



NEW ZEALAND SOCIETY
OF AIR SAFETY INVESTIGATORS

NEWSLETTER

JANUARY 2025

President's Preamble

Tēnā koutou Ladies and Gentlemen,

Recent global events have highlighted what a turbulent world we live in these days. It's fair to say the air has been turbulent for the Boeing company ever since the 737 Max accidents. But those accidents were arguably preventable, the design, certification and regulatory systems were all in place to ensure newly design aircraft were safe to operate. So, what went wrong? There are many aspects to that those accidents we can learn from.

It's appropriate to acknowledge the 45th anniversary of the Flight TE901 accident at Erebus on 28 November 1979, that affected so many people for so many years. Loved ones were lost, 20 crew and 237 passengers, and many whānau affected, and first responders and investigators faced harrowing conditions at the site. Taking time to reflect on the accident and its profound impact on so many lives, gives purpose to what we do every day to make aviation safer.

Our ANZSASI conference in Auckland earlier this year was an overwhelming success, with 24 presenters, from 6 countries, and 99 delegates. A huge thank you to our organising committee AB, Mike, Wayne and Lou Child, and to the last-minute subs David Bacon, Barry Stephenson and PSW. Without your stellar effort there would have been no conference.



*AB presents Keonhee Lee with the
Ron Chippendale Memorial Award*



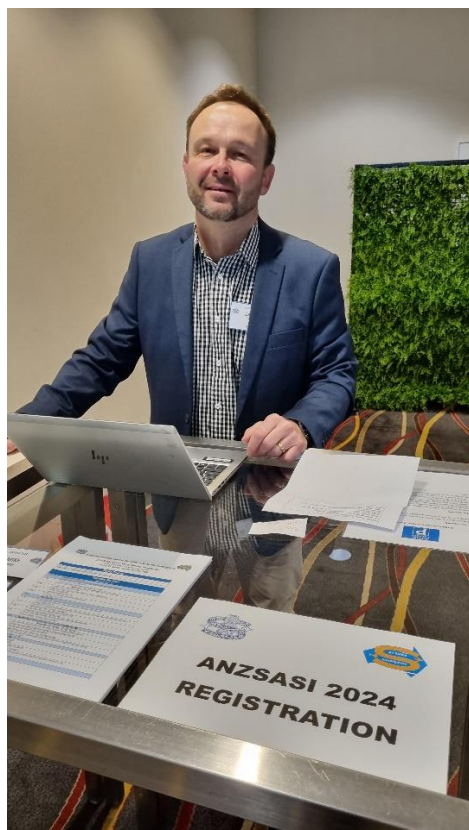
*Angus Mitchell giving his
after-dinner speech*



*Ashok Poduval presents on
just culture and non-punitive
reporting*



Ian McClelland presents on TAIC hot air balloon investigations



David Bacon helps out on the registration desk



Lea and Emerson from the PNG AIC present

VP's Views

Good day friends.

The best of the season to you. I'll start out by thanking all of you that assisted in any way with the ANZSASI 2024 conference in Auckland. I deeply regret missing it so I'm grateful that several of you stepped up as IT assistants, moderators, paper reviewers, presenters, organisers, schedulers, advertisers, and/or just did the plain, ordinary, menial jobs that needed doing but don't get a lot of attention. Thank you all for whatever you did to support this enjoyable but challenging-to-put-on event.

My work rotation commuting in and out of Africa as a contractor to the UN did not coincide with the ANZSASI 2024 conference unfortunately. However, there are 3 takeaways from my time in Africa that you may or may not be aware of, that I'd like to share with you:

1. The first is TCAS jamming. Everyone is familiar with GPS jamming and spoofing but may not be as familiar with TCAS jamming. While flying in the Central African Republic on behalf of the UN, a well-polished silver helicopter (resembling an AS350 A-Star/Écureuil) landed next to my Dash 8-300 on the apron. It had no registration nor any other form of identification. Shortly after it landed, our TCAS became inoperative. We tried all the usual methods to get it working again (turning it on/off, pulling & resetting CBs, complete power down and power up of the aircraft) without success. The helicopter departed and suddenly the TCAS resumed working normally. This seemed like too much to be a coincidence.

As safety investigators we all know one of our foremost principles is not to engage in speculation - we don't draw conclusions until we've gathered all the facts. But this was a dilemma where that was just not possible to follow. Was the TCAS broken and requiring an MEL write-up or not? After consulting with personnel more experienced operating in that part of the world, we considered the limited information we had. Mercenaries were known to be operating in the area, pilfering the limited resources of the country. Those mercenaries pressured the government to set up restricted areas to protect their work. Anyone approaching those zones regularly encountered GPS jamming.

At other airports, when we taxied past mercenaries from that same contingent, we also encountered a loss of GPS signals. Until we taxied further away from them, when the GPS signal would return. It seemed unlikely that if the mercenaries engaged in GPS jamming, that they would limit their behaviour to only GPS jamming, while not jamming other means of detection too. Therefore, on the balance of probability, the most likely cause of our TCAS problem was that it had been jammed.

Once back at base I requested advice from military friends, one of which is Wing Commander Richard "Dicko" Beaton of the RNZAF. Some of you may know him. Richard forwarded me this video that I'll share:

https://www.reddit.com/r/flying/comments/1g5sx0z/rf_attacks_on_tcas_defcon_cyber_security/?rdt=36230.

I'm working on getting a specialist in this area to be our speaker at one of the future monthly webinars.

Overall, I'll sum up how I feel about the TCAS jamming I was exposed to this way: we have members in our NZSASI and ISASI ranks who have had to walk through the wreckage of midair collisions and deal with the aftermath. Following theirs and others' recommendations from around the world, air

safety engineers worked hard to develop technology like TCAS to prevent that from ever happening again. It's maddening (to say the least) that here was an entity that just felt entitled to take that potentially life-saving piece of safety equipment away from us to protect their own nefarious enterprise. NZSASI and ISASI are not political organisations and thus cannot directly confront the suspected perpetrators. But what we can do, what we are good at doing, and what we should continue doing, is reporting safety issues like this one and raising awareness of it.

2. The second takeaway I'd like to share is about that feeling we all get at some point about giving up on something you've said over and over and over ad nauseum that just isn't being listened to. Every single day on assignment I had to tell the baggage handlers not to block the access door between the cabin and cargo compartment with baggage, in case there was an inflight fire. Almost every day, without fail, I'd go to close the cargo door, only to find baggage in the no-baggage/fire zone. On one occasion, I reached my breaking point and just about gave up. I could see some baggage slightly encroaching into the no-baggage/fire zone. I was sick of telling the baggage handlers not to do that.....I didn't want them to come back and have to redo all their work.....it wasn't encroaching that much into the prohibited zone.....would something bad likely happen when nothing bad had ever happened before.....we're in a different country and don't want to offend people.....and on and on went the excuses my mind was generating as I closed the baggage door. Just as I was about to turn the handle and lock the cargo door, I thought to myself, I just can't do this. I shouldn't be doing this. I remembered a great line by Robert De Niro in the movie Ronin: "when there's doubt, there is no doubt." When you doubt what you're doing is the right thing to do, it's probably not! I ripped open that baggage door, recalled the baggage handlers and told them ONE MORE TIME, that baggage cannot go in that location, just in case there was an inflight fire.

So, for those of you that are pushing a safety initiative into 2025 and feel like giving up, this is exactly the time NOT to give up. Your opponents want you to give up and/or be quiet and/or go away. Don't give into that! Instead of tracking in the direction of giving up, now's the time to make that 180 degree turn and redouble your efforts to be heard. Just know, I'm in your corner and I'm cheering you on.

3. The last takeaway from my time in Africa I'd like to share is about mental health. There is a saying that circulates frequently on LinkedIn and other social media sites: "no job is worth your mental health." I expected and prepared for my mental health to take a bit of a hit with my African job. I accepted that as a cost of my desire to help those who are in need and give back more in life. After a couple of rotations in/out of Africa I gave myself my own objective (as possible) assessment of how my mental health was doing. As much as I enjoyed serving the UN and as much as I believed in their mission, I felt my mental health was declining more than I was prepared to accept. I hated having to quit my African job because my bosses were 2 of the best I've ever had in terms of how supportive they were with advice for dealing with the difficult African conditions. But as the saying goes "no job is worth your mental health". I drew a red line in the sand of how much I was willing to let my mental health decline and the whole situation had unfortunately gone over that red line.

The reason I bring up this topic is 2025 might be a time for some of our members (or your co-workers or friends or family members) to give themselves their own internal review of things. You may find that a change of job, or company, or maybe just a change of how you deal with those things in your workplace that are doing damage to your mental health, might be worth your while. I'm certainly willing to have that conversation ***in confidence*** with any of our members that would like to.

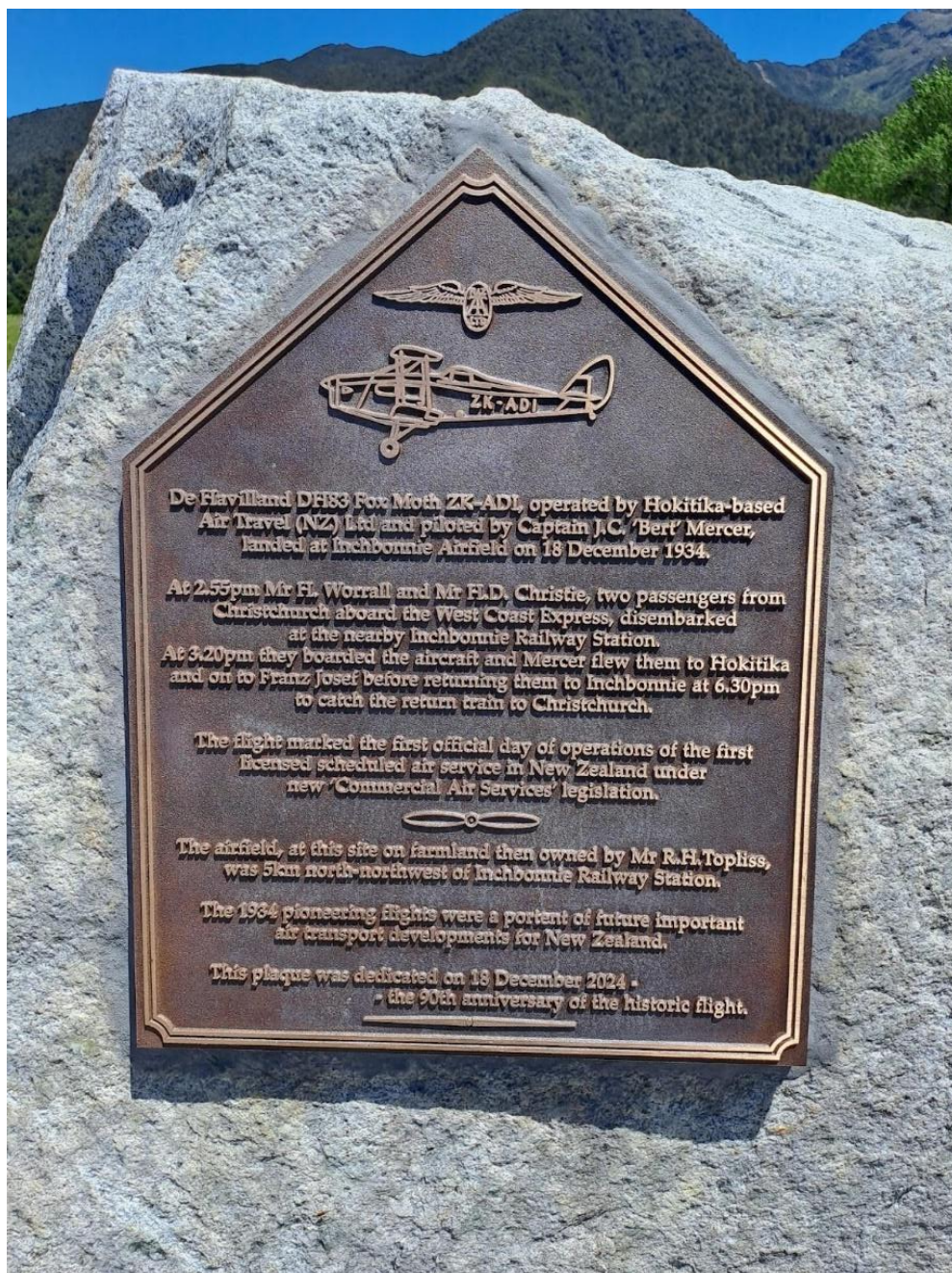
As for my desire to help those in need and give back more in life, I haven't given up on that, it's just taken a new form. I am moving on into something in aviation I've never done before but always

wanted to: aerial firefighting. In March 2025 I'll be starting with a global aerial firefighting company hopefully helping prevent people from losing their homes or loved ones.

As I write this, I'm just returning from attending this event on the South Island:

<https://www.westlandheritage.co.nz/inchbonnie90>, which commemorated 90 years since New Zealand's first scheduled and licensed passenger flight. You may recall I mentioned it a few times in our monthly webinar. One of the lead organisers of this event was NZ Aviation Historian Reverend Dr. Richard Waugh. You may recall Richard was the guest speaker at our August 2023 webinar, revisiting NZ accidents that had a significant impact on the overall history of aviation in NZ. The historical plaque unveiled at the site reads:

"The flight marked the first official day of operations of the first licensed scheduled air service in New Zealand under new 'Commercial Air Services' legislation..... The 1934 pioneering flights were a portent of future important air transport developments for New Zealand."





I'm all for remembering history. Those that don't learn their history are destined to repeat it. So, I salute those involved in contributing in any way to the success of this event. But I can't help thinking that there's an important detail to this event that might have gotten missed. The pilots involved in this feat got a lot of credit, which indeed they deserved given the country's often challenging weather and the limitations of aircraft technology of the day. But this was the first licensed scheduled air service which means this was the first flight permitted by the licensing authority (regulator) and thus an achievement that the licensing authority (regulator) should be proud of as well. This event marked the start of a tradition of the licensing of many safe and successful operations in New Zealand by the licensing authority, that continues to this day. Those of you working for that licensing authority should be equally proud of this event. James Reason's Swiss Cheese Model of accident causation is well known. But lesser known in that same book are his comments about how the regulator is "damned if they do, and damned if they don't". Regulators all around the world take flak from all sides. But try to imagine aviation without a functioning regulator.

I attended this conference on September 17-18 in London:

<https://www.aircraftcabinair.com/>. To summarise, there were several speakers talking about how they lost their medical certification to work as flight crew after they were poisoned by breathing contaminated air in the cabin. The main learnings from this conference were:

- The biggest point is we need greater awareness that contaminated cabin air is an actual problem.
- Pilots need to be more diligent writing up fumes events in their maintenance logs and having them investigated. I know for a fact at one regional airline I worked for bad smells in the cabin were never investigated because "Dash 8s have always smelled like that."
- A320 APUs are particularly problematic for contaminating cabin air because of the positioning of the air inlet. It is located on the bottom of the fuselage where oil, deice fluid, and other contaminants can collect and thus be drawn into the air going into the cabin. As we all know, both jet airlines within NZ operate A320s therefore it's important we spread the word about this.

- Blood tests for suspected cabin air contamination need to be more readily available and available sooner. Other tests can be inconclusive based on the multiple sources of contamination that exist within the cabin.
- Aircraft under development need Boeing 787 bleed air systems that have demonstrated a marked reduction in the number of cabin air contamination events. I'll leave it to the B787 pilots in our ranks to elaborate more on that as I'm not type rated on the aircraft. Suffice to say for now the aircraft does not have a traditional bleed air system that draws air from the engine compressors.
- As previously mentioned, it is difficult to trace contaminants in the cabin because of so many sources of bad smells. It is easier to monitor what is coming through the bleed ducts for unhealthy contaminants.
- Boeing 757 and BAe146 aircraft are particularly bad for cabin air contamination events. I've been told our local B757 operator is already aware of that but it helps to spread the word anyway.

On that note, please let me know if you see any good conferences our members may be interested in so I can advertise them in the monthly webinar. The topic of cabin air contamination provided much food for thought so I'm pleased to say 2 of the conference speakers have offered to give us their presentations in our monthly webinar series. They are:

- January 8, 2025 - Judy Cullinane, a former Ansett Flight Attendant who has now become a lawyer. Her health was damaged by contaminated air entering the cabins of the Bae 146s she used to work on.
- February 12, 2025 - Ricardo Pavia (tentatively), an engineer with TAP Portugal airlines. He will be talking about the difficulties in de-contaminating aircraft bleed air systems after fumes events.

In closing, **I really need a co-host for the webinars when I'm away.** I'm grateful for HCAP Administrator Ron Thacker's help when I'm away but it's not possible for Ron to be there all the time either. **Please think of someone and let me know.**

Thank you for your time.
Mike

Sec/Treas Section

As already alluded to by Jim and Mike, 2024 was a challenging year for aviation safety, with a number of high profile and, unfortunately, deadly events. These events are stark reminder of the complexities and risks involved in aviation and underscore the critical importance of the work we do in safety and investigation.

We had an Executive Committee meeting in December, where we started laying the groundwork for ANZSASI 2026, which will be held in Wellington. Both Mike and myself will be overseas with work during the lead up to the conference, so please consider stepping up if you are in a position to help with the organisation and/or running of this conference.

On the treasury front, I was advised by our bank in November that our Resident Withholding Tax (RWT) exemption had expired. This had occurred without any notification from IRD. I have been working with IRD to get our exemption re-instated, but those familiar with the joys of dealing with them will know that nothing happens quickly – their “10-15 working day” response time invariably ends up being 20+ working days. We now have a solution, but it requires a minor addition to the

NZSASI Constitution, which in turn requires a vote by the membership. Expect to see details prior to the next general meeting.

If your contact details have changed recently, can you please let me know. Contact me at nzsasi.sec@gmail.com

Cheers,

Wayne

Membership (AB)

Firstly, a warm welcome to these new members who have joined in the last 12 months:

Ian Quinn – Ian joined ISASI in 2023 and was affiliated to AsiaSASI at the time of joining. Ian is currently a senior investigator with the Hong Kong Aircraft Accident Investigation Authority, but as he is a Kiwi, we persuaded him to switch allegiance to NZSASI earlier this year. Ian has accumulated a wealth of experience since first obtaining his PPL in 1966 (over 30,000 hours) to becoming a senior captain with Cathay Pacific. CAA members will recall Ian's term as an airline inspector from 2014 to 2017.

Natasha Quinn (Ian's daughter) – Natasha is a senior first officer with Cathay Pacific, but with an incredible background of air safety and accident prevention activity. About the time that Ian announced that he was coming to ANSASI 2024, he persuaded Natasha to join ISASI, also affiliated to NZSASI.

Hamish McGill – Hamish is CFI/Manager at Learn to Fly NZ, based at Wanaka Airport. Hamish is a B and D category instructor, with safety management and audit experience. He has a few nautical strings to his bow as well – marine engineer and dive instructor among them.

Dean Clisby – Dean has been an aviation consultant for the past 14 years, with experience in a wide range of aviation activity: Safety Systems Manager, Jetconnect; Quality Manager for Origin Pacific and QANTAS NZ; four years as a CAANZ safety auditor, but best of all, he's an old 3 Squadron RNZAF helicopter pilot!

Andy McKay – Andy's done quite a few things in his life – he was once a detective, ran a helicopter training establishment in Masterton, is currently an Aviation Examiner with CAANZ, and alongside this position, is also Director of Civil Aviation, Niue (having taken over that role from Bill MacGregor).

Welcome back to former President, **Graham Streatfield**, still with the RNZAF, in the position of Safety Learnings Manager. Graham's term (2017-19) as President was interrupted by his posting to Washington DC, as the New Zealand Air Attaché. As a side benefit to that posting, I was able to get him along to the May 2019 Mid-Atlantic Chapter dinner meeting, and the International Council meeting the next day.

Membership administration

Since ISASI moved its membership administration on to the Wild Apricot platform, ISASI membership numbers are no longer allocated. For those who had membership numbers before the changeover, these remain valid. The category of Affiliate member has now become redundant, and anyone in that category is now automatically an Associate member, with the prefix AO instead of the previous FO. So, the categories currently applicable to NZSASI are: AO (Associate Member), MO (Full Member), LM (Life Member) and LW (Life Fellow). Of the LW category, there have been only two in NZSASI, Ron Chippindale and one other who shall remain nameless for modesty reasons.

Membership Dues

An ad hoc group was formed at the ISASI Council meeting in Nashville last year to address the dues issue – the group consisted of the four membership committee members and several other Councillors. Various issues have been discussed in the intervening period: the actual dues amounts; the ‘tiering’ of these amounts to assist societies comprising mainly low-earning members (e.g., Pakistan SASI); remitting part of received dues back to the individual societies; and associated administration matters. Discussions on the tiering and remitting are ongoing.

As far as could be determined, the last increase in dues was in 2010, and since then, ISASI has survived on a combination of seminar income and membership dues. The seminar income had taken a major hit from the effects of COVID-19, so a review of the finances was undertaken as a result.

As decided at the International Council meeting on 29 September, the membership dues will increase with effect from 1 January 2025, as follows: Student Member – US\$30; Associate and Full Members – US\$95; Corporate Members \$US750. These amounts will show on the membership invoices due out in the near future. Pity about the current exchange rate, eh! Let’s hope this doesn’t put anyone off renewing.

To avoid future shocks, the Council has undertaken to review the dues levels at three-yearly intervals.

Council Policy

Or more fully, the International Council Policy and Procedures Manual. It badly needed a makeover, so Muggins volunteered. A much bigger job than it first appeared, but it is now in much better shape, a lot fewer words, and almost ready for final review.

President’s Postscript

Planning is underway for the 2026 ANZSASI conference. The Executive team has decided it will be held in Wellington, and we are currently researching venues. We welcome volunteers to assist the committee with organising it, as Wayne and Mike will soon be based overseas, so AB and I will need your help.

From your Executive team we wish you all the best for the new year ahead and hope to see some of you at ANZSASI in Sydney later this year.

Kia haumaru te noho (stay safe)

Ngā mihi

Jim

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