



# Heritage of the Air Conference

## 14<sup>th</sup>-17<sup>th</sup> November 2019

### Compiled Abstracts

CONFERENCE PARTNERS



# Opening Plenary

## 1. Welcome to Country with Wally Bell

## 2. The Future is Disturbing Our Present: The Ecopolitics of Aviation

*Dr Prudence Black- The University of Adelaide*

According to sociologist Bruno Latour we don't live on the globe, we live in a Critical Zone. The Critical Zone is that thin layer between the atmosphere and the earth (from the base of the roots of trees to the breathable atmosphere). Aviation is part of that critical zone, sharing that space with humans and other technologies. The history of aviation was essentially about the idea of progress through global expansion. Today, air routes are at almost saturation point, and we are acknowledging that there are earthly limits (with the exception of space travel). This talk will address how aviation has always been shaped and determined by environmental factors, from the early development of airborne powered flight, to the quest to go higher, faster and quieter, and now to minimising the impact of fossil fuels into the atmosphere. Entrepreneurs like Richard Branson are investing time and money into colonising new space, in a bid to transcend earth and live on other planets. This is why we have to think carefully about what we mean by 'Heritage of the Air', as the best practices that can feasibly be carried forward and sustained in the 'critical zone' we (still) inhabit.

## 3. It all started with the SR-71: How my avgeek obsession began

*Rhianna Patrick- ABC Radio*

From borrowing a book at my primary school library on the SR-71 to hanging out with my cousins at RAAF Base Amberley, aviation and its history has been a common thread in my life, even if I didn't realise it.

# Saturday Plenary

## 1. The New Poetics of Gravity

*Dr Alice Gorman- Flinders University*

In this paper, I want to contextualise airspace, and the material culture which goes with it, in a landscape of different gravities and pressures which range from the ocean depths to the broader solar system. Aviation and spaceflight are historically and technologically entangled. The first humans to enter space were recruited from the ranks of test pilots and skydivers. As shells enclosing habitable environments, aeroplanes, rockets, shuttles and space stations have common geometries and constraints. Each is designed to function within a certain range of conditions in the gravity well centred on Earth.

To provide structure I'll draw on Gaston Bachelard's 1958 classic *The Poetics of Space*. Although published in year 2 of the Space Age, following the launch of Sputnik 1 in 1957, outer space is implicit in this work. Nonetheless, Bachelard's categories provide entry points for exploring the materiality of air and space through miniatures, outside and inside, shells, and roundness. My ultimate aim is to investigate how gravity shapes human behaviour by foregrounding it rather than assuming its invariance.

## 2. Stories from Berlin: The Dynamic Aviation Heritage of People and Things

*Professor John Schofield (Archaeology, University of York, UK)*

In the context of human history's *longue durée*, aviation is a new modality, an opportunity for travel, for new perspectives on a supposedly familiar world, and a significant new factor in armed conflict. Spaceflight is an extreme example, with space tourism an obvious consequence. In all its forms, aviation has made the world a much smaller place. As archaeologists, it is not only the contemporary world we experience as we fly over it, but the layers of past activity that are also visible on its surface. While anyone can see the former, and make some sense of it, it takes skill and training to see the latter, and to read the landscape in terms of the human behaviours that have shaped it over millennia. This, however, is only the traditional view of aviation heritage, as aerial archaeology: the past in the present. In this lecture I will promote the broader view, arguing that aviation heritage also provides a window on both a 'contemporary past' (that which comes up to date) and a 'future past' (a prediction of what comes next, and what will survive of the present into the future). To illustrate these various points and to provide focus, I will build this talk around the diverse aviation heritage of a single city (Berlin, Germany), illustrating how these many perspectives interlock and cross-refer creating a complex, significant and universal heritage, of 'modernism, machines, migration and memories'.

# 1. Plane Stories: Encounters with Objects

Material culture plays a fundamental and vibrant role in the field of memory studies. 'Material memories' and personal recollections are typically intertwined and interpenetrate. This session aims to articulate some of the ways that such entanglements between an object and an individual operate in daily life and on special occasions; and can thereby contribute diverse perspectives on understanding and experiences of Heritage of the Air.

Session Convenors: Steve Brown, Annie Clarke, Sally Brockwell, and Ursula Frederick

## 1. Maurice Guillaux, a Bleriot XI and the first aerial mail

*Paul Ashton- University of Technology Sydney*

Today Maurice Guillaux's Bleriot XI hangs from a ceiling in the Powerhouse Museum. It seems largely ignored. It flew the first aerial mail run from Melbourne to Sydney in 1914, just before the outbreak of WWI. It was also full of other significant objects. This paper looks at how this object could be presented to Children in creative non-fiction.

## 2. Kingsford-Smith, Charles Ulm and Colonial Jealousy

*Sally Brockwell- University of Canberra*

Despite the stunning success of the first trans-Pacific flight by these Australian aviators in 1928, not everybody was impressed nor convinced that it was the forerunner of regular flights between Australia and the US. C.S. Grey, the British editor of the Australian magazine "Aircraft", wrote a damning with faint praise report of the pioneering flight, revealing that the British were not so happy with this Australian achievement. Intriguingly, there were some hand-written notes on the photocopy describing the piece as "xenophobic, Anglophile nonsense" that indicated "the hold the UK industry had pre-WWII in Australian aviation affairs".

## 3. The Empire Air Mail Scheme in One Object

*Phil Vabre- Civil Aviation Historical Society*

A single airmail letter from the author's collection, posted in 1938 from England to Karumba, Queensland and then forwarded on to Sydney, encapsulates the essence of the radical late-1930s Empire Air Mail Scheme.

This one, surviving object has a great deal to tell us about many aspects of the Scheme itself and also the broader nature of the British Empire. By following its long journey, we can

glimpse the nature of communications throughout the British Empire in the 1930s. We can begin to understand the nature and origin of the Empire Air Mail Scheme and the ultra-modern flying boats employed on it. We can peer into the tension between Empire loyalty and Australian national identity. We can see some of the problems of the operation of the longest air route in the world, including the need to establish very remote bases to support the Scheme's flying boats. We even know the identities and some details of the lives of some of the people who handled this letter, notably the postmaster at Karumba who was doing that job in his spare time when he applied the datestamps to the letter.

The power of even trivial objects to provide insight into the world that was, when viewed with knowledge and curiosity, cannot be overlooked.

#### 4. Ode to Todd Road

*Helen Lardner- Helen Lardner- HLCD Pty Ltd*

Todd Road for most people means industrial Melbourne and boring Westgate Freeway exit signs. But Todd Road is a secret pleasure. During WWII, Australia's emerging aircraft industry centred on Mascot in NSW and Fishermans Bend in Victoria. Planes like the Beaufort Bomber, the Beaufighter and the Wirraway were wheeled out of the hanger and took their first flight on the Fishermans Bend runway.

Now I speed down that runway, the wind in my hair, thinking of the lift-off it gave Australia's manufacturing industry. How much richer would all our lives be if the excitement of the past was more strongly illuminated in everyday experiences?

#### 5. Waste not

*Valerie Dennis- National Trust of Australia (Queensland)*

Last April a pair of Southern Boobook owls began roosting on the DH98 Mosquito canopy in the old shed. They stayed until August. The canopy came from a farm near Oakey on Queensland's Darling Downs, a present from a vintage aircraft restorer friend who jestingly thought my partner and I might like to rebuild one. One lifetime would not be enough.

Two hundred and twelve of these 'Wooden Wonders' were built in Australia at Bankstown, Sydney. Capable of nearly 650 kilometres per hour, they were delivered for use to No. 1 Photo Reconnaissance Unit, No. 1 Squadron and No. 87 Squadron.

Following the Second World War, what remained of the Australian production of this balsa wood light bomber and reconnaissance aircraft was sold for scrap or converted to components. How this piece made it to the Oakey farmer's yard is not known. Perhaps the owner thought the aluminum and Perspex cover might have been useful, an easy dog kennel.

Today only 30 DH Mosquito aircraft survive worldwide; only four of the survivors are airworthy. A few years ago we airmailed the trim mechanism we also had to a restorer in New Zealand to help with the reconstruction of one of these survivors. The canopy is for the birds.

## 6. The collective weight of the Southern Cloud

*Peter Hobbins- Honorary Associate, Department of History, The University of Sydney*

On 1 July 2019, the Commonwealth of Australia finally legislated to protect historic aircraft wrecks over 75 years old – if they are underwater. Yet most Australian aviation accidents have occurred over land. While terrestrial wreckage was usually cleared away, relics from significant disasters still remain, such as the Douglas DC-3 airliner Lutana, which crashed in northern NSW in 1948. In this presentation, I meditate upon a hefty artefact removed from the impact site of the Avro Ten airliner, Southern Cloud. Disappearing on a flight from Sydney to Melbourne in 1931, its remains were only discovered near Cooma in 1958. While I purchased this item on eBay, museums around Australia also hold remnants of the Southern Cloud. Souvenir hunters gathering such fragments in 1958 were described as ‘ghouls’. Yet their distributed trophies – gradually making their way into formal collections – echo the frenetic spirit of 1931. Then, airminded citizens were convinced that they ‘saw’ or ‘heard’ the vanished airliner at over a hundred locations. In pondering the best repository for my own ‘ghoulish’ vestige of the Southern Cloud, I ask whether such artefacts facilitate a form of collective commemoration. What role, therefore, might they play in a participatory heritage of the air?

## 7. Remembrance of Flights Past: vicarious reality and virtual indigestion

*Don Wallace- Member of ICOMOS and Associate at GML Heritage*

Nowadays all that may be taken to remember a flight is a screen grab of an electronic boarding pass—airline ephemera is now indeed ephemeral. Past and current ephemera will be explored with an emphasis on meal service and the menus themselves.

The airline menu allows the passenger to relive their flight experience but also allows the intangible transfer of an untaken journey to be experienced by others into the future.

Using a 1966 heirloom menu, the 33 courses of the first-class meal service on the eight-stop BOAC ‘Kangaroo Route’ from London to Nadi via Australia will be vicariously—and speedily—condensed on the screen. The audience (‘passengers’) will be provided with facsimile menus to take with them (number subject to printing price and copyright – may be extract or reformatted content). ‘Passengers’ will be ‘served’ an after-dinner mint at the end.

## 8. The Flying Binoculars

*Jane Lennon- Australia ICOMOS*

Having abandoned my ambition to be a pilot due to not mastering aerobatics, I then became an avid observer from the air. My father would not allow me to take my beloved Pentax binoculars on our helicopter flight from Coolangatta to Melbourne in 1967 because they weighed too much and I flew in a bikini and shirt to reduce weight. The rush of adrenalin as the chopper soared off the edge of the Scenic Rim and out to the plains is still a vivid memory.

My binoculars played a major role in searching for sites known in the historic literature but dots in the vast landscapes of the Northern Territory. Late afternoon flights above the tree tops looking through the slanted sunlight for the glint of metal bolts on creekside gum trees; these were where Aboriginal men were chained before being marched off to distant prisons. Tamarind trees, tell-tale signifiers along the blue coastline of Coburg Peninsula of Macassan cooking ovens. Mining machinery overgrown by strangling blackberries or lantana depending on sites in the south of the continent or north can be seen through the trusty binoculars from a chopper...ah, the tales these binoculars could tell.

## 9. Crossing the Equator: heritage of the air

*Suzanne Bravery- Making museums matter*

Lowered air fares in the early 1970s enabled and encouraged greater civilian use of planes instead of ships to cross hemispheres for holidays of discovery and adventure. A key component of the Australian transitory migration was crossing the Equator. For many families, this was their first experience of leaving the southern hemisphere to travel to countries learnt of in school or through family oral history. New experiences started on the plane with flight staff dressing as Neptune, highlighting the change in time and space from one part of the world to another. In terms of memory, why was celebrating this crossing so important and how has crossing this invisible line been celebrated since?

## 10. Memories of Fokkers: Adjacent way

*Wendy Somerville- University of Canberra*

Memories are slippery buggers. No matter how we wrangle and herd, they slip through the cracks to become the things they want to show. Sometimes they want us to yearn for then, or to imagine a different now. My story of two Fokkers is entangled in memory only. Nothing tactile here. One Fokker Friendship I wanted to fly in. It was the only plane I could name. The other Fokker was famous and handed down to her children from my mother's memories.

## 11. *AirUK* teaspoon: theft, speed, modernity

Steve Brown- *The University of Sydney; University of Canberra*

On 15 November 2009, while digging at the side of my then house, a bent metal teaspoon appeared. It was not until I washed the spoon that I noticed a stylised Union Jack flag and 'AirUK' etched into the handle. AirUK, I subsequently found out, was an airline that operated from 1980 until 1997, after which it was acquired by Dutch flag carrier KLM and rather awkwardly renamed 'KLMuk'. AirUK's flight network served the British Isles and continental Europe: the carrier never flew to Australia.

So how did an airline teaspoon, presumably taken by a light-fingered passenger or unruly flight attendant, end up bent and discarded at the side of a house in suburban Arncliffe? I don't expect to ever know the real circumstance or events that led to this situation. But the spoon illustrates the movement and dispersal of things around the globe and the ways in which local places are materially connected into a globalised world: the spoon is a marker of global connectivity. In this presentation I will consider how the themes of global connectivity, accumulation, and a sense of speed in the late-modern period are evident in the life history of the *AirUK* teaspoon.

## 12. A Year of Aviation Illustration & Design

James Kightly- *Freelance Aviation Journalist*

What do you find out when you publish an aviation illustration, artwork or design every day for a year? At the start of 2019, I decided to explore the various aspects of aviation art and illustration in a 'post a day' blog. While I had plenty of material, and was comfortable with the art and aviation aspects of the topic, I was surprised at how much the posts had to encompass social history to a remarkable degree. I'll be presenting a selection of the surprises that came up, some caused by a closer look at an old friend, others completely new to me – and I hope you. There really IS a lot more to the culture in aviation.



## 2. Military and civil aviation: Early development & links

Civil aviation in Australia and beyond would not be where it is today without developments and experiences in military and civil heritage in Australia and overseas. This session aims to explore the history and heritage of Australian aviation through papers exploring links between civil and military heritage both overseas and in Australia.

Session Convenor: Rosemary Hollow

### 1. Innovations in aviation navigations: The Australian distance measuring equipment

*Roger Meyer- Civil Aviation Historical Society Inc.*

A little-known field of Australian innovation has been the provision of visual and radio navigation aids for use by civil aviation. An example of the former is the Tee Visual Approach Slope Indicator System (T-VASIS), and the latter includes the Microwave Landing System (MLS).

This paper explores one such example of Australian innovation; Distance Measuring Equipment (DME). It was developed using the combined resources of science (CSIRO), the manufacturing industry (AWA) and the Department of Civil Aviation (DCA). Australia was the first country to develop a DME system for domestic use, and was mandatory in all regular public transport aircraft between 1955 and 1995.

How did this collaboration come about; how successful was DME as an engineering and operational achievement, and what further innovations did this model lead to?

### 2. Flight logs, terrain, tempest and trials: NSW Air Ambulance 1967-82

*Bronwyn Holland- University of Technology Sydney Honorary Associate FEIT*

The post-war era saw a boom in aviation in Australia with a turn to training by returned service personnel, an abundance of decommissioned aircraft and a proliferation of regional air services. Flight pioneer Nancy Bird Walton and a number of influential public figures championed the founding of an air ambulance service in NSW. How this service evolved can be traced through flight logs and personal records of a pilot blooded in regional and remote area air services, and experienced in national and international commercial aviation. The challenge for the Air Ambulance flight crews and administration, was not confined to navigating difficult terrain and bad weather across the state to bring ill or badly injured patients to specialist treatment and deliver them safely home again. There was perennial funding constraint, public-private tensions and sometimes destabilising political intervention. Nevertheless the NSW Air Ambulance quickly became a service in high

demand, celebrated by families and communities across the state who could count on its support. The record dates from the beginnings of the NSW Air Ambulance, when it had just one Beechcraft Queenair B80, VH-AMB. This aircraft is now mid-flight, complete with handwritten flight logs, in the Transport Gallery of Sydney's Powerhouse Museum.

### **3. From the same root - the founding of Australia's military and civil aviation: 'The emergence of a government policy relating to civil and military aviation in Australia, 1918-1920'**

*Leigh Edmonds- Federation University*

It is no accident that the two branches of aviation in Australia, civil and military, were formed within a week of each other; the Civil Aviation Branch of the Department of Defense on 28 March 1921 and the Australian Air Force on 31 March 1921. These two branches took root, growing from discussions held at the highest levels of the Commonwealth government before the end of World War I and leading to decisions regarding them taken in the second half of 1920. Almost a century later, both have grown to become multi-billion dollar enterprises central to Australian culture and security.

Using documentary evidence, this paper discusses the reasons for such a close association between Australian civil and military aviation, rooted in the response to three issues confronting the Commonwealth government in the second decade of Federation - national defense, national development and finance. The experience of the war had taught the Commonwealth government that aviation had become a necessary component of national defense and civil aviation promised to play an important role in the great project of national development. However, facing both these proposals was the problem of paying for them.

### **4. Flight arrives to the Tuggeranong valley**

*Rebecca Lamb- Community Group, Minders of Tuggeranong Homestead Inc*

From the arrival of Andy Cunningham's Genaire Tiger Moth in the early 1920s, aviation took an upwards turn in the quiet rural Tuggeranong valley. Andy Cunningham's flying escapades became the stuff of local legend and his brave attempt to complete the flying race from Sydney to England, ended in almost disaster. Yet undaunted, he returned to Australia and to Tuggeranong to continue his thrilling aerial maneuvers in his flying machine. The Tuggeranong valley became the practice ground for aerial target bombings by the allies during the early part of WW2 then a flight training ground for the Canberra Aero Club right up to the 1970s. The beginnings of flight and Tuggeranong area are closely linked. I'd like the opportunity to expand on these themes on this occasion.

## **5. Connecting the British Empire 1932 to 1971 - Bringing the World to the Trucial States**

*Dr. Saif Al Bedwawi- University of Sharjah*

*Hafsa Tameez- Management Office of Sharjah: Gateway to the Trucial States*

The aim of this paper is to discuss the role of Sharjah Airport in connecting the British Empire as far as Australia from 1932 to 1971.

In the early 1920's, Imperial Airways began its iconic London-India air route. Along this two-day journey, the airlines needed an overnight landing stop and rest house for its passengers and thus they came to Sharjah, a self-governed Sheikhdom in the Trucial States, now one of the seven emirates of the United Arab Emirates. What followed next was a saga that brought the world to the Trucial States through Al Mahatta, the first civil airport in the region that still exists today as a museum, and sparked a movement towards modernity that radically changed the face of Sharjah and put it on the world map. Often referred to as 'The Forgotten Theatre', this imperial air outpost survived economic and political changes, the Second World War and its aftermath, and the birth of a nation. It was a haven in the desert for people in transit, a capstone in the sea and land networks that existed in the region historically, and a critical strategic connection between East and West during the dawn of aviation in the Gulf. Modernity came to Sharjah by air and left echoes of the development it instigated that can be felt in the Emirate today.

## **6. From Flying Fowl House to Spirit of Kokoda: The long and continuing journey of Papua New Guinea's Ford Trimotor**

*Andrew Connelly- PNG National Museum and Art Gallery*

Upon entering the gate of the PNG National Museum, next door to Parliament House in the Waigani capital district of Port Moresby, one immediately encounters three historical aircraft, most prominent of which both visually and in terms of heritage is a 5-AT-C Ford Trimotor. Built in 1929, this aircraft had an illustrious and varied career across half the globe. A glamorous early life included appearing in the 1930 Paris Air Show and operating in east Africa as the Star of Tanganyika owned by the Earl of Lovelace. The aircraft was brought to New Guinea in 1935 and became a workhorse for a burgeoning colonial society, carrying passengers and cargo throughout the Mandated Territory until the outset of WWII when it was commandeered into RAAF service. In 1942, the Trimotor bogged on muddy ground and flipped over at Myola Lake whilst delivering supplies to the men fighting on the Kokoda Track. It lay there for 37 years before being airlifted to Port Moresby in 1979. This aircraft is a touchstone not only for colonial and wartime heritage, but also for present-day land issues in the capital. It also remains a lightning rod for heritage issues in PNG, with the Myola landowners continuing to press demands for its return and for compensation.

## **7. For Defence Purposes: the military influences on civil aviation in Brisbane in the interwar years**

*Valerie Dennis- National Trust of Australia (Queensland)*

From its administration within the Department of Defence to the wartime backgrounds of its pilots and aero company managers, civil aviation in Australia developed in an entrenched establishment of men bound by the shared military experiences of the past and a budget-restricted preparedness for the future.

In 1922, three former military pilots chose 34 hectares near the Brisbane River at Eagle Farm to be acquired for defence purposes as the city's first civil aerodrome. There, the Civil Aviation Branch constructed one hangar while QANTAS, venturing in from the bush, built another. A handful of military-trained pilots undertook joy flights, air-taxi services or provided flight instruction, occasionally to women. All seemed well until the wet season of 1927 turned Eagle Farm into a morass.

Acquired for defence purposes as the replacement for Eagle Farm and boasting its two, now relocated hangars, Archerfield Aerodrome celebrated its 1931 opening with an aerial pageant. Following the 1939 declaration of war and, despite the decade's gradual growth in civil aviation, Archerfield's hangars were camouflaged and its pilots, engineers and training aircraft dedicated to the support of the Royal Australian Air Force. The defence purpose of civil aviation in Brisbane had been resolved.

## **8. From Flying to Spying: the Department of Civil Aviation in Portuguese Timor, 1941-42**

*Phil Vabre- Civil Aviation Historical Society Inc.*

In January 1941 the British and Australian Governments arranged to divert the Qantas Empire Airways flying boat service through Dilli, the capital of Portuguese Timor, in order to head off growing Japanese influence in the colony. At the same time, the Australian Department of Civil Aviation (DCA) sent a mission to Dilli to assist the Timorese to set up a wireless station in support of the service. This in turn led to some of the strangest activities that DCA personnel were ever called upon to perform. In this paper we will see how the air service was also used as a cover for spying on Japanese activities, how a DCA officer was instrumental in facilitating the bloodless invasion of a neighboring country, and how that same officer later became a go-between in negotiations for the – rejected - surrender of Australian forces in Portuguese Timor to the Japanese.

### 3. Intangible cultural heritage and place

In Australia, forms of intangible cultural heritage arise from every cultural group – from the cultures of Indigenous Australians, the cultures transmitted and adapted through each wave of migrant settler groups, and home-grown cultural practices that reflect peoples' response to the environment, history and cultural settings.' Chaired by the National Scientific Committee for Intangible Cultural Heritage (Australia ICOMOS), this session will explore the ways in which projects and case studies on aspects of the heritage of the air enable a better understanding of how cultural practices contribute to or stand apart from the cultural significance of place. The aim of this session is to identify how intangible cultural heritage has been recognised or ignored in Australian heritage practice.

Session Convenor: Lisa Sturis

#### 1. A Guide to Remembering – The Colonial Amnesia Project

*Tania Blackwell- Independent Researcher*

Through the lens of a 5th generation Tasmanian woman, with convict history linking back to the settled district of Victoria Valley and Bothwell; there has been no recognition of the Frontier War and the displacement of the First People. My research methodology initially was to explore what a memorial landscape would look like through the lens of Landscape Architecture. However, the narrative became much broader and influenced further exploration through the lens of a perpetrator and a thief.

Deep mapping of shared histories through site immersion, creative interventions, and tracing the path of my convict ancestry and the Black Line. Perceptions altered and the deep complexities that were resonating from the landscape, the waterways, trees, mountains and air we breathe. Memories of darkness. Realising that there was a sense of absence, loss and haunting that was far greater than anything tangible; that culture and country had been stolen. This then posed the question, how can we capture these intangible memories, this sense of loss and this deep haunting?

#### 2. Heavenly figures – preserving the intangible heritage of First World War memorials

*Darren Mitchell- University of Sydney/Australia ICOMOS NSC-ICH*

Even though the air during the First World War contained previously unknown terrors (Sloterdijk 2009) for many soldiers – gas attacks, airborne weapons – memorials built to remember the fallen and those who survived often pointed heavenwards. Sky-piercing

obelisks, starry domes, and goddess/angel sculptures served to focus aloft mourning and hope for a grieving and grateful nation. I will consider one such example, the Marrickville War Memorial erected in 1919 to commemorate more than 450 men of an inner-city Sydney suburb. A Winged Victory (Goddess Nike) figure atop a pedestal some four metres tall, holding wreath and sword, evoked this skywards hope (van Leeuwen 1988) and in its symbolism the monument exemplified Anzac commemorative thought and practice of its time. Recently, the memorial has been 'brought down to earth', partially relocated to an indoor exhibition space in the Australian War Memorial, displayed as an example of the post-war memorial movement. And a replica sculpture, installed in Marrickville in 2015, has made subtle changes to Nike's gestures.

This paper will examine how both the new horizontal view of the original housed in Canberra, and its contemporary (re)interpretation, make inaccessible to twenty-first century observers the intangible values of the post-war era.

### **3. Hello – Goodbye: Arriving and Leaving**

*Marilyn Truscott- Australia ICOMOS*

The world is now smaller, travel time shorter, contacts just a click closer. Yet physical connection can be a world away! Airports are today's spaces for welcome and farewell, that first or last hug. This short account including photos provides personal memories of mine and others' of meeting and parting. Has that experience of arrival or departure shifted over time given we fly in and out so often today, and air travel itself as changed? Are today's airports affecting the arriving and leaving experience and our associated sense of place.

### **4. Aboriginal Culture Meets Aviation: Kurna Heritage and RAAF Base Edinburgh**

*Neale Draper- Neale Draper & Associates Pty Ltd & Archeology, Flinders University of SA*

The Kurna native title holders of the Adelaide region of SA have a rich heritage of mythology, oral and documented history, and associated physical record of sacred sites, mound villages, cemeteries and other heritage places.

This cultural landscape includes the Edinburgh RAAF Super Base and Defence precinct, the site of WW2 munitions factories, the Woomera Rocket/ Weapons Testing Range, Defence Science and Technology Group, the home base of the Air Warfare Centre, No 92 Wing's AP-3C Orion and P-8A Poseidon surveillance aircraft and other RAAF and Army units. Infrastructure development and modernization at RAAF and the Edinburgh Defence Precinct involves frequent interactions with Kurna heritage, cultural landscape and traditions.

This paper describes some aspects of this relationship between the Kurna people and one of Australia's major Defence Aviation facilities, which involves modernism and machines in aviation as well as emphasising the living memories and Kurna cultural heritage values of

this special place. This case study illustrates the many links between intangible and tangible cultural values of place, as well as the multi-layering of diverse cultural values and how these can be mediated and shared for a specific place.

## 4. Place and Airspace

How have aerial perspectives transformed life on the ground? This session brings together views from urban planning, law and art to explore how communities have mobilized concepts of air space and Country to impact cultural, social and legal outcomes.

Session Convenor: Tracy Ireland

### 1. Big Sky Canberra

*Shane Breynard- School of History, Australian National University*

This presentation will explore Canberra's development as a uniquely twentieth century city through a fresh focus on the contribution of aerial photography and the moving image.

Concepts of the aerial view and 'a big sky' are invoked in the earliest descriptions of Canberra remain central to how the city is perceived in the national imagination, and to its representation across the globe.

The exciting advances in aeroplane technology of the early twentieth century transformed the way Australians came to experience distance, landscape and urban life by the century's end.

The use of aerial photography in town planning, in military applications, and in promotional imagery, was particularly influential in Canberra's development, marking it out as a uniquely twentieth century city.

However this image of Canberra, so carefully woven into the uplifting spirit of modernity, is only one of the ways that air technology and the moving image have left their mark. At times a failure to consider the 'Canberra project' from-the-ground meant that the technology of the air and the magic of the moving image came together in unexpected, unscripted and sometimes tragic ways.

This paper examines these unanticipated histories and the learnings they hold for a more grounded imagination of Canberra's future.

### 2. The city from the air: skylines, skyscrapers, and sights of urban heritage

*James Lesh- The University of Sydney*

The advent of technology to view and record cities from above changed how people perceived, valued, designed, promoted and conserved cities. Before the nineteenth-century cities had been imagined from above, but the advent of flight and particularly aerial



photography changed the course of urban history. For heritage, these technologies altered perceptions of historic environments and approaches to conservation. The interrelationship between sky and ground fascinated conservationists as much as it did city promoters. This paper draws on twentieth- and twenty-first century aerial photography of Melbourne, focussing on the presentation of the city skyline, particularly in the vicinity of the Yarra River and southern CBD. It argues that this iconic Melbourne vantage, manufactured by flight, not only reflected but also engendered the changing heritage priorities of the city in the twentieth-century. These photographs show that the Melbourne CBD grew bigger and taller, particularly with the construction of skyscrapers. Ultimately, this pattern of development proved to be difficult for conservationists due to the impacts of high-rise towers on low-rise historic environments. As city skylines such as Melbourne become increasingly crowded and postwar skyscrapers enter heritage lists, this paper will explore tensions related to the conservation of the urban heritage of the sky, as pictured from above, while integrating the key conference themes of the modernism, technology and memory.

### **3. Let Air Space be a Teacher**

*Ivana Troselj- UNSW-Canberra*

13th century property law helped to define the earliest notions of airspace into which the first hot air balloons flew. "Cuius est solum, eius est usque ad coelum et ad inferos" ("whoever's is the soil, it is theirs all the way to Heaven and all the way to Hell). But the history of airspace is also one of evolving concepts. It continues to evolve to accommodate new space missions and cyber activity, well beyond what was historically only tethered to earth, and its sovereign soils. And airspaces are sometimes as contested as they are congested. An understanding of the history of the evolution of airspace, will help to explain these developments. Moreover, the way in which that evolution has been shaped and helped to shape the development of the international treaties and norms to which Australia subscribes, along with evolving concepts of sovereignty and territorialisation, digital communications, and thresholds of operational engagement, will help Australia to imagine what comes next in its operations, and its thresholds for engagement in its other operating spaces, as airspaces continue to evolve and converge with emerging capabilities.

### **4. Heritage from the Air - Contemporary Indigenous Australian Painting: An Aerial View of Landscape Informed by Traditional Knowledge**

*Marie Geissler- Honorary Associate Fellow, School of the Arts, English and Media, University of Wollongong*

The history of the ways in which Indigenous Australians from remote Australia (the desert and northern Australia - Arnhem Land) have used paintings of their country (which can be

said to symbolically represent aerial views of their lands) to advance the self-determination of their culture offers many insights in relation to the self-determination of their cultural heritage.

The capacity of the people to create such works reflects on the nomadism of the traditional people, and a culture which is based developing a memory that allows them to learning intricate details related to survival in the landscape such as places, events and objects. Within the culture this learning is reinforced by ceremonial song, dance, storytelling, drawing and painting.

Such paintings encode traditional knowledge and entitlements in ways that such knowledges by this means were protected for posterity, they also provided vehicles for cross-cultural engagements that would allow Indigenous Australians to prosecute land and sea rights claims to the Australian Government.

The early small acrylic Papunya works of the 1970s and 80s graphically represented aerial views of landscape and cultural content. The works from this time were accompanied by sketched interpretative maps of the work setting out the details of landscape and events (many small works are on view at the National Gallery of Australia).

A highlight of that decade and movement in terms of scale, is a work of Clifford Possum and Tim Leura's Napperby Death Spirit Dreaming 1980, 207.7 x 670.8 cm (National Gallery of Australia). It is a monumental and exceptional work of cartographic inspiration which relates to vast distances of the artists' country as seen from aerial perspective.

## 5. No highway in the sky: Can air routes join land and sea examples of cultural exchange?

Aviation helped forge a truly international twentieth century. This session considers the validity of air routes as cultural routes, along with land and sea examples, in the context of current definitions and understandings of global heritage. The session invites contributions on the evolution of different aviation routes, such as the QANTAS Kangaroo Route, from early flying-boats to the jumbo-jet and beyond. It will explore the cultural exchanges that flowed from the global migration and mass tourism of the post war boom. It welcomes reflections on the intangible cultural significance of early air travel through access to both private and public memories. Diaries, photographs, travel posters, press reports and populist media such as Frank Clunes' 1948 travelogue *High Ho to London* and Neville Shute's 1948 novel, the 1951 film classic *No Highway in the Sky* can illuminate and record cultural exchange.

Session Convenors: Sandy Blair (MC), Kirsty Altenburg and Timothy Hubbard

### 1. Investigating air routes as sites of dynamic cultural exchange

*Sandy Blair (MC)- University of Canberra*

This paper considers the validity of air routes as cultural routes, along with land and sea examples, in the context of current definitions and understandings of global heritage. It explores the dramatic cultural exchanges that flowed from global migration and mass tourism by air and how this is expressed in physical remains. It also reflects on the intangible cultural significance of early air travel and how it is remembered and represented in the twenty-first century.

### 2. Overcoming isolation: memories of early air and land travel

*Kirsty Altenburg- Altenburg Consulting*

This paper investigates some mid twentieth century journeys by air and land in response to Australia's geographic isolation. Innovative travel routes developed prior to the era of mass tourism, from flying boats to the post war overland 'hippy trail' to Europe. Accessing both private and public records the paper explores the ephemeral nature and intangible cultural significance of these memories as cultural exchanges. It will explore how these early air and land routes can be remembered as themes contributing to the evolution of the Kangaroo Route as a cultural route.

### **3. When the Kangaroo Route Boomed: from its post WW2 rebirth to the jet age and beyond**

*Timothy Hubbard- Heritage Matters Pty Ltd*

Building on two previous papers (Hubbard, 2012; Hubbard 2014), this paper explores the rapid evolution of the QANTAS Kangaroo Route after the Second World War. It shows how the Kangaroo Route facilitated enormous cultural changes in Australia and, more broadly, in the British Commonwealth. Evidence is found in private diaries, media coverage, memorabilia and the statistical analysis of the decline in alternative transport (mainly travel by sea) and the rise in mass tourism. Sub-themes will include: Australians 'going home' to the UK; migration from the UK and Continental Europe; international sport, especially cricket; and how Coronation Street met Ramsey Street. The paper tests the cultural significance of the Kangaroo Route against the official definition of a cultural route. It challenges the international heritage community to fly higher and further.

## 6. GA2020 Scientific Symposium: Q&A

The 20th ICOMOS General Assembly and Scientific Symposium (GA2020) will take place in Sydney from 1-10 October 2020. The theme of the four-day Scientific Symposium: 'Shared Cultures – Shared Heritage – Shared Responsibility', reflects the global context of heritage as part of cultural identity at a time of rapid population shift, conflict, and environmental uncertainty. The important notion of shared stewardship, for which the 'culture-nature journey' is of particular relevance, requires diverse approaches to the sustainable protection, conservation, and safeguarding of heritage.

The GA2020 Scientific Symposium will comprise 6 separate themes: Shared Cultures; Shared Heritage; Shared Responsibility; Indigenous Heritage; Culture-Nature Journey; and Marginalised Heritages. Each of the Australian co-chairs will provide a short introduction to their respective themes, identify key issues, and outline the challenges for advancing those issues via the GA2020 Scientific Symposium. The short presentations will be followed by questions and discussion.

The session provides an opportunity to speak directly to the Co-chairs of the Scientific Symposium and discuss with them how you might contribute to and/or participate in this global event. The call for GA2020 Scientific Symposium session proposals and abstracts opened on 2 October 2019 and will close on 6 January 2020. Hence this session provides an ideal opportunity to discuss your ideas for proposals with the Theme Co-chairs.

Session Format:

1. Overview of the GA2020: Prof Richard Mackay AM (GA2020 Convener)
2. Overview of the Scientific Symposium: Steve Brown (Australian Co-chair, Scientific Symposium)
3. Overview of Scientific Symposium Themes:
  - Cristina Garduno Freeman (Co-chair: Shared Cultures Theme)
  - Agnieszka Kiera (Co-chair: Shared Heritage Theme)
  - MacLaren North (Co-chair: Shared Responsibility Theme)
  - Chris Wilson and Diane Menzies (Co-chairs: Indigenous Heritage Theme)
  - Susan McIntyre-Tamwoy (Co-chair: Culture-Nature Journey Theme)
  - James Lesh (Co-Chair: Minority Heritages Theme)
4. Discussion and questions

## 7. Digital cultural heritage: mediating modern migratory memories of space and time

Digital technologies can augment histories with crowdsourced data, enrich archives with sensory experiences, enhance interpretation with interactive media, and improve heritage management with condition capture and maintenance systems. This session presents three diverse cases where digital technologies have been deployed to expand research and interpretive capacity and enable the creation of richer histories.

Session Convenors: Chris Landorf and Kelly Greenop

### 1. SYDStories: Using digital media to tell the story of Sydney Airport

*Indigo Hanlee- Lightwell*

Over the last two years, Lightwell has worked with Sydney Airport to create a storytelling website that highlights the history of Mascot and Botany Bay. Featuring interactive maps, videos, sliders, high-resolution galleries, animations and timelines, the SYDStories website reveals some of the key moments in the history of aviation and the people who made them happen.

SYDStories was officially launched in line with Sydney Airport's Centenary in June 2019, and was created with the help of over 50 contributors. This paper describes our collaborative process, and discusses some of the opportunities and challenges for digital media in aviation heritage and history.

### 2. How the aeroplane shrank the world: visualising travel times with Trove Newspapers

*Tim Sherratt and Brett Holman- University of Canberra*

We demonstrate here a new method for extracting quantitative data from Trove Newspapers. We automatically parse article headlines for periods of time associated with London and Sydney which, from about 1920 onwards, overwhelmingly refer to actual or proposed flights between Britain and Australia. They therefore track the impact the coming of flight had on the imaginative distance between the two nations, helping to overcome the 'tyranny of distance', as Geoffrey Blainey termed the Antipodean sense of isolation. These travel times fell from around 20 days at the start of the 1920s, when steam ships were still the fastest method of intercontinental travel, to 7 days or less by the mid-1930s when international airline services to Australia began. We use Tim Sherratt's Trove Harvester,

which is based on Jupyter Notebooks, making this method easily extendable to other cases where interesting numbers are embedded in Trove Newspaper articles.

### **3. In the air, on the land, in the sea: using digital methods to interpret difficult heritage**

*Alison Starr- Doctoral Candidate, University of Queensland*

Digital methods can bring the past, and its connection to the built world, to a wider greater audience. This is a key factor in war memory, with World War One and now World War Two now passing into the post memory period (Hirsch, 2008) where there will soon be no living survivors to engage with on first hand survivor testimony, of not only significant war events but the extraordinary experience of living through these wars.

While advances in computer generated imagery (CGI) has resulted in realistic depiction of air combat from the aircrew perspective, digital methods offer rich opportunities to connect the tangible and intangible aspects of wartime service. By building a picture of sites where air crew trained and embarked on missions, and frequently did not return to; the breadth, conditions, and inaccessibility beyond a map, of the routes taken; the land-based, water-based, and often remote nature of wreck sites and accompanying war graves; and pilgrimages that the aircrew survivors take to remember service and sacrifice, this war history and heritage can be more comprehensively understood. Wartime aviation activities are much more challenging to interpret in the modern landscape, and accordingly, the impact of these war memories risks being lost in the post-memory period.

A digital picture has the potential to be far richer by being inclusive of the social aspects of war history and looking at the outcomes of these missions from the enemy.

## 8. Vintage Aircraft Operation

The difficulties of operating vintage aircraft today are not necessarily those expected. They include technical and paperwork challenges, and often finding (or making!) rare parts and regaining lost knowledge. So why do it? Entertainment, commemoration, education – as well as enjoying it! This session will feature practitioners and participants in heritage aircraft operation to explore how and why people work hard to put historic aircraft back in the air and keep them there.

Session Convenor: James Kightly

### **1. But have you tried it? Owning, maintaining and operating old and forgotten Australian ultralights**

*Fiona Shanahan- Heritage of the Air and University of Canberra*

The 1970s and 1980s are arguably the biggest decades for ultralight design and production in Australia. An array of Sportsmans, Drifters and Thrusters were created in the Australian backyards of aviation visionaries. Yet today, few fly these older ultralights and even fewer know the history of Australian ultralights. A group of individuals in Australia's Northern Territory have made it their mission to have at least one of every old Australian ultralight in flying condition as part of their private collection. There are certainly challenges that arise from owning, maintaining and operating these aircraft and this paper will explore the challenges as well as the positives. These positives include insights into ways in which to remember Australia's ultralight past, the recovery and preservation of past skills and knowledge, as well as the sheer joy of seeing the aircraft back in the skies where they belong.

### **2. A new generation to operate historic machines for tomorrow**

*Lloyd Galloway- Private historic aircraft owner & operator*

Historic aircraft ownership is rewarding, satisfying and special, so why are vintage organisations struggling to attract younger members? It became evident when Lloyd joined the Antique Aeroplane Association of Australia that there was a distinct lack of younger members interested in historic aircraft. Aviation history is a very important part of the aerospace industry and it is struggling to attract the next generation, those who are needed to keep these aircraft flying into the future. The current attraction for young members to historic aviation groups and events is the longstanding family connections. How can we change this to attract new members from outside the organisation and encourage them to consider owning and operating historic aircraft? Modern flight training methods don't



particularly help and this aspect of 'general aviation' is often overlooked. Passing on these machines to the next generation will allow significant memories and stories to be enjoyed by those in the future. Lloyd Galloway shares his personal journey to becoming an historic aircraft owner and discusses how we can secure these aircraft flying in the future, and why it matters.

### 3. Panel Session- Vintage Aircraft Operation – How it Really Works

In this panel session we present a rare opportunity to ask the actual vintage aircraft operators about the real challenges of maintaining and flying historic machines. **James Kightly**, 'Vintage Aero Writer', a reporter on the area will briefly explain the background, introduce the panel's experts, and open the panel to audience questions.

Panel Members:

**Lloyd Galloway** – a young private pilot, owner and operator of three vintage Auster aircraft, two with World War Two service. Lloyd is also a newly qualified air display pilot and is keen to show that the barriers to entry of historic aircraft operation are not necessarily those expected.

**Matt Henderson** – private pilot and current president of the Antique Aeroplane Association of Australia. Owner and operator of a Cessna O1 Birdog and a CAC Winjeel, organiser of the recent first Tocumwal Airshow, and a regular participant of many air displays and commemorations.

**Stephen Death** – professional pilot operating the multi-generation family business Hazair Pty Ltd, including agricultural and firefighting flying, aircraft ferrying, maintenance and repair. Stephen is a highly experienced air display pilot, including formation aerobatics, display training, and warbird flying including Spitfires, Mustangs and Kittyhawk single seat World War Two fighters.

## 9. The Modernist movement and aviation

The advent of accessible air **travel** in the mid-20th century led to increased requirements for new airports, amenities and associated infrastructure. This session invites presentations on aviation architecture, through the lens of modernism.

How did the modernist movement influence air travel, and vice versa? How did architects embrace the utilitarian design and functional requirements of airport architecture (i.e. terminals and control towers)? How were designers reimagining uniforms and fashion for travelling? How did connecting countries and cultures contribute (or otherwise) to the globalisation of airport design? How did the effect of overseas travel influence Australian architectural styles?

Session Convenor: Canberra Modern (Rachel Jackson)

### 1. The Mother of All Airports

*Lianne Cox- Studio of Pacific Architecture, ICOMOS NZ*

The title of this paper refers to Templehof Airport, in Berlin, as described by Sir Norman Foster. This paper uses an architectural perspective to discuss:

- How Templehof was planned as a cutting-edge airport, and how these ideas influenced airport design.
- The modernist architecture of Templehof from the large-scale modernist planning moves, the architectural design of the buildings, through to the details of modernism within the building.
- The innovative structural solutions that were developed, and implemented to achieve the design.

The paper will include an outline history of the site and discuss: where the name of Templehof comes from; use as a commercial airfield; use during the WW2; inhabitation by the Americans up until the 1990s; current uses; and what the future might hold for Templehof.

## **2. Aluminum takes flight – Women artists and Modernism’s materiality – The contemporary sculptural practice of Donna Marcus**

*Virginia Rigney- Senior Curator – Visual Arts Canberra Museum and Gallery*

Donna Marcus is a contemporary Australian artist whose primary sculptural practice is based on the arrangement of purposefully collected domestic aluminum. The complex geometries of her large-scale works defy the humble origin of their individual components, and her practice seeks to connect the layers of historical associations with their continuing resonance in contemporary life. Aluminum – the wonder metal – was imperative to the success of aviation design and in war-time, ‘Aluminum Drives’ extolled particularly women on the home front, to bring out their pots and pans and contribute to build airplanes for the war effort. Marcus interrogates this cultural history of materiality, particularly the association with aviation and modernity, and her work allows us to see these connections with fresh eyes. In a new age of ‘re-use and recycle’ her works have a potent urgency.

This paper places Marcus’ work in context with earlier women artists of the modernist period and their interest in the representation of aviation and modernity. The presentation proposes to combine striking visual imagery of both historical source material and contemporary practice layered with archival sound recordings and readings from original texts.

## **3. Heritage under pressure: protecting modernist airport buildings**

*Anna Hyland- RMIT University/ Abode Restorations*

Airport buildings have evolved in response to function—the technical and social requirements of modern commercial aviation. These ever shifting technological, social, economic and legal contexts have made airport buildings particularly vulnerable to change.

This raises questions about the conservation of heritage buildings in an aviation context. What is protected? How are competing pressures balanced? How do we preserve the modernist fabric of early airport buildings? And how does the significance of aviation architecture change as its setting or use is altered?

This paper seeks to explore these issues through a case study of the early modernist architecture of Helsinki-Malmi Airport. Opened in 1936, the Helsinki-Malmi Airport is a rare example of a pre-World War II airport environment, with original runways, hangars and terminal building. Despite being declared a cultural environment of national significance, the City of Helsinki is pushing ahead with plans to develop the site.

This paper will explore the history and architectural significance of the airport, the dispute surrounding its development and the strategies being used to protect the site.

#### 4. Take us to the moon: playground rockets

*Sue Jackson-Stepowski- Moree Plains Shire Council*

*Murray Amos- Moree Plains Shire Council*

Take us to the moon: playground rockets not only embody post World War Two geo-political stand-offs, brought overseas telecommunications to Australia and changed educational philosophies, but exemplifies rapidly changing community sentiments and values. The demise of playground rockets still evokes a nostalgia. So what happened? A survey of a piece of childhood fantasy, and one man in particular Dick West, tell us more about a society's dreams about how it once was and where a few still seek to be.

The Space Race was a product of the Cold War, both of which were transformative on how the world viewed technology. These geo-political events extended into overseas telecommunications, rose education standards, and caused international ramifications in the arts and popular culture, including how children play. The most famous climbing frame was shaped as a 'rocket'. In NSW most disappeared in the late 1990s due to OH&S concerns but a few survive including 3 of the 32 'rockets' fabricated by Dick West of Blackheath. This paper summaries how intertwined is a history of play, 1960s social trends, followed by a heritage assessment of 'rockets' made by Dick West. Moree had the first overseas telecommunications tracking station and seeks to ensure its original West fabricated rocket is conserved for future generations.

#### 5. Qantas Airways, Qantas House 1957 and post-war Australian national identity

*Geoff Ashley- Ashley Built Heritage — Heritage Consultant*

The construction in 1957 of Qantas House, Chifley Square, Sydney, reflects the absolute confluence of many themes of Australian post-war modernism and national identity; where multiple cultural, political, technological and design 'heritage of the air' elements came together that either reflect or directed a change point in Australian history.

This paper addresses and links three key strands: the nationalisation of Qantas and its role both literally and metaphorically in linking Australia to the modern post-war world; the modernist design of the building itself and its direct aeronautical references (aluminum blade curtain-wall mullions) that also reflect the exposure to modernism in the architectural training and travels of its designer Felix Tavener, and finally, the post-war technological and social connections to the USA reflected in the use by Qantas of Lockheed Constellation and Boeing 707 aircraft and the construction of the adjoining, Qantas owned, Wentworth Hotel designed in the Californian office of the iconic modernist firm Skidmore Owings & Merrill.

As a link to other conference themes, this paper asks that with its privatisation, what is the nature of our collective relationship with Qantas – is there an ongoing national cultural association or is that now collectively consigned to history?

## 6. Holyman Airways and Modernism - the family connection

*Fiona Austin- Beaumaris Modern*

As an interior designer (Austin Design Associates) co-author of the recently published book, 'Beaumaris Modern', and President of Beaumaris Modern, I have an ongoing interest in my family links to Holyman Airways and family company, 'Modern Art Furniture'.

Ivan and Victor Holyman (my great Grandmothers' brothers) started Holyman Airways in 1932 after the First World War. In 1936 Holyman Airways formed a consortium with other transport companies and became Australian National Airways (A.N.A) with Ivan Holyman as Managing Director, during this time Ivan engaged Melbourne Architect, Garnet Alsop to design the passenger terminals around Australia.

My grandmothers' brothers, David and Cyril Barrett, (Ivan Holyman's nephews) started a furniture design company called Modern Art Furniture in Launceston Tasmania in the 1930's. Ivan engaged Modern Art Furnishing, to furnish all the passenger terminals throughout Australia.

Modern Art Furniture also furnished Wrest Point Riviera Hotel, (later casino) during the period of ownership by Holyman Airways.

The family owned 'Moderne style homes in Launceston and Melbourne – the Melbourne home designed by architect Esmond Dorney.

Modern Art Furniture designed and manufactured sofas, chairs, carpets, side tables, dining tables, dressing tables, wardrobes and even a circular drinks cabinet, the furniture was very contemporary for its time - pared back and 'Moderne'.

## 7. The Royal We: Qantas in the service of nation and empire

*Annie Clarke- University of Sydney*

*Sally Brockwell- University of Canberra*

Post WW2, when aircraft gradually replaced ships as the medium for international travel, royal tours to Australia increased tenfold. Only six of 50 plus visits by royal family members pre-date 1954. In 1965, Qantas (then Qantas Empire Airways) flew the Duke and Duchess of Gloucester on their Australian tour. As the national airline, Qantas promoted Australian design, food and wine through its first-class cabin service. For this royal tour, the interior of a Boeing 707 was re-modelled with Australian designs, contemporary textiles and a food and beverage service that showcased local produce, presenting Australia as a modern nation of cosmopolitan tastes that had grown beyond its stereotypical portrayal as a convict/colonial backwater. In this presentation, we argue that on the one hand Qantas sought to promote a

modern and cosmopolitan Australia, while on the other the growing accessibility of air travel enabled the maintenance of imperial and colonial connections.

## **8. Flights of fancy: Developing an Historic Thematic Framework as a catalyst for Identifying and conserving Twentieth-Century heritage places**

*Sheridan Burke- ICOMOS ISC20C*

Introducing the forthcoming publication of the Getty Conservation Institute (GCI), developed in collaboration with the ICOMOS ISC20C, this paper will review the brave new Historic Thematic Framework for the Twentieth Century, through the lens of heritage of the air.

The technological and political advances of the Twentieth Century that developed the sciences of aviation, and its political, commercial and public applications have also changed virtually every aspect our lives and environment. Aviation sites have been created, abandoned and adapted in rapid succession, and the recent refurbishment of the Eero Saarinen designed airport terminal in New York for TWA will form a case study.

This paper will demonstrate through the heritage of the air how the Historic Thematic Framework for the Twentieth Century can be a catalyst for identifying and conserving sites and places, a useful tool for the professionals, heritage agencies and communities to research, identify, conserve and interpret the heritage of the Twentieth Century holistically and responsibly.

## 10. Conserving and collecting aviation heritage

The Centenary of Civil Aviation in 2021 will focus public interest on the contribution of aviation to Australian society and on vulnerable civil aviation heritage. Globally, aviation has been a key component in the cultural imaginary of modernity and is accepted as part of the texture of the fabric of contemporary life, and as agent and consequence of economic development and globalization. This session explores how and why communities and organisations are conserving and collecting aviation heritage, what is being collected and conserved, and what narratives and values these objects and places convey.

Session Convenor: Tracy Ireland

### 1. *Aranui*: the final journey

*Steven Fox- Museum of Transport and Technology, Auckland, NZ*

In March this year, *Aranui*, the world's last remaining Short Solent Mk IV flying boat was installed into the Sir Keith Park Aviation Display Hall at the Museum of Transport and Technology (MOTAT), completing a project that has been running for several decades. This also marked another major milestone for MOTAT, having its entire aircraft collection under permanent cover for the first time.

RMS *Aranui* was the pride of the T.E.A.L. (later Air New Zealand) fleet flying the trans-Tasman and Pacific Islands route from Wellington and Auckland. Donated to MOTAT in 1964 why did it take 55 years to finally bring it inside? The final journey of the *Aranui* to its permanent resting place, whilst physically only some 85 metres, in many ways mirrored the development of the collecting institution that took responsibility for it.

This is a story of the power of individuals to protect heritage collections, well intended but failed acts of restoration, passion, frustration, vandalism, unwelcome tenants, disappointment, conservation, interpretation and finally delight. The final, albeit geographically short, journey of the *Aranui* is something to behold!

### 2. From Go to Whoa: Taking the journey from acquisition to display

*Andrew Pearce - Endangered Heritage Pty Ltd*

*John White - Endangered Heritage Pty Ltd*

When an aircraft goes on display, museum visitors only see the finished product. Reaching this endpoint may require hundreds of hours of manual labour, but also extensive research and a rigorous decision making process.

Many times museum aircraft do not arrive in a ready to display condition. All will need some work, and may have suffered damage due to neglect, mishap, combat operations, previous restoration or modification. They may be structurally or chemically unstable and they often have many diverse periods of historical operation, making the selection of any particular configuration or appearance more complicated. Often it is found that manufacturers documentation, accepted fact and even eyewitness accounts of the aircraft conflict with the physical evidence present on the airframe.

Custodians of historical aircraft have budgetary and logistical constraints. Purchasing, housing, moving, dismantling, treating, refurbishing, reassembling and displaying an item such as an aircraft all bring significant costs. As complex multi element objects, aircraft frequently have "inherent vice" and a finite lifespan, no matter what treatment is undertaken.

Andrew Pearce (Conservator) and John White (Curator) discuss the broad range of competing factors and the decisions involved in bringing aircraft from potential acquisition through to exhibition launch.

### **3. From Aero Clubs to Aviation Companies**

*Jennifer Wilson- Queensland Museum Network*

Material in Queensland Museum's Thomas Macleod Aviation collection highlights the aviation interests of a number of Queenslanders before and during the First World War. Diaries, letters, logbooks, photographs and memorabilia tell the stories of their experiences as they created aircraft, partnerships and associations in pursuit of their ambitions. These stories provide a significant overview of the development of aviation in Queensland from 1910 to 1919 and their links to wider Australian and international aviation events.

### **4. Out of Africa – the ruin of the Southern Cross Minor**

*Jessica Western and Tracy Ireland- University of Canberra*

In 1962 the wreck of a small plane, the Southern Cross Minor, and the body of its pilot, were discovered in the Sahara where they had crashed in 1933 by a patrol of the French Foreign Legion. In 1975 Mr Ted Wixtead, a librarian at the Queensland Museum in Brisbane, Australia, took part in a successful mission to recover the plane's remains, which are now to be found deep in a storage facility for the museum's permanent collection. Despite this remarkable provenance, the museum's catalogue tersely describes this object as 'box frame aeroplane in exceptional state of wreckage', offering no further details. The remains have never been restored and the skeletonised, twisted form still carries a perceptible tang and texture of Saharan sand.



As part of the 'Heritage of the Air' project at the University of Canberra, we are experimenting with object biography and material histories to explore the cultural impact of aviation and as a way to complicate the dominant, nationalistic narratives of aviation as a technological triumph driven by pioneering, heroic men. Approaching the Minor archaeologically as a ruin, and through object biography, we explore these material traces as the result of both remembering and forgetting, entropy and residuality, intentionality and accident, social and environmental processes. With the poetic narrative of Michael Ondaatje's postcolonial novel *The English Patient* (as well as the visual memory of Minghella's remarkable film) as an inescapable influence, we explore the unruly, persistent materiality of the Minor, its unpredictable vibrancy and more-than-human entanglements.

## 5. Conserving the Qantas Hangar

*Andrew Ladlay Andrew Ladlay Architect*

*Nicole Kuttner- Qantas Founders Museum*

Built in Longreach in 1922, the Qantas Hangar survives as a marker of the airline's humble beginnings in the Australian outback. The building and its immediate site is included in the Queensland Heritage Register and the National Heritage List.

The Qantas Hangar is of cultural heritage significance as it demonstrates the earliest days of the major international airline Qantas and provides a tangible link with pioneering air services in Australia. The hangar is also significant as one of the earliest sites of aircraft assembly in Australia.

The Qantas Hangar is also important for its association with the Royal Flying Doctor Service founded by Rev John Flynn in 1928, and for its association with Hudson Fysh, Paul J McGinness and Fergus McMaster, the central figures in the formation of Qantas, and Arthur Baird, whose engineering skills were devoted to making the airline a success.

This paper looks at the Conservation Management Plan prepared by Andrew Ladlay Architect in 2016, the challenges and issues associated with conserving the place, and the subsequent implementation of CMP policies and recommendations by the Qantas Founders Museum.

## 11. Investigating and analysing Second World War operations

Air power was at the heart of many Second World War victories; subsequent strategic planning often depended on it. This session provides a glimpse of the breadth of aerial operations, the significance of air power in campaign victory, as well as the different ways in which operations can be analysed. This morning our presenters range far and wide as they share their analysis of some of the lesser-known aspects of Second World War aerial operations and activities in French Indochina, Malaya, Rabaul, the Northern Territory, rural New South Wales, and Scotland's Loch Striven.

Session Convenor: Kristen Alexander

### 1. Air War over Angkor: the Franco-Thai conflict and Japanese strategy in French Indochina prior to the war in the East.

*Shaun Mackey- Cambodian Archaeological Lidar Initiative (EFEO)*

In January 1941 the final stage of the Franco-Thai War was fought across French Indochina on land, sea and air. The nature of the air war focused on a reciprocal bombing campaign of military and urban targets. The Thai Air Force prioritised locations in Laos and Cambodia – including Siem Reap near the ancient monuments of Angkor. On one bombing mission, a light bomber of the Thai Air Force, the Japanese made and supplied Mitsubishi Ki-30, was shot down by aircraft of the French Armée de l'Air and crashed near Angkor Wat. By mid-1941 French Indochina had ceded several provinces to Thailand whilst now being under Japanese occupation. Indochina was transformed into a base from which Japan would later launch a combined military strike against British, Dutch and Thai controlled territories.

The Franco-Thai war is a brief and little-known campaign within the Second World War. This paper will focus on aviation and its role in war and strategic war-planning. Evidence includes: Thai air-wrecks; sites of aerial bombing; aviation infrastructure; and, material remains. Air conflict at this period of Indochina's history reveals themes of nationalism, irredentism, militarism, and colonialism in Southeast Asia before Japan's attack on Allied powers on 7/8 December 1941.

## **2. RAAF Operations in Malaya, Singapore and the Netherlands East Indies, 1941 – 1942.**

*Peter Helson- Former UNSW@ADFA post-graduate student*

In December 1941 the Royal Australian Air Force (RAAF) had four flying squadrons based in Malaya. The two fighter squadrons (Nos 2 and 453) were equipped with Brewster Buffalo aircraft and tasked with air defence and support for ground forces. The other two squadrons (Nos 1 and 8) were equipped with Lockheed Hudsons and their role was bombing, convoy escort, and reconnaissance. Both aircraft types were obsolescent designs that were inferior in performance to their Japanese counterparts and would prove to be inadequate for the operations assigned to them. Three RAAF squadrons were based in different locations in Malaya, while 453 was at Sembarwang in Singapore.

The squadrons suffered heavy aircraft losses as the Japanese quickly overran Malaya and then Singapore. The remaining aircraft and squadron personnel were withdrawn to Sumatra. The air campaign continued there, under the inspiring leadership of Group Captain (later Air Marshal Sir) John McCauley, who established a secret hidden airfield known as Palembang 2.

This air campaign has been described in official histories, personal accounts, and general campaign histories. To my knowledge there has not been a specific account of the RAAF's role in this theatre. It is hoped that this paper will lead to the compilation of such an account.

## **3. Conflict to Commerce – Comic Propaganda in WWII. A Case study of the Bombing of Rabaul.**

*Mark Nizette- Kokoda Initiative (PNG National Museum and Art Gallery). Presented by Dr Andrew Connelly.*

As the world slipped deeper into WWII, the power of propaganda became recognised as key to domestic support, and to instil patriotic drive in the enlisted troops. Powerful posters adorned buildings, cinemas screened successes from the front, and the comic industry boomed with stories of the War.

In the USA comics soon became a vital media to communicate selective messages to the people at home, and to the troops engaging the enemy. Initially, the messages of patriotism, moral right and strength were told through fictional characters such as Superman who gained popularity fighting for freedom against the Nazis. But some comics such as the aptly named True Comics and War Heroes sought out real life stories from the war and expertly drew sanitised renditions of the truth to sell to the people. Appealing to adult and child alike, the Government found itself with a powerful, cheap and accessible

communications tool to stimulate productivity and support at home, and courage on the front.

This paper examines a case study of the bombing of Simpson Harbour in November 1942 by the US Fifth Air Force as told through the comic medium and archival research, and reflects on the sanitisation of history.

#### **4. Investigating the systems and material remains of a three-dimensional battlefield**

*Daniel J Leahy- University of New England*

Aviation has been an aspect of modern conflict since the earliest days of the twentieth century. During the First World War, military aviation pioneers began experimenting with ways of eliminating enemy aircraft from the skies, a process which resulted in the art of dogfighting and other forms of aircraft detection and anti-aircraft weaponry being developed. From early 1942, such methods and technology were being employed by a number of militaries on and over the Australian mainland.

Aviation archaeology investigates human involvement with flight through the analysis of related material remains. But as the saying goes, 'what goes up must come down', so much of the material remains relating to warfare in flight are now found at a location other than where combat actually took place. This paper will look at an example of air warfare that occurred over Australia's Northern Territory in 1943. It will discuss how modern technology applied to both the archaeological and historical record can shed light not only on the three-dimensional battlefield of the day but also the systems that were employed on a large scale to defend Australia during the Second World War.

#### **5. The Bouncing Bomb Down Under**

*Michael Nelmes- Narromine Aviation Museum*

"Tripe of the wildest description!" exclaimed Air Chief Marshal 'Bomber' Harris, Royal Air Force Bomber Command chief during the Second World War, when presented with the idea of a 'bouncing bomb'. Barnes Wallis' unique concept was strange, to say the least: a spinning mine, dropped onto water from a low-flying aircraft, which skipped along the surface until hitting an enemy target. Nevertheless, the Upkeep mine was proven in Operation Chastise, the successful Dambuster attack on German dams.

In tandem with Upkeep, Wallis developed its little-known smaller cousin, codenamed Highball. A squadron of elite British (and some Australian) airmen was tasked with deploying it. This paper looks at how and why this unusual weapon came to Australia in late 1944 on a top secret mission to sink Japanese capital ships; and why, despite its airmen being fully trained and ready with a proven concept, Highball was never combat-tested. Despite a projected 50% loss rate in crews if the mission had gone ahead, the airmen were

disappointed when their squadron was disbanded a month before war's end. Its Mosquito bombers were sold off in rural New South Wales to farmers, who stripped them of useful parts for their machinery and used them as novelty cubbyhouses for their kids.

The paper concludes with a postscript. In 2017 two of the trial Highball mines were raised from the bed of Scotland's Loch Striven, one of the lakes on which test drops were conducted. It is hoped that a third example of these 600kg mines can be recovered and brought to Australia.

## 12. The legacy of war: remembrance and commemoration

This session shifts the focus from air power and operations to the individuals who enacted aerial strategy, and the legacy of their service. In investigating the human dimension of aerial warfare, our presenters this afternoon will focus on how memory, place, and artefacts enable combatants, writers, service organisations, communities and families to honour, remember, and interpret individual contribution, suffering, and death.

Session Convenor: Kristen Alexander

### 1. Bartlett Reports: Writing Australia's Air War in 1944

*Liam Kane- University of New South Wales, Sydney*

In this paper I explore the public and private writing of RAAF public relations officer Norman Bartlett in New Guinea in 1944. Joining RAAF formations attached to the US 5th Air Force to write stories for the RAAF's official magazine *Wings*, Bartlett observed the daily lives, joys, and frustrations of Australian airmen working under American control. Understandably, Bartlett's writing for *Wings* highlighted successes – air support for US Army in Dutch New Guinea and deadly interdiction operations with US Navy Patrol Torpedo Boats.

However, Bartlett's private writing painted an unhappy picture. In his diary and letters to his wife Evelyn, he described how Australian airmen were 'sidelined'. They were given unglamorous but dangerous missions. These complaints ultimately culminated in the infamous 'Morotai Munity' in 1945. Perhaps more troublingly, Bartlett became convinced that the Allies were fighting a 'race war' and that Australians and Americans regarded Japanese as 'animals'.

Although Bartlett's career took him away from military aviation, his experiences in New Guinea never left him. I argue he attempted to fuse the two halves of his New Guinea writing in his historical fiction *Island Victory* (1955).

### 2. "Missing in action, presumed dead": Australia's war dead in Papua and New Guinea

*Alexandra McCosker- The Australian National University (ANU)*

In the years following the Second World War, the Territories of Papua and New Guinea had a significant physical Australian presence, as a result of Australia administering those territories. This followed Australia's significant involvement in the battles fought throughout

the territories, including on the Kokoda Track during the war in the Pacific. One aspect of the campaign that is often forgotten is the involvement of aerial combat and reconnaissance. The dense jungle of Papua and New Guinea meant that any aircraft that "went down" were often missing for years, consumed by the dense jungle foliage, with the men in those aircraft deemed "missing in action, presumed dead". Decades after the war, the remains of the men of aircraft crews have been found and interred in Commonwealth War Graves. The Australian presence in the territories, including a significant Returned and Services League (RSL) presence, meant that these men would not be forgotten. This paper will look at the process of remembrance, pilgrimage, commemoration and memory in the context of Australia's missing pilots and airmen in Papua and New Guinea following the Second World War.

### **3. Grounding memory: The importance of place for remembering a fallen aircrew**

*Michelle Chase- School of Humanities & Social Science, UNSW Canberra*

Australian Fred Knight was pilot of a Lancaster Bomber, part of squadron no. 460, flying out of RAF Binbrook. On the night of D-Day, Fred and his crew were heading for a bombing raid on Vire, but were shot down over Coutances and crashed just below the village of Cerisy-la-Salle. All seven crew members died.

In 1994, to coincide with the 50th anniversary of D-Day, the local municipality erected a monument to the crew beside the field where the plane crashed. The municipality holds an annual ceremony of remembrance at the monument for the young aircrew. Members of Fred's family have taken part in some of these ceremonies.

On one visit to Cerisy-La-Salle, Fred's watch, a twenty-first birthday present from his parents, was returned to Fred's nephew by the municipality. The watch had been found buried in the field where the plane came down.

Presented by Fred's great-niece, and exploring the conference theme of memory, this paper reflects on the importance of place and artefact as a focus for memory. The monument and the watch have created a connection between different communities who wish remember Fred and the aircrew, and to perpetuate their memory – none of whom knew the men whose memory they honour.

### **4. 'War wounds of the spirit': Guilt, grief, PTSD, and moral injury. Remembering and interpreting wartime experiences.**

*Kristen Alexander- UNSW, Canberra. PhD candidate*

Second World War air men participated in and witnessed the horrors of aerial conflict. Their emotional and psychological health was tested. Some faltered. The majority carried on,

turning to their air force culture, identity, and commitment to fellow crewmembers, as well as their deep-seated sense of duty.

As time passed, an unexpected heritage emerged, infiltrating their lives out-of-the-air. Some former air men were psychologically disturbed; some exhibited symptoms of post-traumatic stress syndrome. As they reflected on their experiences, many were morally troubled. Some were perturbed by moral emotions such as guilt, grief, shame, and disgust. Some suffered moral injury.

Drawing on the personal and medical testimony which underpin her PhD research, Kristen Alexander examines how former Australian air men prisoners of war remembered and interpreted their wartime experiences. She explores the emotional, moral, and psychological legacy of aerial conflict. She considers those who succumbed to their 'war wounds of spirit', as well as those who allayed their sense of guilt, made sense of their trauma, and lived with their memories of war.

## **5. For Pete's sake get this bloody crate moving!**

*Keith Webb- Director, Image Control Pty Ltd*

In 2001 I began working with the Temora Aviation Museum linking the experiences of air and ground crews to link the richness and emotion of their experiences to the aircraft. It's a wonderful thing for aviation museums to display historic military aircraft to the public, but without historic context they are just machines, impressive but lacking the human dimension. I'll be drawing on over 600 interviews I've done to show how important it is to connect machines to the human experience and share some surprising insights.



## 13. Military sites of significance: places and material culture

Archaeological sites, wrecks, material culture and heritage facilities provide great insight into aviation history. The abandoned are brought back to public and scholarly attention through exciting interpretative mechanisms. Our presenters this afternoon detail their investigations of and attempts to preserve significant aviation sites at Canberra, Temora, Werribee and Victoria's Mount Stanley. In doing so, they highlight how new meaning can be drawn from documentary evidence, material culture, and physical remains.

Session Convenor: Kristen Alexander

### 1. Uncovering the National Capital's original aerodrome and very first air crash

*Jane Goffman- National Trust of Australia (ACT)*

*James Oglethorpe- RAAF 3 Squadron Association*

The Griffins' 1918 blueprint for Canberra shows an aerodrome in the Industrial Area on the city's northern fringe, where Dickson now lies. By 1923, Defence negotiated a lease with Edward Shumack, a WWI veteran and descendant of one of Canberra's earliest settler families. The aerodrome officially opened to military and civil aviation in 1924, but the Federal Capital Commission repeatedly refused to grant a lease longer than 25 years, stymying investment. On 11 February 1926 one of two RAAF De Havilland DH9s surveying the Murrumbidgee River crashed, killing the pilot (a former Duntroon cadet from southern Queensland). The photographer was rescued from the burning wreck but died that evening. Both were buried in the district with full military honours but no headstones. Continuing frustration over lease restrictions combined with preparations for the opening of provisional Parliament House in 1927 caused Defence to transfer the aerodrome to the Campbells' land at Duntroon. Digitising the aerodrome's long lost survey together with wreckage photos, and examining the Inquest report and archived files, has revealed where the landing ground once was, where the crash happened, and where the two young men are buried.

### 2. The sum of its parts? The material culture of an Empire flying school

*Anna Gebels- Heritage, RAAF, Museum, material culture, memories, machines*

In March 1946 No. 10 Elementary Flying Training School (EFTS) was the last of the Empire Air Training Scheme (EATS) EFTS units in Australia to close. Three auctions were held on site – two for equipment and one for buildings. As closure neared, Commanding Officer Ronald

Armstrong Jones elegiacally remarked that: "It is anticipated that in a short time only wide open spaces dotted by upturned foundation blocks and broken flush pans will be the remainder of a once neat and well trimmed Air Force Station". Using archival sources created by the Royal Australian Air Force during the unit's disbandment, this paper reviews the refuse of the school. Its remnants spanned aircraft, buildings and ancillary items, from bolts and thimbles to buttons and bath plugs. What civilian occupations did these wartime aviation objects assume after the auctions, and how were they integrated into Temora and beyond? Which items made their way back into local museum collections as relics to incite reminiscences? In itemising the material culture of 10 EFTS, I ask how it helps us understand the structure, function and meaning of EATS.

### **3. Werribee Satellite Aerodrome—sustaining a temporary airfield**

*Roger Beeston (Director)- RBA Architects*

*Patrick Wilson (Historian)- Conservation Consultants*

The heightened awareness of Australia's vulnerability during the Second World War triggered an ambitious national rollout of defensive infrastructure, including an expansion of aviation operations. On the western outskirts of Melbourne, the remnant triangular timber truss hangers of the Werribee Satellite Aerodrome provide a tangible connection—now rare—to the human drama and technical innovation of this period. Yet what follows for a temporary airfield after the last warplane lands? How can obsolete structures and their associated memories and layers of significance be conserved in a meaningful way? RBA Architects + Conservation Consultants have dedicated years to grappling with such issues at the aerodrome. Our investigation has produced not only a deepened understanding of an often overlooked built aviation typology but also pushed the boundaries of what is conventionally achievable for the conservation of defunct wartime material culture. Extractable from this experience are broader lessons for the multidimensional management of the Australia's aviation heritage and a methodology for contemplating their life after.

### **4. Wrecks as archaeological sites: what can be learned from crashed Second World War aircraft in Australia**

*Meaghan L. Aitchison (presenter), Leah Byrne, Talia Green, James Kightly, Daniel J. Leahy*

Aviation archaeology involves the study of human interaction with flight through the investigation of material remains related to that field of endeavour. While much about Second World War aircraft and aviation operations can be learned from the historical record, some aspects of what has been written still remain fragmentary or contradictory. Through the analysis of aircraft wreckage and associated artefacts, much can be added to our understanding of how aviation played a part during that conflict.

This paper will present the outcome of a recent crowd-funded archaeological survey of the wreck of an American Brewster Buffalo fighter aircraft that crashed in Victoria in July 1942. Despite large portions of the wreck being salvaged over the years, much can still be learned from artefacts remaining at the site regarding the aircraft, its crash, and its involvement in the wider conflict. The survey, conducted in March 2019, identified a significant number of artefacts remaining at the site and has resulted in the wreck being listed on the Victorian Heritage Inventory.

## 14. Air, Land and Sea

This session explores aviation heritage in both land and maritime contexts. How is it valued by communities and managed through regulatory frameworks? What challenges exist for the future of aviation heritage as it is investigated, accessed, conserved and interpreted as a distinctive component of 20<sup>th</sup> century heritage and contemporary archaeology?

Session Convenor: Tracy Ireland

### 1. South Australia's Lost Aircraft, and their Value as Undersea Heritage

*Anna Jackowiak- Department for Environment and Water (South Australia)*

In oceans around the world there exists a veritable museum of shipwrecks and ancient relics. Uniquely protected by their environment, they act like time capsules, providing fascinating windows into the past. These relics and sites have gained increasing value and appreciation worldwide for their significance as underwater cultural heritage. What is lesser known is that aircraft, too, have been lost beneath the waves, a fascinating resource which has, up until recently, been largely overlooked.

The study identified 32 aircraft that have been lost in the waters around South Australia and explores their potential as underwater cultural heritage items. The presentation will explore the illuminating stories around the people involved and the circumstances of the losses.

These wrecks provide fascinating glimpses into South Australia's history. They also present exciting opportunities for discovery, research, and community empowerment. The potential for an extended scope study of aircraft wrecks around the rest of Australia, its territories and further afield is both daunting and exciting.

However, without protection, these sites are vulnerable to damage and exploitation. It is imperative therefore that they are conserved, both out of respect to generations past, and responsibility to secure their benefits for generations future.

## **2. I can still remember the roar of the engines”: memory, attachment and archaeology of the Fairy Firefly VX381 wreck site and the Rose Bay flying boat base**

*Stirling Smith- Heritage, Community Engagement, Department of Premier and Cabinet*

On 24 August 2018, the Australian Parliament passed the Underwater Cultural Heritage Act 2018. For the first time aircraft wrecks 75 years and older located in Commonwealth waters will now be afforded protection. To raise awareness of these legislative changes the NSW Maritime Heritage Program has been undertaking a series of projects to record submerged aircraft and aircraft related infrastructure sites, including archaeological survey of the Fairy Firefly VX381 wreck site in Jervis Bay and the Rose Bay flying boat base in Sydney. While these projects began with the simple goal of recording site attributes, they have unexpectedly revealed a range of strong personal and community connections. This has been evidenced through local community custodianship and advocacy for these places as well as volunteers travelling from afar to participate in the fieldwork projects due to personal connections with the sites. This paper will outline the survey projects, consider why people have such an affinity with these sites and discuss the relevance of aviation heritage in the present and its ability to connect communities both local and global.

## **3. The practicalities of managing airport heritage**

*Ken Owen- Environmental Contractor*

Aviation related heritage values on airports can be comprised of three key, inter-related aspects:

- Built environment
- Technology
- Aircraft

Airport heritage values can be at Commonwealth, State or local levels and are managed through a variety of Commonwealth and state legislation.

This paper focusses on airport built heritage environment. However, it is noted many airports also have important Indigenous cultural and European settlement heritage values.

Airports are not static environments and must evolve in response to changes in aircraft fleets, industry requirements, passenger growth, operational requirements as well as regulatory requirements. Airports also have finite land area and often limited development sites available.

These issues provide a challenge to airport operators and regulators in managing heritage values on airports. Heritage buildings need to have a value to the owner if they are to survive so adaptive re-use is often the best approach. Existing heritage buildings are often of a specific aviation-related nature and can be difficult re-use particularly if located in security

areas of an airport. Modern business and WHS requirements can be a problem for adaptive re-use. If a contemporary use is not readily available, demolition can be the outcome.

A number of Australian and overseas airports provide examples of good heritage management.

#### **4. Balancing Heritage Conservation and Defence Capability**

*Erin Finnegan- Principal Heritage Consultant, Environmental Resource Management (ERM) Australia*

*Shelley James- Assistant Director, Directorate Environment & Heritage Policy Development, Department of Defense*

The Australian Defence Force is tasked with the defence of the nation, and the ability to sustain military capability, including aviation operations from airbases, is of critical importance to the national interest. Defence is one of the largest land managers in the country, with important stewardship responsibilities for an estate which includes diverse and significant Indigenous, natural and historic heritage values. There are currently 130 Commonwealth Heritage Listed places across sixty Defence properties, which also include National Heritage Listed places and lands adjacent to or part of a World Heritage listed place.

Defence is tasked by Government to deliver the ADF mission to protect Australia and its national interests and is required to comply with a broad range of legislation including heritage obligations under the Environment Protection and Biodiversity Conservation Act 1999. Defence seeks to provide a sound balance between capability and environment and heritage conservation. This can involve challenges when an asset has assessed or listed heritage significance, but no 'feasible and / or prudent' alternative can be identified for its future use within the context of operational requirements.

This paper aims to explore the tensions between Defence's operational requirements and heritage conservation, through the lens of Royal Australian Air Force heritage places. This discussion seeks to promote a better understanding of the issues and processes involved in balancing heritage outcomes with operational and financial efficiency factors within the Defence estate.

#### **5. Aviation Archaeology, a vanishing trade?**

*Frankie Bryant- Artefact Heritage Services*

Emerging hot on the heels of the field of maritime archaeology was aviation archaeology, yet it hasn't blossomed in the same way. Why? This session assesses the impact that Annex

13 to the Chicago Convention (1944), Aircraft Accident and Incident Investigation, has had on this area.

Archaeology relies on the investigation of material remains to answer research questions. Accident Investigation protocols in relation to the collection and analysis of aircraft remains means that limited, if any, material evidence of modern aviation wrecks enters the archaeological record. Using Australia as the location and 2014 as the year, investigation of final reports and remote examination of wreck sites showed that only 2.5% (2 from 80) retained sufficient wreckage to form a site for later archaeological investigation, noting that one of these was in water and the location of the other was unknown (MH370, ATSB Report AE-2014-054).

The safety imperative for aviation wreck investigation means that it is unlikely that substantial material remains of modern wrecks will be available for archaeological investigation in the future, yet it may be possible to include elements of archaeological methodology in the wreck investigation process to enable relevant information to be available to future practitioners. Aviation archaeology may yet survive.

## 15. Air Memories

Since its inception, aviation has engendered community and cultural engagement well beyond its direct requirements for facilities, labour and clientele. This session will explore the 'Air memories' of diverse communities and individuals, exploring the fuller human reach of aviation in Australia and beyond. Papers will ask who engaged with the new world of flight, from workers shaping novel logistics chains, to the crowds who attended airshows and queued for joy flights. How has aviation changed us, as individuals and communities?

Session Convenor: Tracy Ireland

### 1. The Wirraway Newspaper War

*Derek Buckmaster- Independent researcher*

The July 1936 decision by the "Aviation Syndicate" to select an American designed aircraft and engine for production in Australia triggered a "war" between pro-Empire and pro-Australia political factions and split the Lyons cabinet. This war was played out in the newspapers with prodigious alacrity. This paper gives an analysis of the contemporary newspaper stories supporting or opposing the "Wirraway decision" for an American design as well as the political factions and business interests behind the stories.

### 2. Pioneering Helicopters in eastern Australia

*Jane Lennon- Australia ICOMOS, Hon. professor University of Melbourne*

The first private helicopter company for charter work in Victoria was established in 1966 by CJ O'Connor, a decorated World War 2 bomber pilot. Initially, the work involved was making advertisements with aerial oblique cameras, traffic and snow patrols. His daughters made the longest flight by helicopter with him in December 1966 from Melbourne Coolangatta. Then on 27 December 1966 while on a shark patrol for the Surfers Paradise Progress Association, he made the first ever helicopter air sea rescue. This resulted in a rapid development of technology for such rescues.

O'Connor pioneered helicopter work in Papua New Guinea (1968-82) and the ABC made a television documentary, "Balus" about his flights there. Returning to Queensland, he was involved in surveys, remote installations and television work. His journals reveal the transient nature of the places in which aviation history was made as the landscape soon changes, as with Narrow Neck at Surfers Paradise becoming hi-rise developments. Country airstrips for refuelling have gone or been redeveloped into regional airports. How do we conserve such



transient heritage? Private journals and film record some of this but as the places evolve their forgotten stories and associations add layers to our ancient continental landscape.

### **3. Lady Pilots: Millicent Maude Bryant**

*Sophie Jennings- GML Heritage*

Millicent Maude Bryant, my great-great-grandmother, was the first woman in Australia to obtain a commercial pilot's licence in 1927. Her tragic death in a ferry accident ten months later cut short her flying career. While recognised for her achievements at the time, she has since been eclipsed by others who followed in her flight path and her influence among her contemporaries is less apparent.

This paper considers how she came to flying, her legacy as a female aviatrix, and how we commemorate women's contribution to aviation. While her aviator's cap is held by the Powerhouse Museum, what of the intangible heritage associated with her legacy? What value or significance can be found in the air by tracing the path of her test flight?

### **5. Memories of an air disaster: Canberra and the 1961 Botany Bay crash**

*Rosemary Hollow- University of Canberra*

On the evening of 30 November 1961 in a severe thunderstorm, an Ansett Airlines Vickers Viscount enroute to Canberra crashed into Botany Bay just after takeoff. All fifteen passengers and four crew were killed.

The enduring memorial for those who died came from the report of the Board of Inquiry into the crash: it recommended that all Australian aircraft should be equipped with weather radar by 1 June 1963. The recommendations of the report also resulted in closer cooperation between the now Bureau of Meteorology and air traffic controllers around Australia.

This crash remains significant in the history and memory of those who were part of the Canberra community in 1961. The fatalities included well-known members of the community, and Christmas presents were found in the wreckage. Using media reports and oral histories from Canberrans directly affected by the crash, this paper considers where the disaster is situated in the history of Canberra and Australian aviation history. In contrast to the 1940 Canberra air crash where the death toll included three politicians, there are no public memorials or books published on the 1961 disaster.

This paper aims to address this imbalance, remembering the lives lost and sharing the memories of this significant Australian air disaster.

## 6. Balus i kam!\*: The importance of aviation to Papua New Guinea's modern development and its lasting impacts

*Megan McDougall- Heritage consultant, M. ICOMOS*

*Dr Martin Fowler- University of Melbourne*

*\*PNG Tok Pisin meaning "the plane is coming", usually an expression of excitement and expectation. People even now in rural areas and regional towns across the country often drop what they are doing and rush to see who or what is arriving yelling "Balus i kam! Balus I kam"*

"The heavenly birds were the most potent harbingers of change yet to arrive on the island of New Guinea, given its mountainous and often near inaccessible terrain".

Perhaps more than any other place on earth, the arrival of the aeroplane in Papua New Guinea in the early 1920s provided a truly dramatic juxtaposition of traditional ("primitive") and modern ("civilised") life.

It was critical to the exploration and development of PNG:

- 1922 "Flying canoe" lands in Kaimari in the Papuan gulf with photographer Frank Hurley onboard.
- 1931 Gold dredges flown into Bulolo and PNG sets the world record for amount of airfreight in a year.
- 1933 A huge "Bird of Paradise", (aeroplane) carrying a few Australian explorers and businessmen, "discovers" the great highlands Wahgi Valley.
- 1942 The Japanese attack Rabaul. Subsequently war in the air proceeds over highlands valleys that have not yet been contacted.
- 1950s Goroka airstrip danced into existence by local warriors and women.

For the Melanesian people, the arrival of planes was a source of wonder, and mythology quickly became attached to the first encounter with airplanes and their occupants.

Aviation in PNG is explored through its tangible and intangible heritage- from historic photos, remote airstrips and wrecked planes through to expression in art, dance and costumes.

## 7. Spitfires Sprouting in the Burmese Spring: The Real-life Quest for Historic Fantasy Aircraft in Contemporary Myanmar

*Jane Ferguson- The Australian National University*

In 2013, a group of British aviation archaeologists began excavation in Myanmar of what they thought would be 140 mint-condition crated RAF Spitfire MkXIV aircraft.

According to their story, at the brink of the end of the Second World War, Allies were stuck with these unassembled aircraft. With neither the funds to send them home nor wanting the craft to fall into enemy hands, they buried the crated planes in Mingaladon, Meiktila, and Myitkyina. Like legends of pirate treasure, the story of buried Spitfires carries with it fantastic aura and intrigue. For aviation fans, the pirate's gold is an iconic aircraft, meaningful in patriotic narratives for its role in the Battle of Britain.

This paper will discuss this story as a form of military history folklore, but also one stoked by the orientalist perception that Burma/Myanmar's decades of military regimes and purported isolation would indirectly "preserve" the crated aircraft in time. As this paper will demonstrate, Myanmar locals are not bereft of their own legends of buried war materiel and treasure, a point largely lost on British aviation enthusiasts in their quest for their holy Spitfire grail, but one which crucially enabled this quest to manifest itself.