access member airstrip information.

Once logged in on the AOPA NZ website, under the Member Resources drop down menu, choose 'member strips', then click on 'You can find member strips here'. The member airstrip directory is now part of the fly-in app.

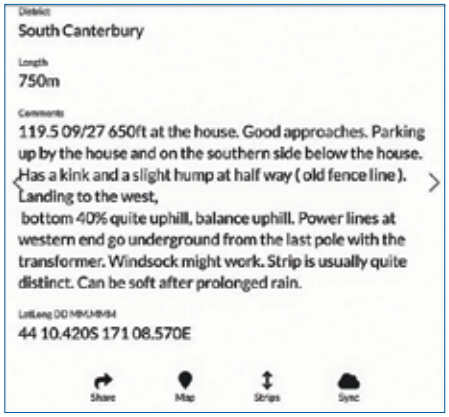
1: Open the app...

2: Zoom in...

3: Select your destination.



4: Click on the name to bring up specific detail.



Always ring ahead to confirm airstrip availability, and for a briefing.

Many airstrips are part of active farming operations and there are many day to day activities that can make a visit on a specific day impractical. Sometimes an airstrip can be unavailable for several months at a time if there are winter crops or new grass.

Some airstrips are in areas where extra care needs to be taken with neighbouring communities, and here especially you should avoid overflying urban areas, and think about noise. As always, care with overflight of livestock is essential, especially during take-off if your aircraft is a bit loud and scary.

An advance phone call will sort all of these things out and pave the way for a stress-free visit. If you are coming from another region, a heads up from a local regarding the local weather pattern is also very useful.

As an example of how the app works, I have included some screenshots of my own airstrip, as listed. Happy flying!

5: Scrolling down provides contact information - use it! Call in advance for a briefing and permission; don't just turn up.

6: A click brings up a map showing the strip you've selected.

7: Some strips additionally offer photos to help you orientate yourself as you arrive.

Jay McIntyre is the owner, LAME and IA of JEM Aviation, Omaka

Oil temperatures...

Interesting question, dilemma or Catch-22?

It's fair to say we're taught that oil temperatures should be kept as low as possible, and basic scientific principles would suggest that keeping the oil temperature low is best.

However, think about your car. Not many (any?) cars have an oil temperature gauge these days but probably, without exception, oil temperature indications are biased towards an over temp situation. Has anyone ever seen a low oil temperature warning?

On the other hand, we're taught not to taxi or use high power settings until the oil temperature is in the green. With many aeroplanes this can mean sitting parked for a long time waiting for even an indication on the gauge.

A couple of recent incidents have highlighted how flawed our ideas around oil temperature might be.

For some time, a PA-28 we look after has had repeated reports of low oil pressure and high oil temperatures. An external gauge was fitted, confirming that the oil pressure was satisfactory and the aircraft gauge was under-reading. Like most OEM temperature and pressure gauges, the actual pressure and temperature readings are a bit hard to determine with 'It's in the green' accepted as being okay. But what is the actual reading?

In this case the pressure was under-reading by 10–20psi and, although at the low end of the tolerance, the pressure was within limits.

Recently a digital engine monitor was fitted, again confirming these readings. With an SD card fitted, engine data is recorded at one second intervals, providing a plethora of information. This data confirmed that the oil pressure was fine, albeit at the lower end of the limits. Of more interest was the oil temperature, which is most often barely at the minimum recommended temperature of 185°F and was not seen above 200°F (the maximum being 245°F). It should be noted that these readings have been taken in mid-January in the middle of a spectacular summer where Blenheim has had a good run of over 30°C days. It will be very interesting to review this data in winter!

So, what does this mean for our engines?

I would argue that, like many things in life, we are killing them with kindness. While excessive oil temps are obviously bad for all the reasons we understand, low oil temps are perhaps more insidious, with the biggest downside being moisture retention and condensation inside the engine leading to increased corrosion.

Additionally, many of our aircraft suffer from low utilisation, meaning the moisture never gets 'burnt off' and we have a perfect recipe for component failure.

We saw this recently when a Tomahawk on loan to the ATC Flying Camp at Woodbourne came to us with the engine vibrating. It was an odd fault in that the engine vibrated throughout the RPM range and on all magneto settings. Troubleshooting soon found that both exhaust valve springs on #2 cylinder were broken. Both springs exhibited signs of corrosion and the rocker cover was coated in milky oil… classic signs of excessive moisture. On inspection, similar signs of corrosion were noted in the other cylinders, something that we recommended the regular maintenance provider address.

So, what to do about this? If it was up to me, I'd remove most, if not all, oil coolers from lower horsepower engines for operation in New Zealand. Of course, this is not necessarily legal, although in the case of the PA-38, the oil cooler is listed as optional in the Maintenance Manual, and there are currently some flying without coolers. I think that most maintainers would fit a cooler as that is 'what you do', but I think that removing them should be seriously looked at – easy enough to test it out by removing the hoses and blanking off the fittings.

Broken PA-38 valve springs – note the surface corrosion.

In the case of other aeroplanes such as PA-28s and C172s, researching the various manuals and TCDS does not give any indication that that cooler can legally be removed. However, most (if not all) do allow fitting of 'winterization plates' which blank the cooling airflow to reduce the cooling effect. Perhaps these should be relabelled as 'Temperature control plates' and used as required, regardless of the season, to regulate the temperature within the required range. It should be remembered that regardless of your thoughts on Global Warming, New Zealand is regarded as a cooler climate.

Have a think about it, as I'm sure your engine and bank account will thank you for it!

Introducing Karen Williams

Late last year Karen Williams took on the role of Member Services Administrator for AOPA NZ.

Karen grew up in the Wairarapa and has been involved with aviation for most of her adult life. She first became associated with the Wairarapa Aero Club when her cousin John was training for his Commercial Pilots Licence at Hood Aerodrome. She started training towards a PPL but put it on hold when life got busy. "I faced the usual dilemma of people learning to fly. When I was busy with work I had the money to train but did not have the time. When I was less busy with work, I had all the time in the world but no money!"

After some years away, Karen has returned to the Wairarapa with her partner Kevin. They live in the former Skydive building at the end of the 06 runway on Hood Aerodrome, and hope to build a hangar house in a new development on the west side of the airfield. The couple own a Jabiru J230 microlight which they imported from Australia in 2022. Karen remains closely involved with the Wairarapa Aero Club, where she recently finished a five year stint as Club Captain.

After the Covid lockdowns Karen decided to improve her work life balance and gave up a long career in the logging industry to take up a number of part-time roles in aviation. In addition to her new position with AOPA NZ, Karen is the Safety Officer at Hood Aerodrome, Safety Manager for the Rural Aerial Co-op in Pahiatua, and helps Bevan Dewes and Lucy Newell with administration of their adventure flights company, Legend Aviation. Karen has a particular love of the Tiger Moths operated by Bevan and Lucy, and hopes to finish her PPL and ultimately to get a Tiger rating.

Outside aviation, Karen and Kevin spend a lot of time on their 39ft yacht, *Sabbatical*, based at Seaview Marina in Petone, enjoying both fishing and diving. The Marlborough Sounds are their favourite playground, though they have ambitions to take *Sabbatical* further afield. With Fiordland in mind they have already installed a Starlink system, in anticipation of Karen being able to continue some of her roles from the boat on extended trips.

Karen is always keen to hear from people seeking information on AOPA NZ membership or member benefits.

Cromwell

By Kynan Yu

Cromwell, New Zealand's most inland destination, is a relatively small town located 18nm east of Queenstown on the shores of Lake Dunstan.

The aerodrome – Cromwell Racecourse NZCS, features two grass runways, 18/36 and 09/27. There is fuel onsite, with RD Fuel supplying avgas - Jet A1, and plenty of aircraft parking. A $5 landing fee is payable via collection box at the northern and southern ends of the main runway.

Runway 18/36 is the main runway at 1020m in length, but be aware that there is a dip in the middle third of the runway. I try to aim about 200m past the threshold to avoid touching down just before or on the crest of the dip. Runway 09/27 is shorter at 830m, landing is prohibited on 09 and taking off is prohibited on 27, so make sure to read the AIP briefing plate.

In the past there have been a couple of pilots caught out with large rabbit holes. The local hangar owners have been routinely checking and filling any that are found, but do keep this in mind when planning to land.

One of the local hangar owners has a Davis Weather station installed on site. If you haven't seen the free app (Weatherlink) before, it's definitely worth getting as it gives you some basic weather information for wind speed and direction, pressure and temperature. There are a lot of units around the country which I often use when I am intending to land at an aerodrome or strip that doesn't have an ATIS, METAR or TAF. They can often be found one at either the aerodrome or a nearby town, and will provide good insight into the local conditions.

Just to the north of town is a small aerodrome – Cromwell NZCW, which has an 800m grass runway, 18/36. There are no facilities onsite and it will occasionally have stock grazing on the runway.

Cromwell's central location makes it a great place to base a flying vacation or stopover. All within about 80nm you can be on the east or west coasts, south to Stewart Island or north into the alps surrounding Mount Cook. The vastly varying terrain in all directions makes for sensational scenic flying, whether your preference is airport to airport or you're into backcountry strip landings.

The main tourist attraction in Cromwell is Highlands Motorsport Park, a world-class facility that caters for the whole family, friends or team mates. Entertainments range from a high adrenalin track action experience in Ferraris, Porsches and racing Go-karts, to a more leisurely wander through the National Motorsport Museum and refreshments at a café boasting an amazing view of the circuit from the alfresco deck. And don't forget to check out the famous 'loo with a view' – six themed bathrooms that have one-way glass, giving guests a stunning view of the race-track.

Highlands is a ten minute walk from the southern end of the aerodrome or, if you call in advance, the friendly staff will be able to shuttle you over to the Park.

Cromwell is also well known for its cycle trails. The recently completed Lake Dunstan Trail can take you from Cromwell township through the stunning Cromwell Gorge and into the historic town of Clyde. Key features along the route include impressive man-made bridges and landscapes, early pioneer history, Old Cromwell town, Carrick vineyard and the quirky Burger Afloat, a floating burger and coffee joint located on the side of the trail mid-way to Clyde. The total trail length is 55km which can be shortened to suit via your start point. The views along the trail are stunning, and it can also be linked up to the Otago Rail Trail to create a multi-day ride over 200km.

Trail Journeys have a base at Highlands Motorsport Park and can offer bicycle rentals, return transport and support for any of the Central Otago cycle trails.

Cromwell also produces fruit that is widely regarded as some of the best in the world, which explains the 17m tall, 1.7 tonne 'Big Fruit' sculpture in the centre of town. Apples, pears, nectarines, apricots and cherries are all grown in the ideal Central Otago climate. Jacksons Orchard on the State Highway sell their fresh seasonal produce direct to the public at their roadside store; you can even grab a yummy real fruit ice cream or take a 45 min tour around their working orchard. Scattered around the outskirts of Cromwell there are also several world-famous vineyards offering cellar doors and tasting rooms for you to enjoy once your aircraft is parked up for the day.

Motorsport action and viewing at Highlands Motorsport Park (above), trail bike riding (newly completed Dunstan Trail, right) and a bounty of fresh fruit are among Cromwell's delights.

There are plenty of accommodation providers in Cromwell, depending on your budget and needs.

The Harvest Hotel is right in the center of town and has a restaurant, café and bar onsite. There are several other motels located close to the center of town. Next to Highlands Motorsport Park is the new Central Park Apartments & Motel, a modern 4 star accommodation provider with one, two and three bedroom units perfect if you're flying in to watch some motorsport right next door.

There is only one local transport provider, Cromwell Cabs. They operate Tuesday to Sunday 12pm – 12am, or by prior reservations. I would recommend to pre-book your transport.

We have a small but active flying community at NZCS. If you are planning a visit and would like to catch up or should you have any questions in advance of a visit, feel free to reach out.

Kapiti Airport update

By Chris Hoffman

It's been over four years since the current owners of Kapiti Airport advised the Aero Club and wider airfield users that they should leave the airfield due to its imminent closure.

The action was initiated by the Templeton Group, whose airport company CEO, Chris Simpson, often commented in the media about the financial non-viability of the airport, neglecting to factor in the Business Park, which was a permitted development to help provide financial sustainability.

The airport remains in private ownership, but any moves by the owners to change the airport function could lead to action under the Public Works Act that would facilitate the return of the land to the original fifteen or so landowners from whom the land was initially taken. The land acquisition occurred during and shortly after the Second World War to enable the establishment of a military airfield, and after the war this became the main airfield for the Wellington region until the development of the main runway at Wellington Airport in 1960.

The airfield was sold into private ownership in 1995. The Puketapu hapu, who represent the majority of the local landholders directly involved in the initial land acquisition, protested this and the three subsequent sales that have occurred, at increased value each time. They have lodged a claim with the Waitangi Tribunal. The last transfer of ownership was from the Todd Group to the Templeton Group, funded with private equity funds from the Alvarium Group.

In November of 2020, a group of concerned Kapiti residents and airport users established the Kapiti Airport Preservation Society Incorporated (KAPSI), and initially set about working with interested parties to highlight the imminent closure of the airport. Their aim was to present accurate information to the community to counter some of the claims being made by the operators of the airfield, who wanted to close it so they could then build 2300 houses. The Society established a web presence through which it offered an alternative view of how the airfield land might be developed with a co-created kaupapa committed to honouring Te Tiriti principles of protection, partnership and equity. The group continues to liaise with the local council, the Puketapu hapu and airport users.

The group has evolved its website to share this vision of what could be possible – Kapiti Air Urban (pictured above) is one vision of what could be done. It restores mana whenua with potential for modern community housing, creates employment opportunities in new technologies, protects the wetlands and maintains an airport, with Kapiti District Council involved to ensure the facility is integrated into the local infrastructure and allows for new technology like electric aircraft. The community has been polled several times by KAPSI and the overwhelming response has been a desire to retain an active airport. This information has been passed on to local MPs and district councillors.

AOPA NZ has contributed funding to KAPSI to assist with the social media presence. Funds have also come from the New Zealand Aviation Federation, as well as from the community of the Kapiti Coast. I encourage you to have a look at the website (https://kapitiairurban.co.nz), read the stories of current users (https://kapitiairurban.co.nz/blog) and listen to a great radio interview – https://kapitiairurban.co.nz/conversations.

The long term future of NZPP is still not secure, and AOPA NZ will continue to advocate on your behalf in supporting the Kapiti Air Urban initiative.

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