
AUSTRALIAN SOCIETY OF
AIR SAFETY INVESTIGATORS
Winter Newsletter

ASASI Winter Newsletter

August 2025

In this newsletter you can expect:

Welcome to the Winter edition of the ASASI News Journal!

It has been a busy year with the preparation and organisation of the Australia & New Zealand Societies of Air Safety Investigators Annual conference, ANZSASI2025 , at the University of New South Wales , Randwick, Sydney. The UNSW generously provided the venue for the conference in the Tyabb Room at the John Scientia Centre. Although it was a departure from our usual venue arrangements at hotels, the facilities were excellent and ideal for our conference. Logistically it was more complicated with organising catering and negotiating discounts for accommodation at local hotels. However, the feedback was very positive and the venue generated a professional atmosphere for the conference.

In this edition we have reprinted the ASASI President's review of ANZSASI2025, and some background information regarding the Ron Chippindale memorial lecture series plus preliminary information regarding ANZSASI2026.

We have extended the Members Column with details of new members plus a column about our Corporate Members.

There has been much speculation regarding the Air India Boeing 787 accident and with the release of the preliminary report even more speculation. We have included some general comments about accident investigation as well details of the recorders and Indian facilities.

The monthly Rotorcraft Asia- Pacific e-News from Rob Rich has a wealth of information for members interested in rotor craft operations. We have reproduced two articles regarding 30 years of CASA operations and updates .

Finally, we have included the first of a series of historical information files regarding air safety investigation in Australia

If you have any comments or corrections please contact the ASASI executive.

President's Review of ANZSASI 2025

About ANZSASI
A joint initiative of the Australian Society of Air Safety Investigators (ASASI) and the New Zealand Society of Air Safety Investigators (NZSASI), the aim of the Australian and New Zealand Societies Air Safety Investigators (ANZSASI) conference is to provide ongoing professional development for aviation industry professionals working in the field of aviation safety and accident investigation.

The origins of the ANZSASI Annual Seminar dates back to the inaugural 'Regional Seminar' event run in Brisbane in 1997. In the current era, the conference is hosted on an annual rotation basis between the Australian and New Zealand societies. One of the two bi-annual Asia Pacific Cabin Safety Working Group (APCSWG) Seminars is held to coincide with the ANZSASI conference, traditionally on the Friday preceding.

The annual ANZSASI professional development conference is aimed at experienced and early career air accident investigation professionals, as well as aviation safety professionals, academics and students interested in aviation safety and air accident investigation.

ANZSASI 2025: Surfing the Future of Safety: Investigating Change for Better Outcomes
The 2025 ANZSASI Conference, held at the University of New South Wales (UNSW) campus in Kensington, Sydney from 30 May to 1 June, marked a major milestone in regional collaboration and innovation in the air safety investigation community. Hosted this year by ASASI, the event brought together over 75 delegates from government, academia, industry, and international bodies.

Following the 2025 theme of 'Surfing the Future of Safety: Investigating Change for Better Outcomes', the program featured a strong blend of technical rigour, operational insight, and forward-thinking analysis, covering a broad range of case studies, regulatory challenges, and safety frameworks.

After a warm traditional welcome by ANZSASI Conference host and Gold Sponsor, Professor Brett Molesworth, UNSW, Captain Alf Jonas, President ASASI, opened the conference. Alf contrasted the safest year on record for commercial jet airline fatalities in 2023 (zero fatalities) and 2017 (which had the lowest fatal aviation accident rate in history) with a recap of the devastating accidents of the last nine months from around the globe (2024/2025). Underscoring the evolving complexity of aviation risk – 'it was never just one thing' – rather a convergence of human factors, automation, environmental conditions, infrastructure, and more. Alf emphasised that the achievement of 2017 reminds all that the safety systems and principles do/can work, but only if this industry continues to invest, innovate and investigate. Alf encouraged all to treat every accident not just as a tragedy (which they most certainly are), but as a data point which is not only an opportunity to prevent recurrence, but to continuously improve.

Chief Commissioner of the Australian Transport Safety Bureau (ATSB), Mr Angus Mitchell's opening keynote address reflected on recent complex investigations in Australia, emphasising the growing need for data-rich methods, digital literacy, and interagency collaboration.

Mr David Clarke, Chief Commissioner of the New Zealand Transport Accident Investigation Commission (TAIC), offered a timely exploration of Artificial Intelligence (AI) as a tool in the future of safety investigation in his keynote presentation Unlocking New Potential: AI in Safety Investigations.

Commissioner Clarke's keynote captivated the audience with its clear-eyed view of both the promise and complexity of integrating AI into investigation practice. Drawing on case study material, research partnerships, and TAIC's early-stage work, Mr Clarke highlighted how AI can be used to rapidly process vast volumes of data, including: flight data and identifying patterns and lessons learned across various incident types through historical searches. The Commissioner cited the example of

UNSW 2025

Opening Address by Alf Jonas, President ASASI

President's Review of ANZSASI 2025 Continued

unlocking historical knowledge across over 500 inquiry reports not only within TAIC but across equivalent agencies such as the ATSB [very useful for desktop study, but also to recall otherwise 'lost' valuable material]. AI has being used in visual reconstructions of aircraft behaviour during accidents as well. TAIC is also developing innovative tools for AI to accurately transcribe recorded interviews [and assist in the interview process itself]. He also highlighted the challenges and limitations of AI in Accident Investigation, such as: limited adaptability to unprecedented scenarios; and organisational implementation barriers.

[Author's note: Due to the limitations of machine learning ('narrow' AI) and current low development levels of Artificial General Intelligence (AGI), AI is limited in it's ability to interpret new and unique events. AI is also prone to errors, bias and the phenomenon of 'hallucination'. A classic headline cited by the Commissioner was: 'AI-Controlled Camera Follows Bald Referee's Head Instead of the Ball'! As a result, AI output requires regular Subject Matter Expertise oversight, monitoring, and verification and validation.]

Mr Clarke's remarks also touched on emerging ethical and legal questions surrounding the use of AI-generated insights in formal findings and how transparency and explainability will be critical in maintaining public and judicial confidence in investigation outcomes.

Chief Commissioner Clarke was careful to note that AI is not a replacement for accident investigators, but a powerful augmentation tool - one that can accelerate routine analysis and free up human expertise for higher-value analytical and decision making tasks. All these AI assisted initiatives would lead to faster case resolutions while maintaining investigative quality and depth.

Saturday's program featured high-profile cases and technical studies, including Upset Prevention and Recovery Training (UPRT) Australia's fascinating analysis of Loss of Control In-Flight (LOC-I) events and the high tech science behind the training program (including Anxiety Inventory analysis and Para Sympathetic Nervous System suits). The ATSB provided two presentations on the Seaworld Helicopter mid-air collision, with insights, firstly, from an accident investigator's perspective and, secondly, a Seaworld survivability safety study.

Delegates were treated to thought-provoking papers from Airbus on international collaboration, a UNSW research study on runway incursions through a human factors lens, and a presentation by Professor Graham Braithwaite from Cranfield University exploring global developments affecting the investigation profession.

Group Captain David Smith, Director of the Defence Flight Safety Bureau (DFSB), opened Sunday's session with a keynote centring on DFSB's roles and mandate, and a review of recent Defence investigations. The morning keynote was followed by diverse presentations on a DFSB engine failure investigation, a Rolls Royce small turbine engine failure investigation analysis, runway safety, and international practices in family assistance, and investigative modelling.

ATSB Chief Commissioner, Angus Mitchell

UPRT Australia Shane Tobin

President's Review of ANZSASI 2025 Continued

Culture, Connection, and Community
Beyond the technical sessions, the conference offered plenty of opportunity for professional networking and knowledge-sharing. The Friday evening welcome reception at the Royal Hotel Randwick brought together 55 attendees and partners, while the conference dinner on Saturday evening featured a moving keynote address from Mr Greg Hood AO, former ATSB Chief Commissioner, who reflected on his time leading the agency through key moments such as the MH370 search.

Notably, the conference included strong attendance at the pre-conference Asia Pacific Cabin Safety Working Group (APCSWG) session, which brought together 64 participants for presentations from regulators, subject matter experts, and operators. The ASASI Executive also welcomed five UNSW aviation students, continuing the society's tradition of mentoring and encouraging the next generation of investigators.

Reflections and the Road Ahead
As the aviation industry faces renewed challenges—from continued operational recovery post-COVID to the emergence of new platforms, technology and risk environments—the role of the investigator is evolving rapidly. AI, as David Clarke articulated, is no longer a speculative tool of the future but a present-day force reshaping how we understand and respond to accidents.

The 2025 ANZSASI Conference made clear that the investigation community is both ready and willing to adapt—while holding fast to its core principles of independence, rigour, and public service.
As delegates departed UNSW, many did so with fresh ideas, renewed networks, and a shared sense that the work of safety investigation is entering a new chapter—one powered not just by technology, but by the enduring human drive to learn, improve, and protect lives.

Peter Ayre, ATSB

Mark Bathie, ATSB

Mr Peter Budd

Peter Budd receiving ANZSASI 'Space Pen'

Networking

ANZSASI 2025 Networking

TAIC Chief Commissioner, Mr David Clarke

Receiving ANZSASI memento

Rebecca Kerr, Airbus

Ms Yan Yan, UNSW PhD

Mr Paul Fox (@ Professor Graham Braithwaite), Cranfield University

Mr Greg Hood, AO Keynote Dinner Speaker

Conference Dinner

Mr Hood receiving gift and ANZSASI Space Pen

Conference Dinner Professor Brett Molesworth receiving gift and ANZSASI Space Pen!

Conference Dinner conversations

ASASI VP, Ms Clare Fry

Ms Clare Fry introducing GPCAPT Dave Smith, Director DFSB and presenting gifts

Ron Chippindale Memorial Address winner: MAJ Mehdi Mousouri

Mr Jon-Adam Michael, RR USA

Delegate Interaction

Mr Lee Ungermann

Ms Kerryn Tiddy, flydubai

Mr Kym Bills, Edith Cowen University

Mr Jim Burtenshaw, TAIC | NZSASI President

Mr Jeffery Shearer, TAIC

Handover of ANZSASI Cow Bell to NZSASI President

ANZSASI and UNSW Execs

ANZSASI 2025 Closing Remarks by ASASI President, Alf Jonas.
'Space pen anyone??' Final one awarded to ASASI Secretary/Treasurer – Mr Paul Mayes

ANZSASI 2026

"ANZSASI 2026 will be held in Wellington New Zealand, over the period 05-07 June 2026. We are planning on holding the conference at the James Cook Hotel Grand Chancellor Wellington, which is located between The Terrace and Lambton Quay in the CBD. I have just signed the contract with the James Cook Hotel Grand Chancellor, so everything will be in one place, in the heart of the Wellington CBD."

Website for the hotel is:
https://www.grandchancellorhotels.com/james-cook-hotel-grand-chancellor

Ron Chippendale Presentation

Ronald "Ron" Chippindale (26 March 1933 – 12 February 2008) was the Chief Inspector of Air Accidents in charge of the New Zealand Office of Air Accidents Investigations.
He was born in Kettering England, and moved to New Zealand in 1938. He was educated at Rangiora High School.

Chippindale was a pilot for the Royal New Zealand Air Force from 1951 to 1974, flying transport and training aircraft. He was a qualified flight instructor and spent over eight years in Defence Flight Safety before retiring (as a squadron leader) after 23 years of service. He was a graduate of the Royal Air Force College, Cranwell.

On retirement from the RNZAF, Chippindale was appointed as an Inspector of Air Accidents in 1974 and in 1975 became Chief Inspector of Air Accidents in charge of the New Zealand Office of Air Accidents Investigations.
When the Office was abolished in 1990, he was appointed Acting Chief Executive Officer and Chief Inspector of Air Accidents in the Transport Accident Investigation Commission (TAIC), which replaced the Office of Air Accidents Investigation.

In 1992, When a Chief Executive was appointed; Chippindale became the Chief Inspector of Accidents with the Commission, an appointment he retained until his retirement on 31 October 1998.

During this time period, he was the Investigator-in-Charge of 48 aircraft and rail accidents and incidents, and had overall responsibility for the investigation of approximately 400 accidents and incidents. He was involved in several major aircraft accident investigation such as being the chief investigator of the Mount Erebus Disaster, the DC-10 accident in Antarctica in which 257 lives were lost.

He was a member of International Civil Aviation Organization (ICAO) teams, which investigated the Mozambican Tupolev Tu-134 air disaster in South Africa in which the President of Mozambique lost his life, and the shooting down of three civil aircraft: Korean Air Lines Flight 007 over Russia and two United Nations (UN) L-130 aircraft in Angola.

Chippindale has represented New Zealand at Accident Investigation Group meetings of ICAO and drafted the ICAO circular on the provision of “Family Assistance” after an aircraft accident. He is also the New Zealand Councillor to the International Society of Air Accident Investigators and a transport accident investigation consultant. In 2004, Mr. Chippindale was awarded the 'Jerome F Lederer' award for outstanding lifetime contributions in the field of aircraft accident investigation and prevention and achievement of the International society of Air Safety Investigators’ Objectives and technical excellence.

Ron Chippendale Presentation Continued

In March 2007, Chippindale was one of 22 people who received a New Zealand Special Service Medal (Erebus) at a ceremony in Wellington. The medal was awarded for the work in what became known as “Operation Overdue”.
Chippindale, 74, was struck by a car which went out of control in Porirua, 20 km north of Wellington, at 7.25am 12 February 2008, and was killed instantly.
Until his fatal accident, he was an adjunct lecturer teaching ‘Aircraft Safety Investigations’ in a 3 paper series extramurally (by correspondence) at Massey University (Palmerston North Campus), School of Aviation.
The NZSASI and ASASI membership agreed to the initiation of the Ron Chippindale Memorial Lecture to commemorate Ron’s legacy to air safety investigation by inviting a speaker to present a paper at the annual ANZSASI Seminar in his memory.
The Presenter of the Ron Chippindale Memorial Lecture at this year’s conference was:
Major Mehdi Moussaoui

Mehdi received an undergraduate degree in Aeronautical Engineering before joining the Australian Army. He started his career at 171 Aviation Squadron with the Blackhawks, and then posted into the Helicopter Structural Integrity team at the then Directorate General Technical Authority (now the Defence Aviation Safety Authority). He has worked in project and engineering roles for MRH-90 and Chinook platforms before staff roles and as an aviation safety investigator for Army Aviation and now for the Defence Flight Safety Bureau.
His presentation was on the accident to the MRH-90 Taipan Engine Failure Resulting in Ditching - Jervis Bay, NSW, 22 Mar 2023 with particular reference to the engineering and technical issues identified during the investigation.

Corporate ISASI Membership

Our individual and corporate members represent more than 70 countries and are a diverse group working in all facets of the industry worldwide. Members include major aircraft manufacturers, government investigation agencies, labour unions, military services, safety organisations and private industry.

Corporate membership would indicate to a worldwide audience of safety professionals that you are committed to the enhancement of aircraft accident/incident investigation and a reduction of loss. Your organization is one that it is directly involved in aviation, and by its nature is dedicated to improvement of aviation safety. Your membership would indicate to the aviation community, your customers, and your employees that management supports and is committed to the enhancement of aircraft accident investigation and a reduction of aircraft accident rates.

There are five ISASI corporate members associated with ASASI. We very much appreciate their support and will be recognising their contribution in our quarterly News.

In this edition we are spotlighting one of these : the Australian Defence Flight Safety Bureau.

The Defence Flight Safety Bureau is accountable to the Chief of Air Force in his capacity as the Defence Aviation Authority for the strategic management of flight safety in Defence. The Bureau provides Defence with independent aviation investigation, research and analysis, safety training and safety promotion capabilities. Accordingly, DFSB is the centre of expertise for flight safety within Defence.

Group Captain David Smith is Director of the Defence Flight Safety Bureau

Group Captain David Smith joined the Royal Australian Air Force in 1984 – and went on to graduate from the Australian Defence Force Academy, Number 145 Pilot's Course, and Operational Conversion to the F/A-18 in 1990. GPCAPT Smith flew Hornets over the next 8 years, as both a junior officer, and in training and executive roles. GPCAPT Smith left the RAAF for a short period to fly with Pel-Air Defence Aviation, before returning to the Air Force and continuing in his F/A-18 career – serving as the Commanding Officer of No 2 Operational Conversion Unit, and as Executive Officer of HQ 81 Wing. GPCAPT Smith has held senior officer positions on deployment for Operation OKRA, in HQ Joint Operations Command, and for the last 5 years in the Defence Aviation Safety Authority, first as the Director of Aviation Operations, and for the last two and a half (extremely busy) years, as the Director of the Defence Flight Safety Bureau.

He gave the Keynote address at the ANZSASI2025 conference titled "Surfing the Future of Safety: Investigating Change for Better Outcomes"(please see the ASASI website Conference Papers for a copy of the presentation)

ASASI is very grateful for the ongoing support of the DFSB who have been well represented at the ANZSASI conferences for many years. Eleven members of the DFSB attended this year's ANZSASI conference.

PNG Accident Investigation Commission is a Corporate member and we have a close relationship with the PNGAIC

The following article was supplied by Emerson Buidal of the PNG AIC who has been an active member of ASASI and presenter at ANZSASI conferences

1. Professional Profile

Emerson Buidal is the Executive Manager Investigation at the Papua New Guinea Accident Investigation Commission (AIC) based in Port Moresby. With over a decade of experience in aircraft accident investigation and involvement in 51 investigations, he has progressed from a trainee investigator to a senior leadership position. His career reflects a strong commitment to aviation safety, technical excellence, and continuous professional development.

2. Engagement with ANZSASI and Regional Safety Collaboration

The Commission, through its investigation team, recognises ANZSASI's vital role in fostering collaboration, knowledge sharing, and continuous improvement among safety investigation professionals across Australasia and New Zealand. The Commission values its participation in ANZSASI as an opportunity to strengthen regional partnerships, align with international best practices, and contribute to the advancement of transport safety. Participation in such forums also supports the professional development of AIC investigators and underscores PNG's commitment to maintaining high standards in independent safety investigations.

3. Structure of the PNG Accident Investigation Commission

The Commission is an independent, no-blame investigation authority established under the Civil Aviation Act 2000, mandated to investigate aircraft accidents and incidents in accordance with ICAO Annex 13. The Commission is governed by a three-member Board of Commissioners and led operationally by a Chief Executive Officer, who is responsible for strategic planning and day-to-day operations. The Commission operates through three main divisions: Executive, Corporate Services, and Investigations. Reporting directly to the Minister for Civil Aviation, the AIC operates independently of regulatory authorities, service providers, and judicial bodies.

For more information, please visit the Commission's website through this link: https://www.aic.gov.pg/

4. Operations of the PNG Accident Investigation Commission

The operations of the Commission are guided by its mandate to conduct independent, thorough, impartial, objective, and no-blame investigations into aircraft accidents and incidents, in accordance with the Civil Aviation Act 2000 and ICAO Annex 13. The AIC initiates investigations upon notification followed by appropriate assessment and determination of investigable of occurrences within PNG or involving PNG-registered aircraft abroad and prioritises timely evidence collection and preservation.

The Commission engages with both domestic and international stakeholders involved in investigations conducted under ICAO Annex 13. These include operators, manufacturers and their technical advisors, regulators, and aircraft accident investigation authorities from other States, along with their accredited representatives. Such engagement promotes effective, cooperative, and collaborative investigations. Throughout the process, the Commission maintains strict independence and confidentiality, with a sole focus on enhancing aviation safety through evidence-based findings and the issuance of safety recommendations to address identified safety issues.

5. Investigations

A. Recent / Ongoing Investigation

The Commission is currently progressing four (4) ongoing investigations as outlined:

- A Cessna Caravan 208 aircraft (PNG registration P2-AMH): Experienced an abnormal runway contact during landing at Balimo Airstrip, Western Province, Papua New Guinea.
- A Cessna T188C aircraft (Australian registration VH-SOY): Impacted terrain during a low-altitude operation near Sangkiang Village, Madang Province, Papua New Guinea.
- A DHC-6 Twin Otter aircraft (PNG registration P2-AXL): Veered off the runway during landing at Kerema Airport, Gulf Province, Papua New Guinea.
- A BN2B-26 Islander aircraft (PNG registration P2-SAM): Impacted terrain near Sapmanga, Morobe Province, Papua New Guinea. All five persons on board were fatally injured.

B. Major Investigations by the Commission

The following were the major accident investigations that were conducted by the Commission since its establishment in 2010:

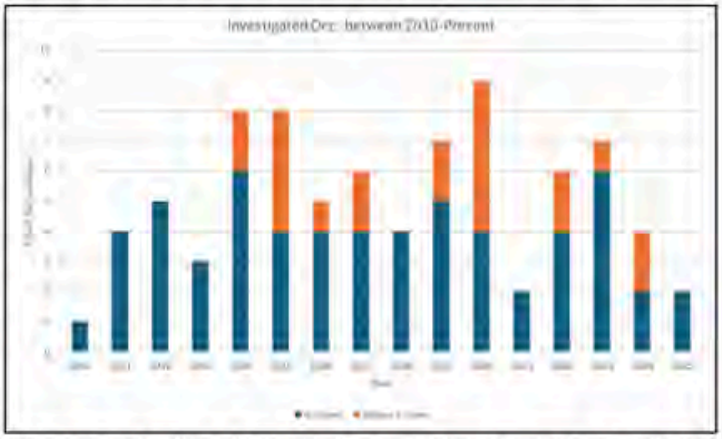
- Dash 8-100 aircraft (PNG registration P2-MCJ): In 2011, the aircraft was involved in an accident near Madang, Papua New Guinea, due to inadvertent selection of flight idle/governor beta mode in flight. This led to dual engine failure and loss of control. There were 28 fatalities in the accident.
- Pilatus Britten Norman Turbine Islander (PNG registration P2-SBC): In 2016, the aircraft impacted terrain about 1.2 km west of the threshold of runway 07, Kiunga Airport, Western Province, Papua New Guinea, during final approach. All persons on board were fatally injured.
- Mil-8 MTV-1 helicopter (PNG registration P2-MHM): In 2021, the helicopter impacted terrain following a loss of control after take-off at Gobo, Jiwaka Province, Papua New Guinea in 2021. One person sustained serious injuries.

C. International Investigation – Delegated to PNG

- ATR72-500 aircraft (Vanuatu registration YJ-AV71): Operated by Air Vanuatu, the aircraft veered off the runway in Port Vila after an in-flight engine malfunction and smoke event, which prompted a Mayday call and emergency landing.
- A Boeing 737-8BK (PNG registration P2-PXE): Operated by Air Niugini, when, during its final approach, the aircraft impact the water of the Chuuk Lagoon, about 1,500 ft (460 m) short of the runway 04 Threshold. Six passengers were seriously injured, and one passenger, initially unaccounted for, was fatally injured.

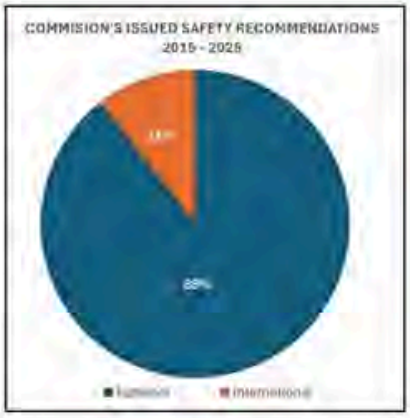
6. Reportable and Investigable Occurrences from 2010 to Present

The Commission has consistently demonstrated strong investigative performance, completed numerous accident investigation reports and conducted risk assessments in response to reported occurrences. A 24/7 duty officer system is in place, with officers receiving occurrence notifications and conducting assessments in accordance with the Commission's Incident Risk Assessment Methodology. Since its establishment in 2010, the Commission has investigated a total of 82 occurrences, comprising 61 accidents and 21 serious incidents. The Safety Database ECCAIRS, for which the Commission serves as custodian here in Papua New Guinea, contains 1,099 reportable occurrences, reflecting a strong commitment to comprehensive safety data capture and analysis. The AIC has consistently ensured timely responses to all reported events, contributing significantly to improvements in transport safety both nationally and across the Pacific region.



7. Safety Recommendations

Between 2015 and 2025, the Commission issued a significant number of safety recommendations aimed at improving aviation safety outcomes. The majority, approximately 89%, were directed to national stakeholders, including operators, regulators, and service providers, while the remaining 11% were issued to international stakeholders.

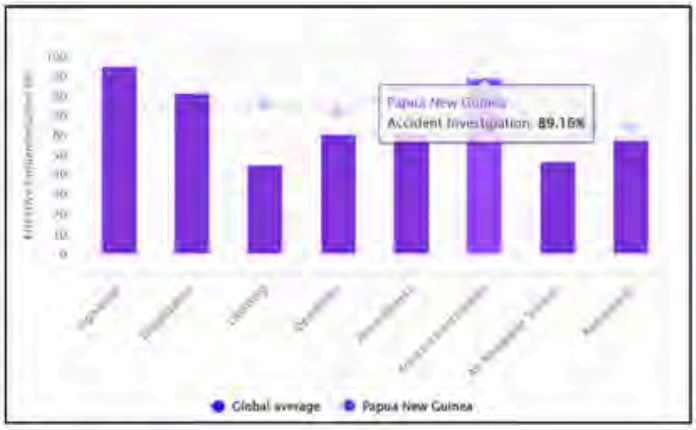


Notably, the AIC has issued several critical safety recommendations aimed at driving systemic improvements in aircraft operations, with outcomes that have influenced aviation safety practices globally. These include the fitment of a Beta Lockout system on Dash 8 aircraft to prevent inadvertent in-flight selection of the ground beta range, the amendment of the ATR 72 emergency checklist to strengthen flight crew response protocols during abnormal situations, as well as other contributions to global aviation safety.

The issuance of these safety recommendations, reflects the Commission's strong commitment to advancing aviation safety through evidence-based investigation findings, both domestically and internationally.

8. News / Achievements

A. AIG USOAP Audit Score — Papua New Guinea



The Commission has made substantial progress in strengthening its aircraft accident and incident investigation capabilities, as evidenced by the results of the 2023 ICAO USOAP Continuous Monitoring Approach audit. The effective implementation score for the Accident Investigation Group (AIG) increased from 26% to over 89%, marking a significant advancement in the States's compliance with ICAO SARPs. This achievement reflects the State's enhanced investigative capacity under the Commission, which is mandated to conduct thorough independent, and no-blame safety investigations in accordance with international standards.

B. Human Resource Capability and Ongoing Technical Training Framework

The Commission has implemented a comprehensive and structured four-phase investigator training system aligned with ICAO guidance. This system encompasses initial orientation, supervised on-the-job training, basic investigator courses, and specialised advanced training. This framework supports the AIC's technical capacity-building through accredited programs such as the Certificate in Transport Safety Investigation from RMIT University (in a partnership with the ATSB), the ICAO Singapore Aviation Academy Safety Fellowship, specialised international courses, and tailored in-house training consistent with ICAO guidance.

The Commission's investigators bring a wide range of multidisciplinary expertise across critical aviation fields, including flight operations, air traffic management, aircraft maintenance engineering, flight recorder analysis, safety management systems (SMS) and organisational factors, cabin safety, unmanned aerial vehicles (UAVs), ICAO USOAP compliance, and the evolving disciplines of human factors and accident prevention measure. This breadth of expertise enables the Commission to effectively respond to the full spectrum of aviation occurrences, conduct thorough and standards-compliant investigations, and fulfil its obligations under the ICAO.

The Commission has established a data-driven Staffing Needs Methodology and Policy to assess and determine the appropriate number of technical personnel required for both investigative and non-investigative activities, ensuring compliance with ICAO SARPs. This approach leverages accident investigation data sourced from the safety database.

The AIC fosters an inclusive and diverse workforce, with women representing 46% of technical investigator roles, reflecting its commitment to gender equity in technical aviation professions.

C. Investigation Facilities and Equipment Capabilities

The Commission's investigative capabilities have been significantly enhanced through the integration of technologies and robust in-house resources. These include drone-assisted aerial survey systems using PIX4D software for site mapping and terrain modelling. A dedicated engineering workshop supports the examination of wreckage and components, while a fully equipped flight recorder laboratory enables data download /recovery, readout, and analysis of both intact and damaged recorders and other electronic devices. The laboratory features specialized equipment such as Memory Access Retrieval Systems, PCB rework stations, chip recovery tools, and 3D flight animation technology. Investigative fieldwork is further supported by a comprehensive suite of tools, including evidence documentation kits, electronic instruments, precision measuring devices, and personal protective equipment.

The Commission is also expanding its underwater recovery capability through the use of specialized equipment, including underwater locator beacons, sonar scanning devices, and a remotely operated underwater drone.

D. Regional and Global Partnership

Beyond capacity building, the Commission has expanded its regional influence through active international engagement. It collaborates with other accident investigation authorities via Memoranda of Understanding and under the APAC Region Investigation Code of Conduct. These partnerships promote cooperation, information sharing, technical support, and mutual assistance in investigations. The Commission also supports *ICAO's "No Country Left Behind" initiative*, reinforcing its commitment to strengthening global aviation safety.

As a recognized regional partner, the Commission actively participates in key forums and initiatives such as ANZSASI, the ICAO APAC Accident Investigation Group (AIG), the International Accident Investigation Forum, and joint activities with other investigation bodies. Notably, the AIC has contributed to regional capacity-building efforts, including its involvement in the Underwater Recovery Exercise hosted by a fellow Asia-Pacific investigation authority.

In 2019, the Commission was accepted as a full member of the International Transportation Safety Association (ITSA), a global network of independent safety investigation authorities across all modes of transport. This membership marked a significant milestone, recognizing the AIC's contributions to transportation safety both within Papua New Guinea and across the Pacific region.

Welcome to New Members

So far this year we have had 11 new members who Joined ISASI and, as they are from Australasia, they automatically join our ASASI team. We are very pleased to grow our membership and welcome the new members. They have a wide range of backgrounds and experience which illustrates the scope of contemporary aviation safety and investigation. Details of three of new members follow and we plan to introduce other new members in future editions.

Dr. Alison O'Brien

Alison O'Brien has worked in aviation defence and investigation as a human factors specialist. She joined the Australian Transport Safety Bureau (ATSB) just over a year ago and previously worked at Boeing Defence Australia across arrange of projects. Alison holds a PhD in Human Factors and Systems Analysis from the University of the Sunshine Coast as well as Bachelor of Arts in Psychology and a Bachelor of Science in Exercise Science. Her research focused on distributed situation awareness and her professional interests lie in system resilience and work design. Outside of work Alison volunteers with Surf Lifesaving Queensland and is a keen ocean paddler. Originally from the UK she now calls the Sunshine Coast Queensland home.

Liam Fleming

Liam Fleming has over 15 years of experience in the aviation industry, with much of his career spent flying in Papua New Guinea. He has held roles including Line Training Captain and Flight Examiner with PNG Air on the ATR 72-600, and more recently operated on domestic and international networks with Air Niugini on the Fokker 70/100 fleet.
In 2024, Liam joined the Australian Transport Safety Bureau (ATSB) as a Technical Officer, conducting office-based investigations into aviation occurrences. He recently completed the Graduate Certificate in Transport Safety Investigation through RMIT University, developed in partnership with the ATSB.

Eden Kirk

Eden Kirk has been interested in the Aviation industry for over 5 years and travels annually to see family in the UK. This sparked their passion for the industry, with them often requesting to visit the cockpit to sit in the pilot's seat. At the age of 2, they had a cabin crew's hat placed on their head. Following their dream, Eden is now a 1st Year Aviation student at UNSW studying a Bachelor of Aviation Management with a Graduate Diploma in Flying, with plans to become Captain Kirk down the line. They are a keen member of the UNSW Aviation Society, currently holding the position of Events Subcommittee Member (2025). Eden has a keen interest for air safety within the industry and how we can improve it by sharing experiences and working together. They attended the annual 2025 ANZSASI Conference held at UNSW Kensington and thoroughly enjoyed it, learning from some of the best minds in the industry.

Accident involving Air India's B787-8 aircraft bearing registration VT-ANB at Ahmedabad on 12 June 2025

The loss of the Air India Boeing 787 Dreamliner is the worst aviation accident for a decade. The worldwide news outlets have been speculating about what happened and "who to blame ". "Experts" have been interviewed with ideas and guesses to provide public interest for the news media.

As air safety professionals we know that the required investigation procedure must be thorough, painstaking and consider all possible aspects . It must be based on factual information and early speculation can be very misleading.

The Boeing 787 has a particularly good safety record with over one thousand in service with many operators . This is the first hull loss of a Boeing 787. The aviation industry and public will want confirmation that the aircraft type is safe and can continue to be operated safely. This pressure must not influence the completeness and integrity of the investigation.

NTSB, USA appointed an Accredited Representative and Technical Advisers from Boeing, GE and the Federal Aviation Administration (FAA) to assist in this Investigation. A team led by the NTSB Accredited Representative comprising of representatives from Boeing, GE and FAA arrived at Ahmedabad on 15.06.2025 and participated in the Investigation. A team of officials from AAIB, UK also arrived at Ahmedabad and visited the site with the Indian DG, AAIB.

The Indian investigation authorities in conjunction with the American NTSB, British AAIB and manufacture's specialist will have a challenging task due to the wreckage disposition and location in a built-up area.. The Flight Data recording and Cockpit Audio recording have an essential role in the investigation.

The aircraft was equipped with two Enhanced Airborne Flight Recorders (EAFR) part number866-0084-102. The EAFR are fitted at two locations, one in the tail section at STA 1847 and the other in the forward section at STA 335. The two EAFRs are similar in a combined data stream of digital flight data and cockpit voice information, with both stored on the same device. The aft EAFR receives electrical power from the aircraft's main electrical system. The forward EAFR contains an additional power source from the Recorder Independent Power Supply (RIPS), a system that provides electrical power to the forward EAFR in the event of a power or bus loss on the aircraft. This allows the forward EAFR to continue to record available digital flight data, and voice data from the Cockpit Area Microphone (CAM), even after power is lost to other aircraft systems.

A preliminary report into the investigation, published on 12 July in India, details the basic background flight information and wreckage analysis. It does not identify any engineering or aircraft defects which could explain the accident. There have been no airworthiness directives released so far.

The forward and aft EAFRs
According to data from the flight recorder, both of the plane's fuel control switches moved from the run to the cut-off position in the space of a second, three seconds after lift – off.

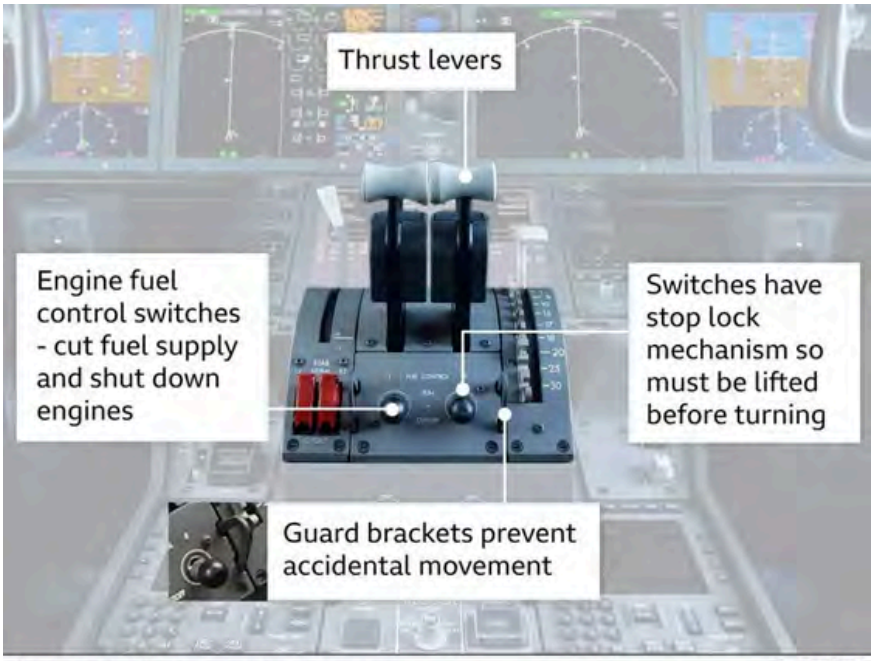
The report states that the fuel-control switches abruptly moved to the "cut-off" position, starving the engines of fuel and triggering total power loss. In recovered cockpit voice recordings, the report said one of the pilots can be heard asking "why did you cut off?" - to

Accident involving Air India's B787-8 aircraft bearing registration VT-ANB at Ahmedabad on 12 June 2025 Continued .

which the other pilot replied he "did not do so". The report does not specify which voice is which.

Therefore, the Preliminary report raises more questions and there will be continued speculation by the media and experts.

It will be several months before a final report or interim report is released.



Source: The Air Current, Getty Images BBC

You can find the Preliminary Report following this link

https://aaib.gov.in/What's%20New%20Assets/Preliminary%20Report%20VT-ANB.pdf

Change in the air: CASA at 30
Over 30 years, CASA has striven for safety in an aviation sector that has changed profoundly. The way we work now is very different, but our mission to ensure safe skies for all – is essentially the same. Source: CASA. 4 July 2025. By staff writers, with our thanks.

It was 1995. Australia had a population of 17.1 million, 2.6 million mobile phones and a few thousand households paying handsomely for the privilege of watching pay TV instead of the 5 channels of broadcast television.
We also had a new aviation safety regulator, the Civil Aviation Safety Authority. CASA replaced the Civil Aviation Authority, which had been established just 7 years earlier as government reflected on the importance of having a dedicated safety regulatory authority to help avoid a repeat several high-profile, and avoidable, accidents experienced in the late 80s and early 90s.
The newly constituted CASA was split from the air traffic control and air navigation services arm of its predecessor, which was reborn as Airservices Australia. In 1995, CASA oversaw the safe operation of the 9,689 aircraft on the civil register, 708 of which were helicopters, and 31,825 licensed pilots. CASA's initial 1995–96 annual report mentions 5,444 licensed aircraft maintenance engineers (LAMEs).

Growth and transfiguration. In 2025, there are 27.6 million Australians – and 30.3 million mobile phones. There are more internet users in Australia in 2025 than there were in the whole world in 1995, when 16 million people logged on, most of them to the warbling of a dial-up phone line connection. Australia's aircraft fleet now stands at 16,475, of which 2,593 are helicopters – a growth of more than 300 per cent – and 28,545 registered commercially operated drones. The privately flown drone fleet is estimated at more than one million. CASA now oversees more than 65,000 pilots – including 35,000 remote pilot licences for drones – a category of aircraft unknown in 1995. In the commercial sphere, remote operator certificates (ReOCs) outnumber air operator certificates (AOCs) by 1,791 to 633.

But growth is not the only theme in CASA's story. Like aviation itself, the organisation was severely tested by the COVID-19 pandemic of 2020–22. The travel restrictions implemented in response to COVID-19 resulted in international and domestic passenger traffic in Australia decreasing by 95 per cent, from January to April 2020. Recovery was slow by comparison. The Australian Government committed over $5.6 billion to a suite of measures to support the aviation sector, industry and CASA, from March 2020 through to 2023.

Airline passenger levels did not return to 2019 levels until mid-2024, boosted in the early part of that year by people flying to see superstar Taylor Swift's series of concerts (according to an Australian Competition and Consumer Commission report). CASA's COVID-19 challenge was to oversee the safe reactivation of the aviation industry from its forced slumber at the same time as CASA itself was impacted by lockdown and travel restrictions.

CASA's digital transformation project, inaugurated in 2017 to move services such as licensing online, proved its worth, during these difficult years. Drones are not mentioned in CASA's first annual report, although Australia would become a pioneer in coming to terms with the new technology. Part 101 of the Civil Aviation Safety regulations came into effect on 1 July 2002, making Australia one of the first jurisdictions in the world to define safety standards and regulations for this sector. The relative certainty these regulations provided enabled the early development of a vigorous uncrewed systems sector in Australia. Regulating, overseeing and promoting safety in this new aviation sector, unknown in 1995, is a major part of the modern CASA's operations.

Success stories of 1995. Several of the aircraft types that have defined commercial and private aviation in the 21st century made their first flights or entered service in 1995. In the closing weeks of the old CAA's tenure, the Gippsland Aeronautics (now GippsAero) GA8 Airvan took to the air for the first time – it would go on to be an Australian success story in service all over the world.

It is pleasing to report that production of this tough and unpretentious aircraft has been restarted in 2025. In Minnesota, US, the first design of a firm founded by two brothers, Alan and Dale Klapmeier, took off.
The Cirrus SR20 was notable for its speed, composite construction and airframe parachute, a feature that, as of 2025, has saved 269 lives in 133 successful deployments.

The 777X is the latest version of Being's large twin that first entered in service in 1995.

On 7 June, the Boeing 777 entered service with United Airlines. Along with the Airbus A330, which entered airline service the previous year, it inaugurated the age of the large, long-haul twin-engine airliner, a triumph of seat-mile economics and passenger safety. It would be 18 years before the first passenger death in a Boeing 777 crash.
In Australian aviation, the major story of 1995 was the ongoing privatisation of Australia's overseas airline, Qantas, which was yet to absorb Australian Airlines (although it already owned the domestic carrier). In the business context, Virgin related to a chain of stores selling CDs and videocassettes. DVDs would not be introduced for another four years. DVDs are much diminished, but not quite extinct, unlike Compass I and II, Impulse, TigerAir and Bonza, all of which rose and fell over the past 30 years. An airline bearing the Virgin name would not be established here until 2000, overlapping briefly with Ansett Airlines, which collapsed in 2001.

End of a deadly era. Globally, 1995 saw 39 examples of a type of crash that has become very rare in the 21st century: passenger-carrying aircraft using ground-based navigation technology diverged from course and flew into high ground. Three of the most tragic 1995 examples were: 30 January, Taiwan. TransAsia Airways Flight 510A, an ATR 72-200, crashed into a hill during approach, killing all 4 crew members on board. 7 December, Haiti. A Beechcraft 1900D drifted off course and struck a mountain on approach to Port- au-Prince, Haiti, killing all 20 people on board. 20 December, Colombia. American Airlines flight 985, a Boeing 757, crashed into a ridge, after the pilots became preoccupied with reprogramming the flight management computer. All 8 crew and 151 of the 155 passengers were killed. A 2008 Australian Transport Safety Bureau report found the worldwide number of controlled flight into terrain (CFIT) accidents involving fixed-wing transport category aircraft declined from 39 in 1995 to 11 in 2004. For the first time since 1990, 2004 recorded no CFIT accidents involving aircraft weighing between 27,000 kg and 272,000 kg. Technology addressed this problem: global navigation satellite systems (GNSS) allowed flight crews to always know their position and forward- looking enhanced ground proximity warning systems (EGPWS) gave longer notice of dangerous terrain ahead.

Since 1995, the ground-based navigation system of VOR radio beacons has largely been replaced by GNSS-based systems such as area navigation (RNAV) and the precision approach certified required navigation performance (RNP) approach profiles.

Adding a key word: the rationale for CASA.
CASA was established after a turbulent and tragic period in Australian aviation. Several high-profile accidents revealed the weaknesses in the oversight regime administered by the CAA.
On 11 June 1993, Monarch airlines crashed near Young, NSW killing 5 passengers and the 2 pilots. The Bureau of Air safety Investigation (BASI) report into the accident found deficiencies both in the operator and in the oversight of the CAA. On 2 October 1994, Seaview flight CD 111, a Rockwell Aero Commander, crashed on a flight between Williamtown, NSW and Lord Howe Island, killing 8 passengers and its 25-year-old solo pilot. This crash prompted a Commission of Inquiry into the relations between the CAA and Seaview Air. In the context of these tragedies and failures, CASA was formed to explicitly prioritise safety. Its first report in 1995–96 gave this definition of its responsibilities:
'To enhance and promote the safety of civil aviation in the interest of the Australian public. CASA's focus is to work with industry to reduce aviation safety risks, with the priority being protection of fare-paying passengers. This is achieved through effective safety regulation and by encouraging a greater acceptance by industry of its obligation to maintain high safety standards.'
The CASA of 2025 still prioritises safety but does so in a proactive and systematic way. Encouraging and mandating the use of safety management systems in the aviation industry is one example of this more sophisticated, data-driven approach. And safety remains our core business: in 1995, CASA conducted around 6,000 audits and inspections annually. By 2023–24, inspection numbers surpassed 20,000, with emphasis on risk- based oversight and data-driven surveillance.
The technologies are different and still evolving, but CASA's work of inspecting, checking, advising, educating and regulating goes on.

A History of Aviation Accident Investigation in Australia
Ian Leslie

We propose to cover the development of the investigation organisations in Australia and the history of some of the main characters who have shaped aviation safety investigation.
This is the first of a series of articles on the history of aviation safety and investigation.

Accident investigation has always been an essential element in the development and safety regulation of aviation.

In Australia prior to 1927 accidents were investigated by Boards of Inquiry. Separate Boards were assembled for each accident, members being selected from suitably qualified officers of the Commonwealth Public Service: but public dissatisfaction led in 1927 to the creation of the Air Accident Investigation Committee to investigate all civil and RAAF aircraft accidents which the Committee deemed advisable to investigate.

The Committee had the power to make recommendations to the Minister for the prevention of recurrence of accidents. The Minister appointed the members of the first Committee: the President being Mr. H.Payne, an engineer; the Chairman Mr. Marcus Bell, Superintendent of Defence Laboratories; Colonel H.B.Gibbs, Chief Inspector Munitions Inspection Branch; Squadron Eric Harrison RAAF; and Captain Eric. J. Jones, Superintendent, Flying Operations, Civil Aviation Branch. An RAAF officer was appointed secretary to the Committee.
The Regulations required that all accidents be reported to the Controller of Civil Aviation and thence to the Minister and to the Committee.
Early in 1931 the Committee was reconstituted to comprise a Chairman with only two other members, the Chairman being the Chief Inspector Munitions Supply Branch, and the other members being drawn, one each, from the RAAF and the Civil Aviation Branch.

During the period 1935-1936 the accidents dealt with by the Committee were: RAAF - 5 major and 66 minor; civil aviation - 15 major and 107 minor. With some accidents the Committee authorised respected members of the aviation community to conduct the investigations. Reports of investigations would then be considered by the Committee. Proceedings were not open to the public and interested parties did not participate in the proceedings other than as witnesses. The findings of the Committee were usually made public by the Minister through the Press.

In 1932 an informal group of engineers in Sydney voiced strong criticism of the investigation into an accident of an experimental aircraft in which the pilot and passenger were killed. Their criticisms were, firstly, that the Committee was comprised of Defence Department officials who, it was alleged, tended to protect the interests of the Defence Department, and interested parties were not able to participate, and secondly, that qualifications of the members of the Committee were not suited to the conduct of investigations of a technical nature.

This criticism and others in the Press probably had an important bearing on the decision to conduct in public the inquiry into the 'Kyeema' accident in 1938.Two additional members were appointed to the Committee: Mr. E.F. Herring KC, and Captain P.G.Taylor. Furthermore, interested parties could have had legal representation. The report from this Inquiry called for review of the organization of the Civil Aviation Branch and there were further calls for a reform of the investigation of accidents.

In response, the Government decided to appoint Air Courts of Inquiry. Essentially this is the concept which, in various modified forms, has prevailed since that time in respect of those major accidents when the Minister has decided that there should be a public inquiry. Prior to 1946 the investigation and study of accidents were not the function of any particular section within the Department and investigations were conducted by the most appropriate officer.
It was not until close to the end of the Second World War that there was a proposal for a re-organization of the Department. This was to establish a number of Directorates and was submitted to Mr. Daniel McVey, the Director-General, who made the following comment: "A Governmental civil aviation authority has important responsibilities regarding the issue of many types of licences. Discussions and decisions regarding those licences may affect considerably the liberty of the subject. For this reason I am rather concerned with the way that such decisions thereby are forced to be in the practice of applying administrative justice. In the same sense I am not at all happy in regard to the proposals I am making in regard to the investigation of accidents. In the present circumstances setting up of a quasi-judicial body similar to that which exists in the United States is not practicable.

It is therefore proposed, as an interim step, that such of the duties that are exercised by the CAB in the United States and which are applicable to Australia should be distributed among the Directorates that are proposed. This step may be regarded as a temporary measure only, particularly as far as air accidents are concerned." The proposal included the formation of a Directorate of Air Navigation and Safety (DANS). The Public Service Board commented "Regarding the objectives of the DANS, if what is intended is the getting of data which will assist in the preparation of rules, regulations etc., no comment is offered but it would not be appropriate for the Directorate responsible for the testing, licensing etc to have the conduct of investigations to determine the causes of accidents..." Consequently the organization proposal was varied to meet these expressed concerns. The investigation of major accidents was then included in the duties of a Chief Inspector of Accidents within the Directorate of Air Transport and External Relations (DATER).

In 1948 this accident investigation unit was removed from DATER and reported direct to the Director-General. Earlier, in 1946, the Superintendent of Accident Studies within DANS was appointed and the work of that Branch was to investigate minor accidents and to develop a system for the gathering of information and the analysis of matters related to the safety of aircraft operations. Accordingly, an Air Safety Investigation Report, CA225, was introduced to be submitted by field operation staff and covered all instances of aircraft defects, failures of airways facilities and other matters which could jeopardise air safety. It was found to be so successful that another Air Safety Investigation Report form, CA225A, was introduced to enable pilots also to bring to attention matters which they felt could jeopardise safety.
The Accident Studies Branch comprised a Superintendent, a radio inspector and an aircraft maintenance inspector. This reporting system was an Australian initiative and was unique in the aviation world but in recent years various types of incident reporting have been adopted in many other countries. Another responsibility was to disseminate safety information and this led the development of the Aviation Safety Digest.

Following the Air Court of Inquiry into the "*Lutana*" accident in 1948, the Minister raised concerns that the investigation proved unsatisfactory in that the reports of these Courts had indicated a serious lack of appreciation of the technical aspects of civil aviation. In 1949 the Director-General appointed a panel to examine the existing form of inquiries into aircraft accidents and to make recommendations. The panel comprised Mr. A.B.MacFarlane, Director DATER, Mr. J.H.Harper, Chief Inspector of Accident Investigations and Mr. H.W.Poulton, Senior Legal Officer. The panel submitted a number of recommendations, and changes to public inquiries were made.

Future Boards of Inquiry would be comprised of a Chairman and two or more members, each with the power of adjudication. The Chairman was to be a practising lawyer of wide experience, and the assessors or members would be selected as having wide experience with personal knowledge and expertise in air navigation. Interested parties could have legal representation and copies of the Departmental investigation report of the occurrence would be available to the Board and to interested parties.

New Air Navigation Regulations (ANRs) were introduced in 1947 following the coming into force of the Chicago Convention on Air Navigation, part of the development of the International Civil Aviation Organization (ICAO) . The Regulations relating to accident investigations retained the dual system of investigations with the Department investigating all accidents, but if the Minister decided that it would be desirable in the public interest he would then appoint a Court of Inquiry.

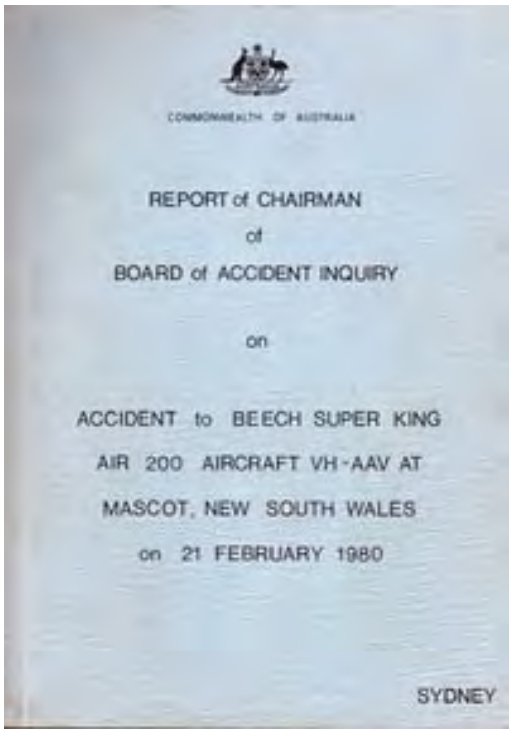
In 1952 the functions of incident investigation were combined with accident investigation and in 1954 the Branch was created as a separate Division, consisting a Director and a team of specialist investigators led by a Senior Inspector. It was designated DASI, but always referred throughout the Department as 'Daisy'. In a later variation of Departmental structure it was named the Air Safety Investigation Branch (ASIB).

A History of Aviation Accident Investigation in Australia Continued.

The re-organization of the Department introduced the establishment of Regional Offices. The investigation of accidents and incidents, other than those taken over by Central Office investigators, were handled by Regional Operations Branch staff, then reviewed by Central Office ASIB. During the 1950s ASIB Branches were established in the NSW, Vic/Tas and Queensland Regions, with SA/NT and WA following in early the 1960s.

These were staffed with investigators, now termed Inspectors of Air Safety, who were responsible to the Regional Director and to the Head of ASIB in Central Office. The Branches notified all occurrences to Central Office and sent reports of investigations for final review. In the event of a serious accident Central Office would either take over or assist in the investigation. The first head of the Air Safety Investigation Branch was Mr. Jim Harper, followed by Allan Lum, David Graham, Frank Yeend, Ian Leslie and then Grif Hughes.

The name of the judicial inquiry was also changed from Court to a Board of Accident Inquiry in 1955. Since that time there have been four Boards, the most recent (as of 2006) being into the accident involving Super King Air VH-AAV in Sydney in 1980.



With the rapid development of aviation in the post-War years and the increasing sophistication of modern aircraft types, the methods of investigation changed, particularly with the introduction of flight data and cockpit voice recorders. Investigation facilities were improved and engineering laboratories were introduced, together with specialist staff. When the Department of Transport was created, the ASIB retained the same reporting responsibility as previously but later it was named Bureau of Air Safety Investigation (BASI) and was relocated in Canberra in 1983 with the head, the Director, reporting direct to the Secretary and with direct access to the Minister.
When the Department of Aviation was abolished in May 1982, the Bureau was transferred to the Department of Transport and Communications, later, on 1 July 1999, becoming a part of the multi-modal Australian Transport Safety Bureau (ATSB), an 'outrider' element of the Department of Transport and Regional Services.

Thank you for reading!

PRESIDENT	ALF JONAS
VICE PRESIDENT	CLARE FRY
SECRETARY/ TREASURER	PAUL MAYES ASASIEXECUTIVE@GMAIL.COM
EDITOR	AMELIA DAVID
EMAIL	CONTACTASASI@ASASI.ORG
POST	P.O.BOX 399 BOWRAL NSW 2576