



Outlook

AHSA News

Vol. 38 No. 2 April 2022

March: Women's History Month



Lores Bonney



Robin Miller-Dicks



Deb Jeppesen and
Robyn Williams

Newsletter of the
Aviation Historical
Society of Australia, Inc.
A0033653P
ARBN 092-671-773

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Aviation Historical Society of Australia Inc.

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Outlook AHSA News is the quarterly newsletter of the Aviation Historical Society of Australia Inc.

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AHSA Meetings:

Melbourne meetings are held on the 4th Wednesday of each month, at the Air Force Association offices in Camberwell Road, Hawthorn. Meetings are also streamed on Zoom.

Membership of the AHSA for the 2022 calendar year costs \$50 in Australia and \$85 for the rest of the world. A membership application form can be downloaded from our website: www.ahsa.org.au

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President's Comment

I was recently driving past Melbourne city early in the morning on the way to pick up a lift to go to the Serpentine Air race, and as I drove along the freeway on the north side of the Yarra River it occurred to me that this was the location called the Cremorne Gardens, Richmond, where on 1 February 1858 the balloon 'Australasian' took to the air, a first for balloon flying in Australia. Then I looked up and there were no less than seven balloons drifting across the sky! A great spectacle.

They were probably on their way from a launch spot on the north side of the city and going cross country to land on Moorabbin airport. How they manage that to me is just amazing. I wonder if the balloon pilots and passengers realised or knew where the Cremorne Gardens had been or that the first balloon flight had taken place from there as they passed by? Real history.

The year 2022 would appear to be the year that we climb out of the trough created by the COVID-19 lockdowns and shut downs of all the activities and events that we consider normal. The RAAF centenary was put off along with the Avalon International Airshow. Airshows and aviation gatherings were also put off as we stayed away from other people while wearing face masks. In due course I expect the Museum of Victoria will have a display of masks that we used to wear. 2022 and the aviation events have started to increase. We have been holding dual face-to-face members meetings and running that with a Zoom presentation such that remote members can be part of the event. Our committee meetings have been convened online for some time. It was less than two years ago that we did not know what the word Zoom meant.

Events. We are starting to see a resurgence of events. Locally here in Victoria; the Serpentine Air Race took place, in New South Wales the Warbirds over Scone air show took place but had weather issues; and then as I write this the Tocumwal Airshow was scheduled for April 10. The West Sale airshow and the AAAA gathering at Wangaratta are scheduled for late April. All good events to attend. One could almost see increased foot traffic from pent-up enthusiasts and historians keen to attend aviation events.

Coming AHSA Melbourne Meetings:

April 27 - Leigh Edmonds speaks about the first airline in Western Australia

May 25 - WGCdr Phil Beanland speaks about No. 100 Squadron RAAF

June 21 - Jeff Maynard speaks about explorer and photographer Sir Hubert Wilkins

For all the camera-toting enthusiasts at Serpentine and Scone, I have to wonder just where those photos go. It is little wonder that in recent times a lot of enthusiasts claiming that they are the representative for this or that media outlet are being knocked back on their request for a media pass and a select photographic location.

I for one have to ask just what those camera enthusiasts do with their images? Do they in fact send them to aviation publications across the world? Or do they just sit on them and have the occasional slide night? Do they put them onto Facebook? A website? Do they say more than what the camera setting was? Do they put a date and location with the pic? For all their enthusiasm for aviation I see short term interest. I for one would like to see more of those enthusiasts getting involved with the AHSA or like organisations.

NGV. What does that mean? It means National Gallery of Victoria. The art gallery of Victoria. Already with a substantial facility just south of Melbourne city, there was a recent announcement that the NGV is to be expanded with a massive new building, one that will no doubt attract worldwide interest. Good for art lovers, tourists and those with an interest in the arts.

I can only express disappointment that Victoria and Australia at large has not elected to inject bulk amounts of finance into a Technology Museum and Centre for the benefit of those with an interest in technology. I guess it may depend on how much influence one can galvanise with government and those that control the purse strings.

It was interesting to read a comment from Andrew Carlile, the editor of Rag & Tube, the magazine of the Antique Aeroplane Association of Australia. He made an editorial comment "I'm sorry we don't have more member-supplied content". And with that I have to agree. I look at the AHSA publication, Aviation Heritage, as being a clearing house for member-supplied articles on Australian aviation history. During members Zoom meetings I see many smiling faces and in the background bookcases brimming with publications. I think that there must be a potential story or two from those publications, even a book review, that would be worth having printed in AH or even this newsletter. Have a think about it and better still do something about it Remember the Musketeers motto. 'All for one and one for all'. Very apt.

Best regards,

David Prosser
President, AHSA Inc.

AHSA NEWS

We have been saddened over the last quarter by the passing of several AHSA members:

Vale Alan Patching

Alan Patching passed away on Saturday 12 March. He was 97 years old (approaching 98) and passed away peacefully at home.

Alan was a Patron of the AHSA, an honorary life member and served as AHSA Vice President for many years.

Born in Queenscliff in 1924, Alan was educated at Point Lonsdale State School, Geelong Junior Technical College and then Gordon Institute of Technology in Geelong.

He joined Commonwealth Aircraft Corporation in early 1943 and moved to Aeronautical Research Laboratories after the end of the war, where he worked on pioneering investigations into metal fatigue in aircraft structures. This work took him to Woomera and also to a secondment in Farnborough, UK.

Alan became involved with gliding in 1943 when he helped construct a primary glider while he was with CAC. Over a period of some 69 years he flew more than 140 types of gliders in 12

countries. He commenced flying powered aircraft in 1970 and flew over 35 types, mainly aero towing.

Alan was a member of the Victorian Motorless Gliding Club, later to become Melbourne Gliding Club.

In 1994 Alan was awarded an Order of Australia (OAM) for his services to Australian gliding. In 2007 he was awarded the Lilienthal Medal, the highest FAI gliding award, for his services to the International gliding community over many decades, in particular for his substantial contribution to glider airworthiness and sailplane fatigue life.



Above: Alan at an AHSA meeting in Hawthorn in November 2015

Ever cheerful and smiling he will be missed from the ranks of the AHSA. Alan is survived by two daughters (Margaret and Rosemary) and daughter-in-law, Ruth (widow of Ian Patching) and her son Tighe Patching.

Vale Keith Meggs

Keith Raymond Meggs OAM, DFM, AAM(US), former AHSA President and Patron, passed away on Sunday, 13 March. He was aged 94. He had been in a retirement home for some time.



Above: Keith Meggs aboard a No. 77 Squadron Meteor

Keith entered the Australian aviation industry in 1943, commencing with Commonwealth Aircraft Corporation as a teenager while the company was producing Boomerangs and Wirraways.

He commenced his flying, in gliders, at the end of 1945. In August 1948 he joined the RAAF for flying training and subsequently flew Mustangs and Meteors in the Korean War, earning a DFM and AAM (US). Later he flew Vampires in Australia and Malta. He re-joined CAC in 1957 working for several years on Sabre fighters and the Ceres agricultural aircraft.

He then worked at the Department of Civil Aviation as an Air Traffic Controller before taking up freelance charter flying. His log books record a total of some 19,500 hours on 109 types of aircraft.

Keith was a foundation member of the AHSA in 1959, served as AHSA President from 1988 to 2013, and most recently was a Patron of the Society.

Over the past 50 years Keith compiled, in four volumes, a comprehensive history of 100 years of Australian aircraft building activity, published as *Australian-Built Aircraft and the Industry*. The first two volumes have been published, and the third and fourth volumes have been written. Keith's sons are working to complete the publication of the full series.

Keith has left an indelible mark on Australian aviation history – particularly since it is no longer possible to gather the amount of detailed information that he compiled over such a long time.

He leaves behind a daughter and three sons.

Vale Bert Cookson

Bert Cookson, who's full name was Bertie Malcolm Nesfield Cookson, passed away on 31 March. He was aged 93. In his later years he lived at Millingandi, NSW. It is understood that in recent times he suffered from dementia and Alzheimer's. His passing was sudden and unexpected.

Bert was a long time aviation historian and actively involved in the AHSA for many years. He served as Treasurer from 1983 until 1987, was part of the editorial committee for the AHSA Journal in 1990 and wrote many articles for the Journal.

He is best known for his compiling of the revered September 1996 publication *The Historic Civil Aircraft Register of Australia (Pre War) G-UAA to VH-UZZ*. This compilation was the result of many hundreds of hours spent in the National Archives of Australia at Brighton laboriously taking hand-written notes – since all that was allowed into the archives at the time was a pencil and paper.

Bert is survived by his wife Nancy, two sons, eight grandchildren and one great great grandson.

Vale Peter Ricketts



Above: A cheerful Peter Ricketts (photo via Harry Forsythe, Orient Aviation)

Peter Ricketts passed away on 16 February 2022 at the age of 80. Peter was a well-known aviation journalist and a keen

photographer, and he was one of the founders of the AHSA back in 1959. He was diagnosed with oesophageal cancer in July 2020 but he kept the diagnosis private.

Peter started writing for *Australian Flying* magazine in 1974. In 1981 he took over as editor and revamped the magazine to cover all aspects of the Australian aviation industry.

Peter then followed with a spell as a correspondent for Melbourne based *Aircraft* magazine, the then long-running standard of Australian aviation publications. He then moved to Singapore as a reporter for the original and very successful *Asian Aviation* magazine. He also spent time as a regional correspondent for *Commuter & Regional Airline News International*, *Interavia*, *Janes' newsletters* and *Aviation International News*. Until his passing, he was running his own e-newsletter *Asia-Pacific Aerospace Report*.

Vale Colin Lock

Colin Lock passed away on 3 February 2022. A former member of the AHSA, Colin worked as a Flight Engineering Officer with Qantas. He was also a dedicated historian who often helped fellow writers by sourcing obscure files at the Qantas Heritage Collection where he worked as a volunteer. Colin's 350-page book, *Finished with Engines - the story of Qantas' long haul flight engineers 1941-2009*, is part of his legacy and is highly recommended.

Vale Colin MacDonald

Colin MacDonald was a dedicated aviation enthusiast, enjoying many aspects of aviation history and current events. Colin served on the committee of the Australian Aviation Enthusiast's Group until it was decided to fold the organisation. He was also a member of the Monaro Club of Victoria and was a regular attendee at meetings. He did a great job as Club Plate Scrutineer and was a big Holden fan with a lot of knowledge of Monaro cars.



Above: Colin MacDonald working at an Avalon air show (photo via Dion Makowski).

Colin regularly worked at Avalon for Airshows Downunder at the WWII "fighter paddock" gate where fellow enthusiasts would (unsuccessfully) attempt to 'storm' the line, ending up with the inevitable, but gentle, "shirt-fronting". Working for the airshow organisation enabled Colin to hang out with the pilots and the swing band! He was also a reliable source of information about incoming aircraft on the roadside pre-Airshow aircraft arrival days.

Colin enjoyed the fellowship of AHSA Melbourne meetings and the traditional post-meeting cuppa and chat.

Vale to these fine gentlemen, they will be missed.

February Melbourne meeting – Michael Smith

Members met in Hawthorn for a marvellous presentation by Michael Smith about his most recent epic journey: a commemoration of the first flight from England to Australia by Sir Ross Smith, Sir Keith Smith, James Bennett and Walter Shiers in the Vickers Vimy G-EAOU in 1919. Mike re-traced their route and timed his journey to land in Darwin exactly 100 years to the minute of the original journey.

But before he could re-trace the Vimy's flight (as if that was not complicated enough), he had to get to Samara in south-west Russia to pick up the new aircraft in which he made the trip. The new aircraft, a Chaika LLC L65 SeaBear featuring dual controls, a glass cockpit and twin Rotax 914 UL Turbo Charged engines each pushing out 115 hp, can cruise at 220-240 km/h up to 4,000 m altitude, with a range of around 2,500 km. With a takeoff distance of 250 m and a landing run of 150 m, the SeaBear is ideal for operating from small fields (or water or snow).

After taking delivery of the new SeaBear, registered VH-OMS, he then had to arrange paperwork for the export of the aircraft (not a simple matter), and get himself to London in time to start re-tracing the Vimy's journey.

Mike was not able to follow the Smith's original route exactly, due to geopolitical changes and airspace restrictions which did not exist at the time. His route was as follows: London – Lyon – Pisa – Brindisi – Aerotre airfield – Souda Bay – Cairo – Aqaba – Haifa – Amman – Bahrain – Karachi – Delhi – Patna – Calcutta – Rangoon – Bangkok – Singapore – Surabaya – Dili – Darwin.



Above: During Mike's journey from London to Darwin he referred to an article describing the original flight, penned by Sir Ross Smith in the March 1921 National Geographic magazine (Michael Smith)



Above: Michael Smith (left) is thanked by AHSA President Dave Prossor (photo: Derek Buckmaster)

Mike completed the journey by flying from Darwin to Adelaide, stopping at all the same stops as the Smith brothers, Bennett and Shiers, and flying into Adelaide 100 years after the Vimy

arrived. But unfortunately most of the events planned to commemorate the original flight were impacted by the onset of the COVID-19 pandemic. Mike's talk was enthralling, and he patiently endured a long question & answer session afterwards.



Above: Another of Mike's recent ventures: Boutique small-batch spirits. Check them out at RothwellDistillery.com.au

March Melbourne meeting – WGCDR Mathew Shelley

For our Melbourne meeting in March we were honoured to host WGCDR Mathew Shelley, the Officer-In-Charge RAAF Museum, Point Cook.

This presentation was another in an ongoing series of collaborations between the AHSA Inc, and the RAAF History and Heritage Branch. We are looking forward to hosting more RAAF History and Heritage presentations throughout the rest of the year and into 2023.

Mathew gave an insightful update on the developments which are currently taking place at the RAAF Museum prior to its re-opening scheduled for June (see more details later under "Museum News").



Above: WGCDR Mathew Shelley presenting to the March AHSA meeting in Melbourne (photo: Derek Buckmaster)



Above: An example of what we can expect when the RAAF Museum re-opens following its Interim Redevelopment Project.

Mathew also provided a vision of possible future directions for the RAAF Museum – which provoked an enthusiastic question and answer session following his presentation.

Welcome to our new members

We wish a warm welcome the following new members who joined since the last quarterly newsletter:

Ken Broomhead OAM (Vic)
Paul Phillips (Vic)
David Ransted (Surrey, UK)
Paul Sheehan (Vic)
WGCDR Mathew Shelley (Vic)
Matt Wernert (Vic)

Kelvin Curnow (Vic)
Wayne Kearns (NSW)
Colin Smeal (ACT)
Michael Smith (Vic)

Search for a Secretary:

The AHSA requires a Secretary in order to operate as a not-for-profit organisation. Our current Secretary (Mark Pilkington) has indicated that he plans to move on to other activities at the end of 2022, so the Committee are commencing an early search for a new Secretary for the AHSA. If you have skills in organisation and are keen to contribute to the future of the AHSA, please contact the President (David Prossor) by email: President@AHSA.org.au.

Note that our monthly committee meetings are held via Zoom, so you don't need to be Melbourne-based to consider this position.

New AHSA website feature: This day in Australian aviation history

In the last Outlook we described this new feature on the AHSA website, which displays events from Australia's aviation history on today's date in previous years.

Historic events have been added from December to April, so events from other months have not been loaded yet. If you have any specific events you would like to see loaded, please email them to the webmaster via Outlook@AHSA.org.au

The feature shows events for the date on which you are viewing the website, but you can also search for events on a particular date, by entering the date into the search box. Use the format like "10 April 1935" rather than "10/4/35". You can also search by topics such as "Coffee Royal" or "Hargreaves", just type the text into the search box and a list of relevant content will appear.

FEATURE – MARCH IS WOMEN'S HISTORY MONTH

To celebrate Women's History Month, which has just passed, here is a selection of stories of pioneering Australian aviators:

Nancy-Bird Walton OA OBE

A 'trailblazer in the sky', 'born a bird without wings' and 'an Angel of the Outback' – these are just some of the ways aviation pioneer Nancy-Bird Walton has been described.



Nancy-Bird first stepped into a plane, a de Havilland Gipsy Moth, in 1928 at the age of 13. She immediately fell in love with the thrill of flight – beginning her journey then and there to

become, at the age of 19, the youngest Australian woman to earn a licence to fly commercially.

Using that licence to take fellow Australians on joy flights at fairs across the country, she was able to introduce many to her passion for flying, but it was her skills as a talented aviator that helped save lives.

Nancy-Bird was known as the 'Angel of the Outback' for her work transporting doctors across communities in regional New South Wales.

Without the technology that pilots rely on today, Nancy-Bird navigated using nothing more than telegraph lines and fences as reference. She would land in fields, careful to avoid hazards such as kangaroos and rabbit burrows.

She was passionate about her profession, establishing the Australian Women Pilots' Association in 1950, and serving as president for 40 years.

Nancy-Bird was an aviation trailblazer not just for women, but for anyone who has dreamed of the freedom of the sky. Nancy-Bird held her pilot's licence right up to three years before her passing at the age of 93 in 2009.

Two years shy of a century since she first took controls of an aircraft, the new Western Sydney International (Nancy-Bird Walton) Airport will open for domestic and international passenger services in late 2026.

Nancy-Bird's pioneering spirit and story lives on through Western Sydney International and her name will continue to be synonymous with paving new opportunities for the next generation.

Source: Western Sydney International Airport



Above: Nancy-Bird Walton (centre) congratulates FLTLT Robyn Williams (left) and OFFCDT Deborah Hicks (right) on their graduation from RAAF pilot training in June 1988, the first women to complete the course and become pilots in the RAAF. (Department of Defence)

Lores Bonney MBE AM

Maude Rose 'Lores' Bonney was born on 20 November 1897 in Pretoria, South African Republic, only child of German-born Norbert Albert Rubens, a clerk and later a merchant, and his locally born wife Rosa Caroline, formerly Staal, née Haible. The family moved to London in 1901 and then to Melbourne in 1903. Maudie, an independent and rebellious child, attended the Star of the Sea Ladies' College and the Cromarty Girls' School, both at Elsternwick. In 1911 she sailed with her parents to Germany, where she enrolled in the Victoria-Pensionat, Bad Homburg, to advance her music studies. She became an accomplished pianist but her prospective career as a musician ended when she suffered stage fright and fled during a recital. At this school she also developed a love of gardening and fluency in French and German.

Returning to Melbourne in 1913, she worked for the Australian Red Cross Society during World War I. On 7 April 1917 at St

Philip's Church of England, Sydney, she married Harry Barrington Bonney, a wealthy merchant and leather-goods manufacturer from Brisbane. The couple lived in the latter city, initially at the Gresham Hotel, before settling in 1919 at Bowen Hills. She called her husband 'Billi' and herself 'Dolores,' later shortened to 'Lores' (pronounced Lor-ee).

In 1928 Bert Hinkler, Harry Bonney's cousin, took Lores for her first flight, from Eagle Farm aerodrome to Yeerongpilly and back. The experience thrilled her and she was hooked. Hinkler praised her ability to know her location by identifying landmarks from the air. The next year Bonney took several joy rides with a flying instructor, Charles Matheson, while her husband played golf. Bored, and losing hope of having children, she began flying lessons with Matheson on 6 August 1930. Twelve months later she gained her private pilot's licence. Her husband surprised her with the gift of a Gipsy Moth, which she named My Little Ship.

The first of Bonney's four major solo flights took place on Boxing Day 1931. Leaving Brisbane at 4.30 a.m., she reached Wangaratta, Victoria, at 7.20 p.m., in time for dinner with her father. She considered this her greatest achievement; it was reported to be the longest one-day flight yet undertaken by an Australian aviator.



Above: Lores Bonney boarding her Gipsy Moth at Charleville, c. 1933.

Having studied blind flying, night flying, aircraft maintenance, and meteorology, she obtained a commercial licence in 1932, not because she sought a career in aviation but to prepare herself for long-distance flying. Between 15 August and 27 September that year she circumnavigated Australia, the first woman to do so. Spending ninety-five hours twenty-seven minutes in the air and travelling some 6,900 nautical miles (12,800 km), she survived forced landings, a collapsed undercarriage, and a mid-air collision with a plane that flew close to hers so its passenger could take a photo; both aircraft landed safely. She was awarded the Qantas trophy for 1932.

Aiming to be the first woman to fly from Australia to England, Bonney learned how to overhaul engines and had her aircraft modified for the journey.

On 10 April 1933 she left Brisbane. Caught in a tropical storm on the twentieth, she attempted to land on the coast of an island off Thailand, near the border with Burma (Myanmar). As she approached a beach, a herd of water buffalo walked into her

path, forcing her to land too close to the sea. Her plane overturned and came to rest in the water. Remaining unperturbed, she managed to free herself from her harness and get to shore. She had the plane salvaged and shipped to Calcutta (Kolkata), India, for repairs. On 25 May she resumed her flight and on 21 June landed at Croydon, England.

Piloting a Klemm Eagle, on 9 April 1937 Bonney took off from Brisbane and travelled via Indian Ocean littoral countries to Cairo and thence to Cape Town, arriving on 18 August. She was the first person to fly from Australia to South Africa. The formidable journey of 15,700 nautical miles (29,000 km) was her most heroic aerial feat. In 1949 she ceased flying because her eyesight no longer met the required standard.

From 1934 to 1939 Bonney had been Australian governor of the Women's International Association of Aeronautics. In World War II she served on the Queensland executive of the Women's Voluntary National Register. Between 1954 and 1956 she presided over the Queensland branch of the Australian Women Pilots' Association; the national body awarded her its Nancy Bird trophy (1981) and the State branch established a trophy in her name. She was appointed MBE (1934) and AM (1991).



After her marriage had failed in the 1950s, Bonney moved to the Gold Coast. She travelled extensively and found serenity in bonsai. Slim and five feet three inches (160 cm) tall, she dressed stylishly and loved jewellery, especially pearls. She died on 24 February 1994 at Mermaid Beach and was cremated. In 2012 she was inducted into the Australian Aviation Hall of Fame. A Queensland State electoral district and streets at Coolangatta and in the Brisbane suburbs of Clayfield and Archerfield bear her name.

Sources: *Australian Dictionary of Biography*; ABC

Robin Miller Dicks

Robin Elizabeth Miller was Born in Perth , WA, On 8 September 1940. She was the second daughter In a family of four daughters and two sons born to Dame Mary Durack Miller and Captain Horrie Miller OBE. Although the story of Robin Miller as a nurse and a pilot could be said to have started only in 1960, there is no doubt that the influences on her life up until then were what set the stage for her later achievements.

Educated at Loreto Convent, Nedlands, Robin trained at Royal Perth Hospital and graduated in 1962 with the State nurses' medical prize. By 1964 she was a triple-certificated nurse at St Anne's Hospital, Mount Lawley. With the encouragement of Dr Harold Dicks (d.1987), honorary president of the Western Australia branch of the Royal Flying Doctor Service of Australia, in 1966 she upgraded her private pilot's licence (1962) to a commercial one.

In 1967 the Sabin oral vaccine replaced the Salk vaccine for immunisation against poliomyelitis in Western Australia. Sister Miller obtained permission from the Department of Health to carry out a programme in the north and north-west. She borrowed money to buy a Cessna 182 and, on 22 May 1967, began a series of flights which took her to remote areas, many of them occupied by Aboriginal communities. Because the Sabin

vaccine was administered on sugar cubes by a woman emerging alone from a small aircraft, Aboriginal children called her 'the sugar bird lady'.



Above: Robin Miller contemplates a nav computer for the benefit of the camera. State Library of Western Australia.

In November 1967 Harold Dicks asked Miller to co-pilot a new Beechcraft Baron on a ferry flight from Oakland, California, to Perth for the RFDS. Granted temporary leave from the immunisation project, she undertook what was to be the first of nine ferry-trips during her career.

In March/April 1968, flying solo, she brought a single-engined Gardan GY-80-160D Horizon (F-OCLA, c/n 220, which became VH-EOL) from Paris to Perth, accompanied by Dr Harold Dicks in F-OCLI (c/n 215, which became VH-CJZ). She completed the immunisation programme in October 1969, after administering over 37,000 doses of vaccine and flying 43,000 miles (69,200 km).

That year Miller was awarded a diploma of merit by the Associazione Nazionale Infermieri, Mantova, Italy; in 1970 she received the Nancy Bird (Walton) award as Australia's woman pilot of the year.

Replacing her Cessna with a Mooney Mark 21 and obtaining a first-class instrument rating, she regularly flew aircraft for the R.F.D.S., despite the initial hostility of male doctors. She was always on call and flew in all types of weather, responding to a range of emergencies and coping with difficult or frightened patients. Tall, fair and elegant, she was conscientious, cheerful and popular. Reacting to those who expected her to don men's clothing, she wore skirts rather than trousers on her flights. Her book, *Flying Nurse* (1971), provided a lively account of her career.

Robin Miller married the recently divorced Harold Dicks on 4 April 1973 in the registrar's office, Canberra. That year she and Rosemary de Pierres competed in the Powder Puff 'Derby', a trans-America race for female pilots. In May 1974 Robin had a melanoma removed from her thigh. She died of cancer on 7 December 1975 in South Perth and was buried in Broome cemetery.

Her life had been cut short at the age of just 35.

In 1976 she was posthumously awarded the Paul Tissandier diploma by the Fédération Aéronautique Internationale and the Brabazon cup by the Women Pilots' Association of Great Britain. A representation of her Mooney aircraft was unveiled at Jandakot airport, Perth, on 20 May 1978.

Sources: *Australian Dictionary of Biography*; *Aviation Heritage Vol 31 No 3 September 2000*; *Aeropedia*; Photo: ABC

Deb Jeppesen (née Hicks)

At age 16 Deborah Hicks was the youngest female pilot in Australia to fly solo. By the time she finished high school she had decided on a career in medicine when in 1987 Ros Kelly, then Minister for Defence, Science and Personnel opened up the Royal Australian Air Force to aspiring women pilots.

"I grew up with a passion for flying," says Jeppesen. She and her brothers, David and Peter, learned to fly their parents' ultralight aircraft from a young age. Although her brothers pursued careers as military pilots, flying Harrier jets and FA-18 Hornets, Deborah didn't consider it—the doors were closed to women. Some years later, when the rules first changed to allow women to apply for pilot training, though still not to fly in combat, Peter rang Deborah: "If they're going to take female pilots, it might as well be you." She didn't waste any time and applied.

Jeppesen was set on flying helicopters, which were also combat aircraft, but was prevented by the fact that, in 1988, women were not allowed to take combat roles. "It was disappointing," she says, "but it wasn't unexpected. We learned to try to meet the challenges and try to break down the barriers, and eventually they opened those roles up. We were really looking forward to going to our squadrons. And we both had very positive experiences. We were well accepted by other pilots and aircrew." Thus, when she graduated she was offered one of two non-combat postings: No. 34 Squadron in Canberra, to fly VIPs around the country and overseas in the Falcon 20 (Mystere) aircraft and later the Falcon 900; or flying HS-748 aircraft at the School of Air Navigation in East Sale, Victoria.



Above: Deborah Jeppesen (nee Hicks), on graduation from RAAF No. 144 Pilots Course, June 1988 (Department of Defence)

She chose the No. 34 Squadron posting and went to Canberra to fly for Prime Ministers Bob Hawke and then Paul Keating; Governor General Bill Hayden, and foreign ministers and other VIPs. She later flew Hercules aircraft in No. 36 Squadron, transporting military personnel and equipment within Australia and to Papua New Guinea and Southeast Asia.

Jeppesen left the RAAF in 1994 when she and her husband, David, also an RAAF pilot, moved to Hong Kong to fly commercial aircraft for Cathay Pacific. Deborah ultimately decided not to fly commercial; instead she retrained as a

psychologist, drawing on her aviation experience to study in the fields of neuropsychology, stress and emotional self-regulation.

As of 2017 Jeppesen was working primarily in Defence, profiling military and political leaders for whole-of-government policy and engagement planning, training elite special forces in performance optimisation and stress mitigation, and was undertaking PhD research with Australian National University into the interpersonal attributes of military advisors in Afghanistan. "I'm intrigued by human behaviour, and my experiences in the RAAF have shaped where I've gone with psychology," says Jeppesen. "Once you're in the military, you're never out of the military. You keep connections through common experiences. In terms of career development, it can be very positive," she says.



Above: "We were excited and relieved that we made it all the way through the course," says Deb Jeppesen (left). "Yeah, it felt pretty good," laughs Robyn Clay-Williams (right). The just-graduated RAAF pilots are pictured here on graduation day in June 1988. (Department of Defence)



Above: Robyn Williams (left) and Deborah Jeppesen (nee Hicks) in flight suits, in front of a Macchi jet (Department of Defence)

Robyn Clay-Williams

FLTLT Robyn Williams and OFFCDT Deborah Hicks were the first female pilots to graduate from the Royal Australian Air Force (RAAF) on 30 June 1988. Only 18 graduated out of the 34 candidates which included four women, Robyn being dux of the course. Robyn later became the RAAF's first female lead test pilot.

Williams was one of the RAAF's first female engineers, and had for years optimistically positioned herself for the moment when women could take their place on the RAAF flight deck. Four women and 30 men would be in the intake of No.144 Pilots Course. By then Williams had achieved her electronic engineering degree. She had run a section of 70 personnel performing avionics maintenance on the C-130 Hercules and B-707 aircraft, before becoming a Divisional Officer in the Defence Force Academy.

Williams had fixed on becoming a pilot when she first flew as a 10-year-old passenger on a school excursion to Canberra. She wrote to Reginald Ansett and told him of her dreams. And when, on leaving school, she was refused an RAAF pilot traineeship because she was female, had vigorously pursued electronic

engineering with the Air Force in anticipation of ultimately sitting at an RAAF aircraft control panel.

Williams was 26 years old when they opened the RAAF pilots course to women. "There are probably no words to describe how keen I was," she says, but she was almost deemed too old to fly. She was accepted based on a stellar performance in the aptitude test, and went on to achieve dux of the whole No. 144 Pilots Course.

On entry to the RAAF pilots' course, the women immediately experienced the thrill of flying the RAAF trainers. Williams had previously managed to pay the exorbitant cost of a dozen private flying lessons in light aircraft, but she says nothing compared to flying military planes. "They fly so much better, they handle really nicely. And on your very first flight in the course you do aerobatics—it may be the instructor who's flying, but it's really awesome!"

Unexpected early difficulties for the female trainees included that uniforms, flying gloves and change-room facilities hadn't yet been conceived of or sized for women pilots; and that the publicity and attention they received for being first sometimes antagonised their male colleagues.

Overriding every other consideration was the competitiveness of the course; the class was repeatedly told that 50% of their cohort would fail. Pressure was intense, with a heavy learning load and constant testing of pilot knowledge and skills. Making a mistake in safety-related procedures meant mandatory failure.

"You do not want to fail!" recalls Clay-Williams. "It's your dream. This isn't a gender thing—it's everybody. You put so much pressure on yourself." She says that if you failed a ride you were allowed one retest, but people often made mistakes on the retest because they were so anxious. "That was one of the hardest parts—you were only ever two rides away from being scrubbed."



Above: FLTLT Robyn Williams on graduation from RAAF No. 144 Pilots Course, June 1988. Robyn was dux of the course. (Department of Defence)

Jeppesen and Williams were the only two women of No. 144 Pilots Course to graduate. Robyn Williams achieved dux of the entire course, and had she been male, she would have been

given the opportunity to train for flying fighter jets. "I thought they couldn't stop me—if I duxed it, I'd get my choice."

Instead, the women were offered one of two non-combat postings: No. 34 Squadron in Canberra; or the School of Air Navigation in East Sale, Victoria. FLTLT Williams went to country Victoria.

Williams dedicated 24 years to developing her career within the RAAF. In 1993 she completed the International Test Pilot School course in the United Kingdom, making her the RAAF's first female test pilot. On that course, she performed tests on a range of aircraft and different areas of their operation, flying helicopters, ultralights, small and large transports, and fast jets.

Following this, she was posted into the Aircraft Research and Development Unit (ARDU) at RAAF Base Edinburgh, and flew the PC-9/A, C-47B Dakota, Nomad, and C-130E Hercules.

Around this time, the RAAF was embarking on a replacement project for the 12 C-130E Hercules flown by No. 37 Squadron. Her role at ARDU came to encompass reviewing the contracts for Australia's purchase of 12 new C-130J-30 Super Hercules aircraft. "There weren't many people jumping to do it," she says, "because it was reviewing piles and piles of technical documents." But when it was decided to send a pilot to the US to test fly the aircraft, Williams' knowledge of the specifications tipped her for the opportunity. "It was a fabulous job. Probably the best job I've ever had and ever will have," she says of the posting that was supposed to take her to Atlanta for a year, but was extended to five years as she provided input for tweaks to the aircraft that would make the Hercules better suited to Australia's needs.

With a team of engineers she then tested each aircraft on the ground and in flight before accepting them for the RAAF. She met her husband, David Clay, while working in the US. "I signed for the very last Hercules when I was seven months pregnant."

The RAAF's first C-130J was used by Lockheed Martin for the test and evaluation program. Earlier Hercules variants were powered by four Allison T56 turboprops, with each engine driving a three or four-blade propeller. In the C-130J these were by four Rolls Royce AE2100D turboprops, each driving a six-blade 'scimitar' propeller.

The new engines delivered greater power and efficiency, making the C-130J faster and longer ranged than previous variants, but also bringing fresh problems when the aircraft stalled. "The combination of a new engine prop changed airflow over the airframe and tail," Clay-Williams said. "This completely changed flying qualities and performance, so a full test program was required. The first time we tested a stall, the wing unexpectedly dropped 110 degrees to almost inverted." To fix this, Lockheed Martin installed an automatic 'stick pusher' for the pilot's control column, which would dip the aircraft's nose to prevent it entering stall conditions.



Above: WGCCDR (Ret'd) Robyn Clay-Williams in 2021 (Department of Defence)

Upon her return to Australia she discovered the RAAF had changed markedly over the five years she was away. "When I left, it was a very male-dominated Air Force, struggling to modernise. The organisation I came back to was much more forward thinking, with a lot more opportunities for women," says Clay-Williams.

As of 2017 Clay-Williams worked applying her experience as a test pilot to researching human factors that influence health care, at the Australian Institute for Healthcare Innovation, at Macquarie University. "Test flying is essentially research," she says. "Test pilots use similar research planning, analysis and reporting methods to academics. The ability to prioritise and make decisions under pressure that you learn in flying also stands you in good stead as a junior academic, where these qualities are very useful but perhaps less common"

Sources: GE.com; Women's Museum of Australia; Department of Defence

AIR MAIL – CORRESPONDENCE

Thanks to members who have provided feedback, questions, corrections, additions and updates. Contact the Editor by email at Outlook@ahsa.org.au.

Several submissions from correspondents are included in this quarter's newsletter.

COMING AVIATION EVENTS

23-24 April	ANZAC Weekend Air Show, West Sale Airport, Gippsland, Victoria (also incorporating the Wings & Heels Fashion Show)
21 May	Temora Showcase #3
14-15 May	Central Coast Airshow, Warnervale, NSW
2-3 July	Brisbane Airshow, Watts Bridge Airfield, QLD
15-17 July	Aviation Cultures Conference Mk. VI (note that the conference has been changed to be an online event only; see www.aviationcultures.org)
24 September	Temora Showcase #4
15-16 October	Warbirds Downunder, Temora, NSW
3-5 March 2023	Australian International Airshow, Avalon, VIC

With all events, please check before you make bookings or travel arrangements to ensure the event is still on. The COVID-19 pandemic has resulted in numerous event cancellations and postponements even at short notice.





Warbirds Downunder Airshow, Temora, 15-16 October

CIVIL AVIATION CENTENARY UPDATE

2021 marked the centenary of the founding of the Civil Aviation Branch of the Department of Defence. This is our final report on the news and events which ran through the centennial year from March 2021 to March 2022.

Essendon Fields Open Day

A public Open Day to celebrate the 100th anniversary of Essendon Fields Airport was planned for last year, and delayed due to the COVID-19 pandemic. The Open Day was finally held in fine sunny autumn weather on Sunday 27 March.

The Open Day featured a broad range of community-related activities, including aircraft displays, car displays, joy-flights, indoor skydiving, the Airways Museum, and children's activities.

A selection of photos from the Open Day are shown below.

The Essendon Fields 100 website is still online for viewing - there is a lot of fascinating historical content in addition to coverage of the open day; see www.ef100.com.au.



Above: An eclectic mix of aircraft were on display at the Essendon Fields Open Day - this is Beechcraft B300C King Air VH-MQK of the Royal Flying Doctor Service (via Essendon Fields Facebook page)



Above: Coulson-Unical's fire-fighting Boeing CU-47 Chinook N42CU (via Essendon Fields Facebook page)



Above: Taking a look aboard the Leonardo AW169 demonstrator VH-UMN of Leonardo Australia (via Essendon Fields Facebook page)



Above: Dornier 228-202 VH-VIN of GAM Air (General Aviation Maintenance) from the observation deck (Peter Kelly)



Above: Rockwell Commander 690A VH-ATF of GAM Air (General Aviation Maintenance), also photographed from the observation deck (Peter Kelly)



Above: Visitors flooding through the Airways Museum (via Essendon Fields Facebook page)



Above: AHSa Secretary Mark Pilkington (centre) speaking with visitors at the Airways Museum (via Essendon Fields Facebook page)



Above: Some of the display area inside the terminal building (via Essendon Fields Facebook page)

CIVIL AVIATION SNIPPETS

Passing of Ben Buckley

The Benambra bush pilot and crop duster died peacefully at home on 15 February, aged 85, after battling prostate cancer in recent years. Ben grew up in Balnarring, but lived the majority of his life in the high country where he established his business, Alpine Aviation, in 1960 after obtaining his pilot's licence at the age of 21 in New Zealand. Ben had more aviation adventures than most and was still alive to talk about them until his passing. Ben had more than one clash with CASA but managed to continue flying. A character of aviation, he will be missed.

Passing of Ingo Renner OAM

Master sailplane pilot Ingo Renner OAM passed away on 26 February after a long illness. He was aged 81. Born in Hude, Germany in 1939, he came to Australia where he commenced gliding at age 15.

Ingo was considered to be the Top Gun of Australian gliding and probably the gliding world. Over the years Ingo won countless Australian Gliding Championships. He was awarded the OAM (Australia) and also the FAI Lilienthal Gliding Medal, the top award by the Gliding world. Ingo is reported to have flown over 36,000 hours.

Ingo was a key part of the establishment of the iconic Sportavia soaring centre in 1970 in a former World War Two hangar at Tocumwal and his name had been synonymous with gliding at Tocumwal ever since.

He leaves behind a wife Judy and four daughters.

Serpentine Air Race Centenary

A fascinating but little-known event in Australian history was celebrated by almost 5,000 people at Serpentine, central Victoria, on Sunday 27 March 2022.

To help pay for the costs of the nation's participation in the First World War, as well as the cost of the repatriation and re-



settlement of Australian soldiers, the Commonwealth Government raised a series of "Peace Loans" following the War.

Each state was given a target for the quantity of bonds which they had to sell. To promote the Second Peace Loan (total value of £25,000,000), a series of aircraft flights were made to towns all across Australia. Victoria was tasked with raising £8,200,000 and many regional towns participated eagerly towards the challenge.

The councillors of the East Loddon Shire (north of Bendigo) decided to hold an Aerial Derby (race) to promote the need for locals to purchase bonds, thus on 27 August 1920 the first officially-organised air race in Australia was held, in support of the Second Peace Loan.

The event attracted four Avro 504K biplanes, all from the Australian Flying Corps, serial numbers H3021, H3040, H3041 and H3043. The race, from Serpentine to Melbourne, was won by Lieutenant W.H. Treloar in H3043.

Treloar passed away in October 1950 and was buried in the Warringal Cemetery, Heidelberg, Melbourne.

In 1995 a re-run of the event was held. That race was won by David Cordy and Adele Patterson in Tiger Moth VH-AIP.

Recognising the significance of the original Aerial Derby, the East Loddon Historical Society began planning to celebrate the centenary of the event in March 2020, but lockdowns caused by the COVID-19 pandemic prevented these plans coming to fruition. The commemoration event was postponed three times but the ELHS persevered and on 27 March 2022 a crowd of around 5,000 people flocked to a make-shift airfield on Frank and Sue Coghlan's property south of Serpentine township to mark the centenary of the nation's first official air race.

Nine Tiger Moth aircraft took part in the special air race including VH-AKE, AWA, BEN, BBC, BTP, CXY, DHR, GAV, and PVZ. Instead of following the original race route from Serpentine to Melbourne, the commemorative race followed a triangular course to Boort then Mitiamo and return. Race competitors were judged on shortest flight time combined with lowest fuel consumption, so it was not a flat-out speed competition.

First place was won by Graham Bunn (a last-minute replacement pilot) and co-pilot Murray Gerraty flying VH-GAV with a time of 53 minutes and 22 seconds. Graham and Murray are instructors at Lilydale and said they were honoured to have flown a 1943-built Tiger Moth in the centennial race. "It was a very pleasant day for flying 500 feet above the ground," Graham said. And on winning the race, both said: "It's incredible."

The trophy that William Treloar won in 1920 was donated to the RAAF Museum by his descendants. This original trophy was on display at the centennial commemoration.



Above: Keith Ireson (at right), grandson of the 1920 race winner William Treloar, presents the first-place trophy to Graham Bunn (at left) and Murray Gerraty (centre) who flew VH-GAV (Derek Buckmaster)



Above: Race winners Graham Bunn and Murray Gerraty crossing the finish line at Serpentine in Tiger Moth VH-GAV (Dion Makowski)



Above: Second place crew (VH-CXV) co-pilot David McGuinness (left) and pilot Jason Cheney (centre, holding trophy) were presented their trophy by Robert Hooke, Chairperson of the Serpentine Air Race Committee (right) (Derek Buckmaster)



Above: Jason Cheney and David McGuinness in "Millie" T-5531/VH-CXV from Cressy, Victoria, seen landing after the race finish (Dion Makowski)



Above: Third place crew Don Gordon and Tony Self (VH-DHR) are congratulated by Serpentine Air Race Committee member Richard Evans (right) (Derek Buckmaster)



Above: Line-up of Tiger Moths after the race (Derek Buckmaster)

In addition to the commemorative race there was an air show, organised by Paul Bennet Air Shows. The participating Bennet aircraft comprised Rebel 300 VH-TBN, Wolfe Pitts VH-PVB, Grumman TBM Avenger VH-MML, North American T28B Trojan VH-FNO and CAC Wirraway VH-WWY.

The air show included numerous aerobatic performances. There were also aerobatics and formation flying by CT4's A19-055 VH-SZK (Steve Guilmarin) and A19-068 VH-CTV (Garry Herne) in company with AAAA President Matt Henderson in his Winjeel A85-427 VH-WJE.

The RAAF was represented by the balloon VH-OUP, 100 Squadron's CAC Winjeel A85-439/VH-FTS which carried the 1920 trophy from Point Cook, and seven PC-21 aircraft of RAAF Roulettes aerobatic team, which gave an exciting display.



Above: The RAAF Roulettes display team perform a 6-ship break at the end of their performance at Serpentine (Dion Makowski)

Some 63 aircraft were noted at the event. These included John Vevers' Curtiss Robin VH-JUV, Ray Goulding's Cessna C37 VH-UZU, DHC-1 Chipmunks VH-AFL and VH-RCU. The weather was hot with little wind, such that aircraft took longer than usual to take-off. It was a day of hats and drinking water. There were

numerous hay-bales for seating, but the wise country folk brought their own seats.

Warbirds Over Scone

The weekend of 26-27 March marked the opening of the new Hunter Warbirds aviation museum at Scone, NSW. The opening was combined with the Warbirds Over Scone air show and the event was a true showcase for the new facility. The museum houses the Hunter Fighter Collection Inc, a group of aircraft from Col Pay's private collection in addition to aircraft from several other private owners.

The event attracted many aviation enthusiasts and warbird followers as well as a good selection of warbirds. It is unfortunate to record that the weather was not the best for the flying program and so there was a much reduced flying on the Saturday and almost nothing on the Sunday. On Saturday there was low cloud and the Sunday flying was cancelled due to low cloud and rain.

It was said that accommodation for Scone and an hour's drive around was sold out. The city fathers of Scone are to be congratulated on their support for the event and the Hunter Warbirds Museum. No doubt the museum will be on the must-visit list for warbird and aviation enthusiasts in the future.

Warbirds that attended were good in number and variety. Soon to be an AHSA member, Peter Hallen, recorded the warbirds that attended.

Spitfires VH-XIF, HET and RAF

Curtiss P-40E, F and N Kittyhawks, VH-KTY, KWK, ZOC and PFO (this was the first time since WWII that four Kittyhawks flew together in Australia)

Mustangs VH-AUB, FST and SVU

Vought F-4U Corsair VH-III

Flug-Werke FW-190 VH-WLF

Grumman TBM Avenger, VH-MML

CAC Wirraways VH-WWY and MFW

Lockheed Hudson VH-KOY

North American Harvards VH-XNZ, HAJ and PEM

North American T-28B & D Trojans VH-FNO, NAW, RPX and TRO

CAC Winjeels VH-WJE, DKK and NON

DHC-4 Caribou VH-VBB from the HARS collection

Pacific Aerospace CT4A and E. VH-CTV, SZK, DMI and OTX

Bristol Fighter replica VH-IIZ

de Havilland DH82a Tiger Moth VH-PCL

Boeing 75 Stearman VH-YDF

Cessna 305 Birdog VH-YAP.

Static exhibits in the Hunter Warbirds museum included Macchi MB-326 A7-047 (gifted by the RAAF), Mirage III O(F) A3-44 (from the former Bankstown Air Museum, and following its recent repaint) and Jack McDonald's Mig 17PF (actually a Polish-built Lim-5P).



Above: Lockheed Hudson A16-211 VH-KOY of 100 Squadron RAAF taxis out past T-28 Trojan VH-FNO and CAC Wirraway A20-695 VH-MFW (Alan Flett)



Above: North American Aviation trainers in the gloom over Scone. Harvards VH-PEM and XNZ with Texan VH-HAJ and Wirraway A20-81 VH-WWY (Alan Flett)



Above: Two P-40N Kittyhawks: Doug Hamilton's VH-PFO (USAAC markings) and Allan Arthur's VH-ZOC taxi out past Spitfire IX MH603 VH-IX (GPCAPT David Fredericks)



Above: Hunter Fighter Collection's P-40E Kittyhawk VH-KTY tucks its gear away as it takes off for a performance at Scone (GPCAPT David Fredericks)



Above: Hunter Fighter Collection's magnificent Bristol Fighter F.2B replica VH-IIZ makes a low pass in front of the crowd at Warbirds Over Scone (GPCAPT David Fredericks)



Above: A general view of one end of the flight line at Warbirds Over Scone showing the overcast conditions and the diversity of participating aircraft (GPCAPT David Fredericks)

Moorabbin Corrosion Corner

Readers will recall the listing of derelict aircraft at Moorabbin airport in an earlier edition of Outlook. The aircraft were to all intents abandoned. Some may return to the air but for most it would be cheaper to buy a flying second-hand aircraft than pour money into a rebuild.

Readers will be interested to know that in mid February the aircraft were towed across the airport and placed in two rows on the south side of the movement area. In all, twelve aircraft were moved to the new location and their previous area turned into usable space for aircraft parking. Information received was that a review of the airport recommended that some of the aircraft presented a safety risk and hence the move.

RAAF CENTENARY UPDATE



March 2021 marked the centenary of the formation of the RAAF and we have been reporting relevant news and events throughout the centenary year from March 2021 to March 2022. This will be our last installment for this series.

Dedication of new Memorial at Point Cook

On 31 March 2021, the Royal Australian Air Force concluded its year of centenary celebrations with a moving ceremony of dedication for a new memorial at RAAF Base Point Cook. The new Air Force Centenary Memorial "THEN. NOW. ALWAYS." is dedicated to more than 350,000 personnel who have served and continue to serve with the Air Force and is located at the southern end of the parade ground.

The new memorial was unveiled by the Chief of Air Force, Air Marshal Mel Hupfeld and dedicated by Principal Air Chaplain Mark Willis. During the dedication, flypasts were conducted by a Mustang from No. 100 Squadron, and by the Roulettes, the Air Force's aerobatic display team from Central Flying School.

As the dedication drew to a close, the Roulettes performed a spectacular 4-ship display over RAAF Base Point Cook in the time-honoured tradition of conducting flypasts for special Air Force commemorations. Roulette 7 Ben Price narrated the manoeuvres.

Seeing the PC-21s rise above the pine trees made attendees realise this truly was a Point Cook event, and deservedly so as the memorial stands literally metres from where flying commenced in 1914.



Above: The Roulettes aerobatic team make a flypast during the dedication of the new RAAF Centenary Memorial (Photo: Leading Aircraftman Sam Price, Department of Defence)



Above: Air Force Principal Air Chaplain, Chaplain Mark Willis, addresses the audience during the Air Force Centenary Memorial dedication (Photo: Corporal Kieren Whiteley, Department of Defence)



Above: The new Air Force Centenary Memorial at RAAF Base Point Cook, Melbourne, feature a spotlight looking skyward on special occasions to honour the 3143 aviators who have no known grave (Photo: LAC Sam Price, Department of Defence)



Above: CAC Mustang A68-170 VH-SVU of 100 Squadron (painted to represent A68-750 of 77 Squadron), makes a fly-past at the Centennial Memorial dedication ceremony (Dion Makowski)



Above: The new Air Force Centenary Memorial is positioned in front of the RAAF Base Point Cook parade ground, Melbourne, and honours the service and sacrifice of all Air Force personnel over the past 100 years (Photo: LAC Sam Price, Department of Defence)

Sources: Defence News, Dion Makowski / Aviation Report

MILITARY AVIATION SNIPPETS

Airpower Teaming System Officially Named Ghost Bat

The first new Australian-built aircraft in more than 50 years has been officially named in a ceremony held at RAAF Base Amberley on 21 March.

The winning name for the Airpower Teaming System was chosen by Chief of Air Force, Air Marshal Mel Hupfeld, from 733 entries received after a naming competition was held for all serving Air Force personnel and cadets.

Head of Air Force Capability, Air Vice-Marshal Robert Denney, said he was delighted to announce the Airpower Teaming System name: MQ-28A Ghost Bat.

"Congratulations to the joint winners of the naming competition, Corporal David Grieger and Flight Sergeant Stephen Barchard, who both submitted the winning name 'Ghost Bat', which best reflects the mission and operational capabilities of the aircraft," Air Vice-Marshal Denney said.

"A ghost bat is an Australian hunter that uses sophisticated multi-spectral sensors to detect, hunt and kill prey both in the air and on the ground. They team together in large numbers to confuse and overwhelm their adversaries and are native to Australia."

Corporal Grieger, a medical technician at No. 1 Expeditionary Health Squadron Detachment in Townsville, said he was chuffed to be named one of the winners and said it was a bit tricky to come up with a name that hadn't already been used, yet still sounded cool.

"I wanted to stick with an Australian animal as the aircraft is designed and produced here," Corporal Grieger said.

"There were lots of fun names, like Quokka, but they weren't very well suited to an unmanned aerial vehicle. I listed off a bunch of animals and birds of prey and then whittled them down to just the two- or three-syllable ones. I tried to pick one that used some sort of advanced prey tracking."

Flight Sergeant Barchard, of No. 82 Wing, said he chose the name because it was the only Australian bat that preyed on both land-dwelling and airborne animals. He also said the aircraft could be configured to electronic warfare, which links to the Joint Electronic Warfare Operational Support Unit, whose symbol is the ghost bat.

Corporal Grieger and Flight Sergeant Barchard have both been lucky enough to see a ghost bat (the animal) in person.

"While posted to RAAF Base Tindal, my wife and I visited the nearby Cutta Cutta Caves a couple of times. The caves are home to a colony of the little critters and we saw and heard them there," Corporal Greiger said.



Above: Flight Sergeant Stephan Barchard, right, and Corporal David Grieger stand with the MQ-28A Ghost Bat aircraft at RAAF Base Amberley, Queensland, after winning the Airpower Teaming System naming competition (Photo: Leading Aircraftwoman Emma Schwenke, Department of Defence)

The two winners of the naming contest were invited to take part in the ceremony, where they were presented with a certificate and a small-scale model of 'Ghost Bat' (the aircraft).

Source: Defence News

The former name "Loyal Wingman" will no longer be officially used for the aircraft.

SkyGuardian (Reaper) lethal drones cancelled

Just as we are learning of the value of drones in an asymmetric conflict in The Ukraine, the Morrison government has cancelled Australia's only armed drone project and diverted the funding to the cyber capability upgrade, known as project REDSPICE.

There was no formal announcement of the cancellation, officials only revealed the axing quietly during budget estimates hearings on Friday 1 April.

The program, which involved the purchase 12 armed SkyGuardian or Reaper drones at a cost of about \$2 billion was announced by Defence Minister Pyne in November 2018. Project AIR 7003 was intended to deliver Australia's first armed Medium Altitude Long Endurance Remotely Piloted Aircraft System.

"These new aircraft will provide enhanced firepower and intelligence, surveillance and reconnaissance support to a range of missions. Medium-altitude, long-endurance, remotely-piloted aircraft have a far greater range than smaller remotely-piloted aircraft and can continuously observe an area of interest for much longer than manned reconnaissance aircraft" Defence Minister Christopher Pyne said in a statement at the time.

In November 2019 it was announced by Defence Minister Linda Reynolds that the MQ-9B SkyGuardian remotely piloted aircraft had been down-selected over the MQ-9A Reaper (the main difference being that the SkyGuardian was capable of being certified to fly in civilian airspace).



Above: A rendering of an armed MQ-9B Predator B in RAAF markings, something which we probably will not see. (Department of Defence)

"Cutting-edge technology of this kind, with advanced sensors and systems, would complement advanced aircraft such as the F-35 Joint Strike Fighter and ensure that ADF maintains state-of-the-art capability," Minister Reynolds stated at the time.

Halestorm to be Made Whole

The South Australian Aviation Museum (SAAM) has gifted to Air Force the cockpit/forward fuselage of Gloster Meteor A77-851 (aka 'Halestorm'), the aircraft in which Sergeant George Hale shot down a MiG-15 during the Korean War.



Above: The cockpit/forward fuselage of the Gloster Meteor A77-851 'Halestorm' aircraft to be restored by Air Force's History and Heritage Branch (Department of Defence)

Director-General of Air Force's History and Heritage Branch, Air Commodore John Meier, said Air Force was pleased to accept this significant historical fighter aircraft from SAAM.

"This generous donation highlights the great cooperation between Air Force and the Australian aviation museums in general, and SAAM in particular," Air Commodore Meier said.

"History and Heritage Branch now intends to fully restore Halestorm prior to putting it on public display."

Halestorm not only had a distinguished service career in Korea but was also a pioneer aircraft for emerging technologies – following the war, Air Force converted Halestorm into a drone and used it to conduct aviation trials at Woomera.

Volunteers from SAAM later recovered and refurbished the cockpit/forward fuselage and put it on display for two decades.

President of SAAM Nigel Daw said they were "proud to gift Halestorm to Air Force, so even more members of the Australian community will have the opportunity to see this aircraft and learn about its history".

The History and Heritage Branch expects the Halestorm restoration – which will include merging the cockpit/forward fuselage to another Meteor aft fuselage and wings – to take at least 18 months.

Source: Defence News

Caribou Unveiled at Amberley Aviation Heritage Centre

A newly refurbished DHC-4 Caribou transport aircraft will preserve an important part of Defence history at RAAF Base Amberley. Following a seven-month restoration process, the Caribou (serial A4-236) was 'unveiled' on 6 April at Amberley Aviation Heritage Centre (AAHC), where it will be on static display during public open days.

Air Force operated a fleet of 29 Caribou from 1964 to 2009, with the aircraft – popularly known as 'the Gravel Truck' – renowned for its ability to operate from improvised runways and playing fields. Caribou were a common sight at RAAF Base Amberley when No. 38 Squadron's fleet was based there from 1993 to 2007. When the last remaining aircraft were retired in 2009, many surviving Caribou made their way into museums and heritage centres, including the Australian War Memorial and RAAF Museum at Point Cook. Caribou A4-236 was handed over to the AAHC.

Warrant Officer Mike Downs led the team to refurbish A4-236, having worked on the Caribou at No. 38 Squadron in 2009. "For a number of years the aircraft was left unattended before being transferred to the custody of the AAHC. In the ensuing years, the aircraft exterior paint finish deteriorated to the point where bare metal was visible and the aircraft was deemed as sub-standard for an AAHC static display," Warrant Officer Downs said.



Above: Air Force personnel from the History and Heritage Branch restored de Havilland DHC-4 Caribou A4-236, which is now on display at the Amberley Aviation Heritage Centre, RAAF Base Amberley, Queensland (Photo: Sergeant Peter Borys, Department of Defence)

Caribou A4-236 began its Air Force service with a marathon journey in August 1965 from the de Havilland Canada factory in Toronto to its new home at RAAF Base Richmond. The 16,500km journey was completed in several legs at a steady cruise speed of 290km/h, with a few tense moments between Hawaii and Kiribati when a propeller fault forced the crew to shut down an engine.

In Air Force service, it provided airlift during the 1990 New South Wales floods, and peacekeeping in Timor-Leste (East Timor) and the Solomon Islands. When A4-236 arrived at RAAF Base Amberley in November 2009, only cursory effort was made to preserve or protect the aircraft while it was parked in the elements.

In recent years, Air Force's History and Heritage Branch has initiated a project to restore many of the retired aircraft at RAAF bases around Australia. The Branch's Static Display Aircraft Support Section (SDASS) works to bring the aircraft to a display standard.

Warrant Officer Downs explained: "Work [on A4-236] commenced on 30 August 2021, with the removal of the wing-mounted flight controls. Following this task, a civilian contractor erected a complex scaffolding assembly that allowed SDASS personnel to safely access every part of the aircraft exterior from the nose 'bonnet' to the tip of the tail at about 10 metres high. The next task was arguably the most arduous of the entire

project – stripping the existing paint from the aircraft's entire upper surface."

The SDASS team is comprised of Air Force reservists with a technical background, with an average age of 57 years and average service career of 32 years for each member. Bringing a wealth of experience and nostalgia for the Caribou, the SDASS team was only too pleased to be working on the aircraft. It spent five weeks chemically and mechanically removing the old paint, sanding the newly exposed surface and removing all remnants of oils, grease and dirt.

Using environmentally safe products, the SDASS team removed the existing paint on the Caribou and disposed of it using an approved contractor. "This process was necessary to ensure paint adhesion for the new livery. From mid-October to Christmas 2021, the team was fully engaged in masking, priming and painting of the aircraft in an olive green gloss finish and applying No. 38 Squadron markings. About 200 individual paint stencils and decals were also applied to the aircraft" Warrant Officer Downs said.

Throughout its 44-year career, A4-236 wore many liveries and markings, including an all-white United Nations scheme in the early 1990s, a planned deployment to Cambodia that didn't eventuate for the Caribou. In the 1990s, it received a green and black 'lizard scheme' that was carried through operations in East Timor and the Solomon Islands until its retirement.



Above: Royal Australian Air Force personnel from the History & Heritage Branch static display aircraft support section who restored de Havilland DHC-4 Caribou A4-236 at RAAF Base Amberley in Queensland (Photo: SGT Peter Borys, Department of Defence)

For its refurbishment, a gloss olive-green finish was applied to showcase the aircraft as it appeared in 1983, including a prominent blue-and-white No. 38 Squadron flash on the tail. The livery echoes the earlier refurbishment of Caribou A4-199 at RAAF Base Townsville, which is displayed in a similar No. 35 Squadron livery.

With the exterior of A4-236 largely complete, the SDASS team is turning its attention to the aircraft's interior. "This will allow visitors to AAHC to experience the full Caribou ambience by allowing walk-through access on open-days at the centre," Warrant Officer Downs said.

Once completed, Caribou A4-236 will feature in the AAHC alongside other Air Force aircraft with a strong connection to the Brisbane area such as an F-111 and the Iroquois helicopter.

Source: Defence News

INDUSTRY NEWS SNIPPETS

More Announcements for Darwin Amphibians and Aviation Manufacturing Precinct

As reported in Outlook Vol. 38 No. 1 February 2022, Amphibian Aerospace Industries (AAI) announced in December 2021 that they intend to set up production of the G-111T Albatross in

Darwin. A further announcement was made on Monday, 14th February 2022, that AAI had signed an investment agreement with the Northern Territory Government and Paspalis Innovation Investment Fund (PIIF) "to see seaplanes take off in the Territory".

Then in early March Dassault Systèmes announced they had joined to support AAI using their design software to create a "virtual twin" of the aircraft via the 3DEXPERIENCE program and work alongside AAI to develop a robust supply chain and business ecosystem to support the development of the updated aircraft.

According to AAI, throughout the engagement, the two companies will work intimately with the Northern Territory government to facilitate the development of an aviation manufacturing precinct in Darwin.

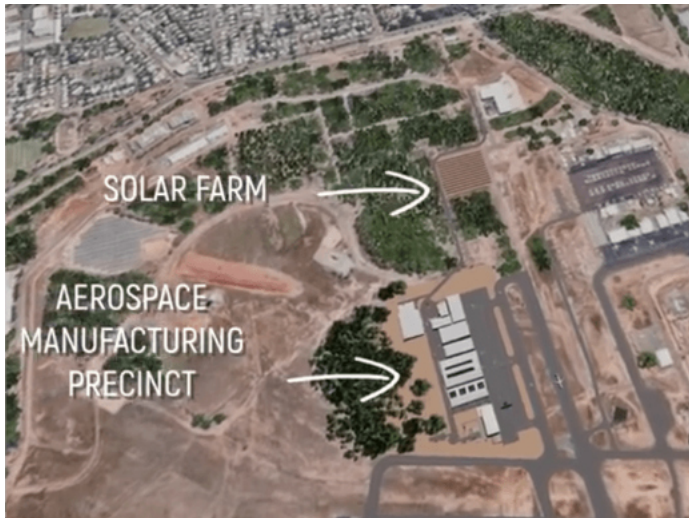
Finally, a week later, on 9 March, The NT Government announced that AAI will be the first tenant in the 20-hectare Aerospace Manufacturing Precinct to be built at the Darwin International Airport.

"AAI has chosen Darwin Airport as their Australian base to manufacture a new version of the Albatross aircraft, and this decision will put Darwin on the map and provide long term economic benefits and diverse job opportunities," Airport Development Group (ADG) CEO Tony Edmondstone said.

The Gunner Government said the new precinct will further boost the growing defence sector in the NT.

The NT Government said it will co-invest \$10 million to the project which they forecast to create about 300 jobs when the company reaches full production, with annual revenue of more than \$100 million by the end of the decade.

"The investment will be made on a matched basis with private equity, through the Government's Local Jobs Fund," the government said in a statement.



Above: Layout of the new Aerospace Manufacturing Precinct at Darwin Airport (NT Government)

Boeing Continues Testing of Loyal-Wingman Ghost Bat

Prior to the aircraft being renamed Ghost Bat, Boeing Australia reported they had expanded the flight-test program of the Boeing Airpower Teaming System, with two aircraft successfully completing separate flight missions at the Woomera Range Complex recently. The first Ghost Bat aircraft developed with the Royal Australian Air Force (RAAF) demonstrated a range of key characteristics during the test flights to continue to expand the flight envelope. A second aircraft also successfully completed its first flight mission.

"It is so exciting seeing two aircraft in the air as the Loyal Wingman continues to excel in the flight-test program," said Air Vice-Marshal Cath Roberts, RAAF Head of Air Force Capability. "This opens up significant capability agility for Air Force, particularly with features such as the reconfigurable nose."

"We're heavily engaged in the payload development and the element of surprise that it gives us in the battle space. You never really know what's in the nose," said AVM Roberts.

Throughout the flight-test missions, the teams gathered aircraft performance data that will be used to inform and refine the digital twin of the Boeing Airpower Teaming System, with the view to accelerate the aircraft's development where possible. The digital twin models the system's entire lifecycle, from design and development to production and sustainment, and contributes to speed and first-time quality.

"We're in a steady rhythm of flight testing on the way to mission and operational testing, enabling Boeing Australia, RAAF and our Australian industry team of more than 35 companies to progressively advance the flight characteristics and capabilities of the uncrewed teaming system," said Glen Ferguson, director of Boeing Airpower Teaming System – Australia and International. "I'd like to extend my thanks to our capability partner BAE Systems Australia, and to RUAG Australia for their specific roles in this latest test block."

The flight tests of aircraft one included the first time the landing gear was raised and engaged. RUAG Australia supplied the landing gear systems to the aircraft, and BAE Systems Australia was integral in the design, supply and support of the flight control and navigation systems tested as part of the flights.

"This is a great achievement for homegrown, Australian autonomous capabilities," said BAE Systems Australia CEO Gabby Costigan. "Our partnership underpins a shared commitment to develop sovereign technologies and deliver a cutting-edge program for the nation's defence."

The first batch of Ghost Bat aircraft are serving as the foundation for the Boeing Airpower Teaming System being developed for various global defence customers. The aircraft will fly alongside other platforms, using artificial intelligence to team with existing crewed and uncrewed assets to complement mission capabilities.

Source: Boeing Australia



Above: A pair of Ghost Bats at the Woomera Range Complex (Boeing Australia)

MUSEUM NEWS

RAAF Museum Point Cook - Update

The RAAF have provided some updates regarding the RAAF Museum at Point Cook on their website.

Firstly, they confirm that the RAAF Museum will re-open to the public in June 2022. The current long closure is due to important infrastructure works to improve visitor accessibility, as well as significant new exhibition installations across the RAAF Museum precinct to enhance the visitor experience.

Infrastructure works and new exhibition installations underway include the following:

Main Museum Hangars:

- In the main Museum hangars, new anti-slip ramp, handrails, fire systems, and exhibition showcases are being

installed to improve visitor accessibility and refresh the exhibition space.

- A new multimedia wall and showcase is being installed to allow for the creation and display of regular rolling exhibits themed around key Air Force events and campaigns.
- RAAF Base Point Cook is also undertaking some infrastructure remediation works which will improve the safety and accessibility around the RAAF Museum precinct.

Strike and Aircraft Display Hangars:

- Within the Strike and Aircraft Display Hangars, RAAF Museum is improving access through complete display reconfiguration.
- An interactive and immersive visitor experience will be created by installing immersive theatrical lighting, large-scale multimedia and interactive touch screens. Clear and accessible circulation will take visitors on a journey through the new exhibition spaces that is dynamic and understandable.
- An enhanced physical experience will be created through sound reinforcement, horizontal view projection screens mounted to the ceiling, as well as multiple vertical screens mounted between the aircraft.

This is an exciting development project which will provide Air Force with a capability to display more than 30 historical and contemporary aircraft from the Air Force Heritage Collection for a national audience.

Entry to RAAF Museum will be free, but bookings will be required to control visitor numbers. Further updates will be advertised via the RAAF website closer to reopening.

Source: airforce.gov.au website

Evans Head Orion Caught in NSW Floods

Contrary to some rumours posted on the internet that Evans Head Heritage Aviation Museum was inundated by the recent floods, this is not the case. The museum was inaccessible for a period of time due to the floodwaters, but none of the exhibits have been affected.

However the museum's P-3 Orion which was stored at Lismore airport awaiting re-assembly was washed away for several hundred metres, as the images below show.



Above: Lismore Airport inundated by floodwaters, the Evans Head Orion is visible at top right.



Above: As the floodwaters receded, the Orion lies in the middle of a paddock beside the Lismore airport.

NEW AUSTRALIAN AVIATION HISTORY BOOKS

Included below are several notable new releases in addition to a book review. If you have read a good book about Australian aviation history, please send us a review and let others know what you thought!

South Pacific Air War Volume 5 - Crisis in Papua September - December 1942

By Michael Claringbould and Peter Ingman

Volume Five of this series chronicles aerial warfare primarily in the New Guinea theatre in the critical period between September and December 1942. It can be read alone or as a continuation of the previous four volumes which span the first nine months of the Pacific War.

By early September 1942 the strategic picture in the theatre had changed markedly within just six weeks. From their new Buna beachhead the Japanese Army commenced a Papuan mountain campaign which threatened the Allied bastion of Port Moresby. Meanwhile the battle for Guadalcanal was raging, with the outcome of the wider Pacific War in the balance.

Against this background a strengthened US Fifth Air Force took the fight to the IJA with direct air support. While this was being conducted by P-39s, P-40Es, A-20As and B-25s, raids by B-17s against Rabaul aided US forces in the neighbouring Solomons. RAAF Beaufighters, Beauforts, Bostons and Hudsons also contributed substantially to these efforts.

At Rabaul a wide variety of fresh IJN fighter and bomber units poured in the theatre, although these became focused mainly on the Solomons. Such were the massive losses experienced, by November the IJN undertook a complete operational and administrative reorganisation of its air power. Then, despite a strong reluctance to become involved, the IJA sent an advance reconnaissance detachment to Rabaul, the forerunner of major reinforcements that would arrive in December.

Never before has this campaign been chronicled in such detail, with Allied and Japanese accounts matched together for a truly factual account of the conflict.

Softcover, 250 x 176mm, full colour, fully illustrated, Avonmore Books, 2022. ISBN 9780648926290 RRP \$46.95

www.avonmorebooks.com.au

Serpentine Air race. 1920-2020. Celebrating Australia's First Official Air race.



Researched and written by Mary Davidson and published by the East Loddon Historical Society Inc, this 91 page book tells the story of the 1920 Aerial Derby and the Second Peace Loan. The book includes many rare local photos and provides biographies of the four race pilots and their mechanics as well as the race organiser Captain A.T. Rose.

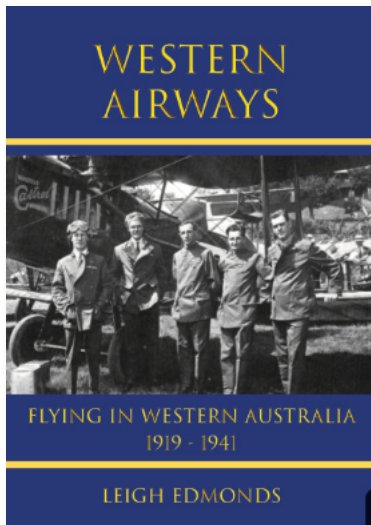
It also covers the 1995 race commemorating the 75th anniversary and a few early details of the centenary event originally planned for

March 2020. The review copy was obtained at the recent Centenary event at Serpentine.

Cost \$30. Soft cover. 91 pages. A4 in size. Further copies of the publication can be obtained from the east Loddon Historical Society Inc. PO Box 14, Mitiamo, Vic. 3573. Email: elhs@bigpond.com.

Western Airways. Flying in Western Australia 1919-1941 by Leigh Edmonds

Author Lee Edmonds commented that at this stage the book is only available in ebook form due to the uncertainty about the likely public response and, of course the restrictions that the COVID-19 pandemic has imposed on all of us.



Leigh is a noted aviation historian with a background in Australia's civil aviation administration. He has published over a dozen books.

This latest book tells the story of how aviation was introduced to Western Australia in the years following the First World War. From its pioneering beginnings when Norman Brearley returned to Western Australia in 1919 with two small aeroplanes to regular flights to the rest of the world in 1940, Western Airways traces the development of this new

industry and explains how aviation reduced the sense of isolation experienced by Western Australians.

In a state as large as Western Australia the relationship between the fledgling industry and government was a vital ingredient in the successful introduction of this new technology which helped to create modern Western Australia. The book also covers the entry of aviation into WWII. For those with an interest in Western Australian aviation pre-WWII this is a worthwhile publication.

The book includes many black and white photos. This reviewer asks readers to contact the publisher such that the ebook is put into printed form. It is a worthwhile publication for any with an interest in WA aviation.

A4 size. 277 pages. BHS Publishing. 2021. Price ebook \$33. BHS Publishing. PO Box 2209, Ballarat Mail centre, 3354. Email: info@ballaratheritage.com.au.

Order online at: www.ballaratheritage.com.au (DLP)

BOOK REVIEW

Japanese Aircraft of World War II: Fighters • Bombers • Seaplanes



Written by Thomas Newdick, this is an interesting new publication. It covers the aircraft operated by the Japanese armed forces from the Second Sino-Japanese War (1937) to the surrender in the Pacific in August 1945.

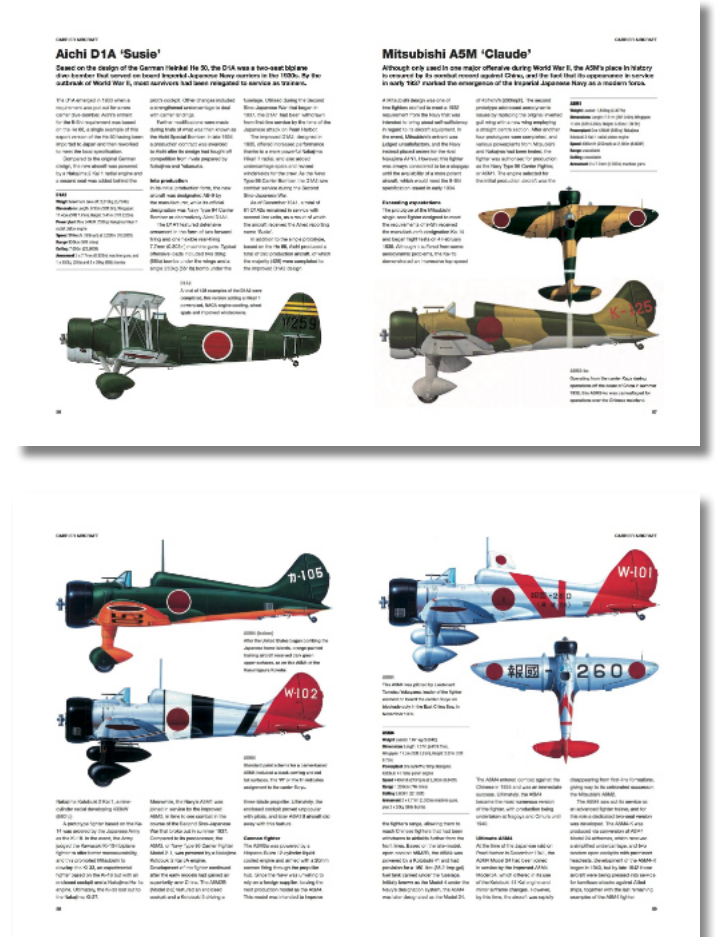
The descriptions are organised alphabetically by manufacturer, including every type of aircraft, from fighters to seaplanes, bombers, reconnaissance

aircraft, torpedo bombers and carrier aircraft. All the best-known types are featured, such as the Mitsubishi G4M 'Betty', Nakajima B6N2 Tenzan, Aichi B7A2 Ryusei torpedo bomber and the famous Mitsubishi A6M 'Zero' fighter. The entries are accompanied by specifications and exhaustive narratives regarding each type, covering the numbers built and their

shortcomings, if any. The book also explains the names given to the various Japanese aircraft and the naming and numbering systems.

Most photographs are black and white but the book is illustrated with many colour profile artworks, three-views, and cutaway artworks of the more famous aircraft in service, such as the Aichi D3A1 'Val', Mitsubishi A6M2 Reisen, and Nakajima Ki.27 'Nate'.

Some sample pages are shown below:



For those with an interest in Japanese aircraft of WWII this is a worthwhile and interesting publication.

Published by Amber Books Ltd, UK. Soft cover 142 pages. A4 Size. Review copy purchased via local newsagent. Cost \$25.00.

Obtainable via www.amberbooks.co.uk (DLP)