



AVIATION HISTORICAL SOCIETY OF AUSTRALIA (NSW) Inc

ABN: 83 295 759 224

HON SECRETARY, PAUL EWOLDT : E paul.ewoldt@hotmail.com
13/40A ROSLYN GARDENS RUSHCUTTERS BAY NSW 2011

Southern Skies

THE NEWSLETTER OF AHS A (NSW) Inc

MAY 2019 ~ No 538

Honorary Life Member AHS A (NSW) Inc: Ian Debenham

**THE MAY AHS A (NSW) Inc MEETING
WILL BE HELD ON WEDNESDAY 8th COMMENCING at 8:00 pm.
PLEASE NOTE THE CHANGE OF DATE TO THE SECOND WEDNESDAY.**

**PLEASE NOTE THE VENUE IN ONE OF THE UPSTAIRS
FUNCTION CENTRES at the NORTH RYDE RSL COMMUNITY CLUB.**
The club is located at the corner of Pittwater and
Magdala Roads, North Ryde. There is ample free
parking and visitors are most welcome. The facilities
of the club are available to members and visitors for
pre and post meeting refreshment and conversation.

MEMBERS MEET FOR DINNER IN THE RIVERVIEWS
RESTAURANT ON THE TOP FLOOR AT 6.30 PM.

**OUR GUEST SPEAKER WILL BE LT. COLONEL TROY R. SAECHAO,
Commander, US Air Force
337 Air Support Flight**



United States Embassy, Canberra
who will talk about his career in
aviation as well as the work of the
"337" (Air Support Flight). The unit
falls under the 374th Mission
Support Group, 374th Airlift Wing,
Yokota Air Base, Japan.

He commands Airmen responsible for the educational,
financial, legal, logistical, medical, personnel, and
administrative support services to all Department of
Defense military, civilian, and retired personnel in
Australia.

Lieutenant Colonel Saechao grew up in Fairfax, Virginia
and earned his commission through the United States
Air Force Academy. He began his career as a KC-135R
pilot before transitioning to the C-12J aircraft. His
operational flying experience spans the globe to
include Afghanistan, Iraq, Philippines, and Libya and he
has deployed in support of Operations *ENDURING
FREEDOM*, *IRAQI FREEDOM*, and *UNIFIED
PROTECTOR*. He is a command pilot with
over 3,200 flying hours in the T-37, T-1, C-
12 and KC-135 aircraft.



MEMBERS ARE INVITED TO THE OPENING
of the
AHS A (NSW) INC LENDING LIBRARY
WITH A BBQ LUNCH FOR MEMBERS
on SATURDAY 25TH MAY 2019 at 11.30 AM.
The event will be held at Gordon Lasslett's home,
38 Woodlands Road, Lindfield.



Please RSVP Christine 8356 9583
or Gordon 9416 7603
by Monday 20th May 2019
E: paul.ewoldt@hotmail.com
or glaslett@bigpond.net.au

**AT THE AHS A (NSW) Inc 2019 ANNUAL GENERAL
MEETING TWO MOTIONS WERE PROPOSED AND
DISCUSSED:**

- Motion 1: *That Ron Houghton and Senja Robey be made Life Members of the AHS A (NSW) Inc.*
Both Ron and Senja have had long-term association
with AHS A NSW and have contributed leadership,
initiative and support for the advancement of aviation
in Australia.
Agreed with acclamation. An AHS A (NSW) Inc Citation
Certificate will be designed for presentation.

- Motion 2: *That the annual membership fee of
the AHS A (NSW) Inc be increased to \$40 per annum
with effect from January 2020.* This is an increase of \$5
to cover rising costs and, after discussion, was passed
by members. The 2018 Committee

**It has been officially announced that the
new Sydney airport to be constructed
west of Sydney at Badgery's Creek, NSW,
will be named the**

**NANCY BIRD WALTON AIRPORT
to honour the first female commercial
pilot in Australia.**

March 2019

**Nancy Bird was patron of AHS A (NSW)
Inc**



1942 – 2019: 77 years ON ANZAC DAY 2000 a memorial to the victims of the 3 and 20 March 1942 Japanese Zero attacks on the port of Broome was unveiled in Bedford Park overlooking Roebuck Bay WA. The memorial records the names of the victims, both civil and service, the bodies of which were never found in the waters surrounding the many flying boats destroyed. The attack on 3 March is the second most deadly air attack on Australia.

THE ALLIED WAR MEMORIAL was erected by the Broome community in memory of Allied Personnel and Dutch Nationals who lost their lives during the air raids on Broome on the 3rd and 20th March 1942.

On 3 March 1942, without warning, Japanese Zero fighters attacked. The attack lasted no more than 20 minutes, during which time 25 Allied aircraft were destroyed and dozens of people were killed or wounded. Many victims were Dutch women and children packed into flying boats on the harbour either waiting to be unloaded and ferried ashore or waiting to depart for the southern states. Another 30 crew and passengers, mostly military personnel, were lost when an American Liberator bomber was shot down shortly after taking off. Precisely how many people died in the raid, and who they were, will never be known.

The Dutch bodies recovered were first buried in the Broome War Cemetery but were later removed and reburied in a special area in the Karrakatta cemetery in Perth.

Following there were three further air raids, one on the 20th March 1942 in which one aircraft was destroyed and one person killed, and in August 1942 and August 1943 which resulted in minimal damage with no deaths or injuries.

CALENDAR OF EVENTS : 2019

THE TEMORA AVIATION MUSEUM'S AIRCRAFT DISPLAYS
 Email: info@aviationmuseum.com.au
 Website: http://www.aviationmuseum.com.au/event/aircraft-showcase



Australia's best annual airshow returns Saturday 4th & Sunday 5th MAY 2019: an Australian extravaganza
 → ILLAWARRA REGIONAL AIRPORT Ph (02) 42083997

INTERSTATE NEWS

MELBOURNE MEETINGS are held on the fourth Wednesday of the month in the auditorium of the RAAF Association, 24 Camberwell Rd, Hawthorn East. Parking is available under the building - enter from the lane at the south end. The meetings start at 7.30pm - ring the bell if the front door is shut. A number of members meet casually for dinner from 6.00pm at the Tower Hotel opposite the RAAFA. Visitors are welcome. Website <http://www.ahsa.org.au/> Contact Dave Prossor, President, president@ahsa.org.au

BRISBANE MEETINGS are held on the last Friday of each month in the Lounge Area, Terminal Building, Archerfield Airport, Brisbane. Visitors are welcome. Next Meeting: Friday 31st April 2019 - 7:00 for :30pm Peter Dunn, Secretary, advised that the AHSa Q'land web site links to Victoria Museum's Facebook page - <http://ahsaqld.org.au/> Contact ahsaqld@gmail.com or Warwick Henry at 0417 771 563

AVIATION HISTORICAL SOCIETY of AUSTRALIA (NSW) Inc
 ABN: 83 295 759 224
AHSA 13 / 40A Roslyn Gardens
 Rushcutters Bay NSW 2011
MEMBERSHIP ENQUIRY
 ARE YOU

- INTERESTED IN AVIATION HISTORY, PARTICULARLY AUSTRALIAN ?
- INTERESTED IN JOINING PEOPLE WITH SIMILAR AVIATION INTERESTS ?
- DO YOU LIVE TOO FAR FROM MEETING VENUES ?
- WOULD YOU LIKE TO BE A JUNIOR MEMBER OF AHSA ?

I AM INTERESTED IN JOINING AHSA (NSW) Inc.
 PLEASE FORWARD: Tick appropriate box:

- Information about AHSA (NSW) Inc.
- A membership application form
- AHSA (NSW) Inc subscription - \$40.00
- Members receive the newsletter *SOUTHERN SKIES*
 - via EMAIL. via post

Name:
 Phone No Mobile
 Address:.....
 Postcode
 Email:.....
 Signed:.....
 Print name

Send this form to:
 The Acting Membership Secretary, AHSA (NSW) Inc,
 C/- W. J. Scott, PO Box 1450, LANE COVE, NSW, 1595

Frank Hurley and the Vimy

Stephen Grose from AHSAQ has kindly given us permission to include this photograph in "Southern Skies".

Stephen wrote: "I do enjoy reading Southern Skies every month and have been following the articles on the air races centenary.

Reproduction Photo: I own a Frank Hurley photograph depicting the Vimy in stormy skies. As you probably

know, Hurley travelled with them from the leg, Charleville to Sydney. The photo is rare in terms of when it was printed but you can still obtain a digital copy from the National Library as they hold the original glass plate negative. What makes this one unique is both Ross and Keith have signed it. **

You are welcome to use a reproduction for Southern Skies if you wish? " (Most certainly! Ed.)



Original Photo:

** "This is the old and poor quality shot that I've attached but now have the means to copy it in way more detail (and edit out the hole put in it at some stage of its life). Here's a correct version (above) and I've included the original so you can see what dreadful condition it's in. I still think it's valuable because having the brothers sign this particular photo is in the hen's tooth category. It must have taken me an hour to clean it up..... All done and it came up well. "

From:

Stephen Grose
<stephen.grose@vintav.com>



Countdown to the Smith flight centenary commemorations: 'Spirit of Brooklands' part 1.

In 1993 Australian businessman Lang Kidby and his friend Peter McMillan decided to build a Vimy replica to fly to Australia and commemorate the 1919 flight. The project was huge. On the title page of McMillan's book *The Greatest Flight*, the lists of people involved total nearly 200. The process involved the expenditure of \$1.5 million, the equivalent of well over \$3 million today.

The aircraft was assembled, flown and registered in the USA. As McMillan explains, 'Early experience with the Australian Civil Aviation Authority convinced us that we had no choice but to assemble the aircraft in the United States, where regulations and bureaucracy are more progressive'.

However, all metal subassemblies, including the fuselage frame, fuel tanks, engines, gearboxes and struts, were constructed in Australia, co-ordinated by Bill Whitney of *Aeronautical Designs Australia*. Many were made by Wayne Daley, a Brisbane racing car builder. The first part, a rudder, was finished by the end of the year. The propellers also had to be made in Australia, close to where the engines and gearboxes were being built. Lang found a prop-maker, Dick Sweetapple, to carve up some sizable logs and shape them into two airscrews plus a spare.

It was easy to find original plans for the airframe, but the original paper copies had to be transformed into CAD files. It was found that the original hand-made files had very few errors.

Engines were a problem. The 1919 *Rolls Royce Eagle engines* were obviously unobtainable and unsuitable and Chevrolet V8s of similar power were used. The basic difficulty here was that the engines revved at a far faster speed and an innovative reduction gearbox was needed to spin the heavy propellers at their required 1000 rpm. Designed and made in Australia, they cost over \$80,000.

For the overall assembly and the manufacture of wooden parts of the airframe, an American film set maker by the name of John la Noue was employed, and he recruited Dan Nelson, a master welder and fabricator who was with the Vimy until the very end of the flight. They handled remarkable challenges including the mass-production of wing spars and ribs, and the sourcing and fitting of five hundred yards of cotton fabric.

The US defence department provided a hangar of 40,000 square feet (nearly half a hectare) at the disused Hamilton field, California, where the aircraft came together. It was ideal: a large gantry crane could lift over three tonnes, and there were some heated workshops suitable for the process such as fabric covering. The airstrip was not in use, and this made it ideal for test flying without interruption.

The original wooden parts were made from Sitka Spruce, but that was in short supply. Douglas Fir, plentiful in the US, was substituted. It was calculated as being 18% heavier but 16% stronger than the Sitka Spruce, and Bill Whitney was happy to accept the weight penalty to achieve the greater strength. The replica weighed in at 12,637 pounds whereas the original weighed 12,000 pounds.

The metal frame of the fuselage was made in Australia by Daley and carried to the US by Federal Express. Despite large amounts of voluntary labour and 'in kind' donations, expenses were huge. Kidby and his associates invested hundreds of thousands of dollars, but there was still a shortfall. Early assistance from the *National Geographic Magazine* was a huge boost. They had a personal introduction to senior National Geographic staff, which assisted. The Smith flight had occupied most of the March 1921 issue and the re-enactment flight was covered in the largest story in the issue of May 1995. (I have a copy of this issue. Ed.)

Shaikh Hamad bin Ebrahim Al Khalifa of Bahrain arranged generous support in return for the promise of large-scale festivities centred on the Vimy, to promote Bahrain. **Shell oil** had provided assistance in 1919, as it had done for Guillaux's pioneering flight from Melbourne to Sydney in Australia, and became major supporters of the present project. Kodak, another major sponsor of the 1919 flight, was not interested.

These donations rescued the project, and from all sources they had (just) enough funds to continue their project. However these high-level sponsors demanded quick results. The re-enactment flight must begin from the 1994 Farnborough air show.

Time was running very short. In May 1994, work on the cockpits and controls hadn't even begun. Some metal components had to be made by US firms because of time pressures, and often these caused problems.

A major problem was the need to get the aircraft to England, which would take a month by ship. However thanks to the good offices of the **National Air and Space Museum** the USAF was persuaded to fly the complete aircraft to Britain in a C-5 Galaxy transport plane of the 337th squadron of the 439th Airlift Wing, which was based at the nearby Travis Air Force Base.

As well as completing the aircraft, they also had a huge task in arranging the clearances and flight planning, while also sending off *'reams of correspondence alerting more than fifty embassies to our plans and generating publicity for Shell and the other sponsors, along with some last-minute fund-raising'*. Meanwhile, John, Wayne and Lang organised all the contractors producing the subassemblies for the multitude of items that had to be brought together in the right order— *'rather like orchestrating a fifty-course French dinner'*. Special staff were recruited for much of this work.

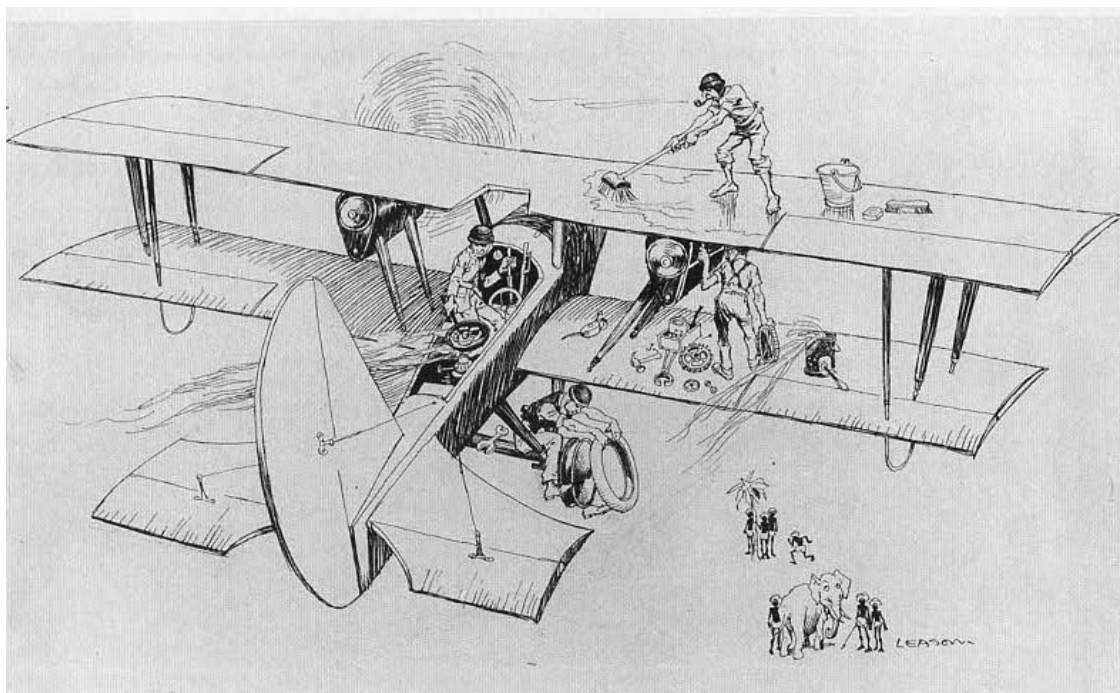
On July 7 1994 the completed aircraft was rolled out of the hangar with appropriate celebrations, and on July 30 the aircraft made its first flight. The pilot was Peter Hoar and Lang Kidby occupied the right-hand seat. Peter was a pilot of the 1969 Vimy replica, (registered G-AWAU) which was built by the Vintage Aircraft Flying Association at Brooklands and first flew in 1969. (This aircraft was destroyed by fire in 1973. Restored to static display condition, it could be seen at the Hendon museum until 2014, and is now in storage).

Coincidentally the first flight was at 1919 hours. The Vimy flew well and stayed airborne for eleven minutes. A fuel injector problem then caused an early landing, but the test flight was a great relief to all concerned.

Peter McMillan took the controls for the first time on August 2. From *The Greatest Flight*: *'Although acutely aware that I could, in a second, destroy 20,000 man-hours of labour, I was enjoying myself after only a few minutes. Of the many antique planes I have flown, the Vimy was by far the heaviest and most sluggish, but you simply had to nudge her hard, like an old mare. After a few more flights, I learned that our gentle old mare turned into a nasty, bucking stallion when the air became turbulent'*.

Over the next three weeks the aircraft flew the necessary 25 hours to gain registration. Though the aircraft was registered NX-71MY, special permission was also given for the original British registration **G-EAOU** to be painted on the wings.

The aircraft was flown to the nearby Travis airfield on August 20 and then loaded on a C-5 Galaxy for the flight to England. Though the aircraft was flyable, a considerable amount of work still had to be done before it could depart on its epic flight.



Next month: the flight, part 1.

The Blackburn Kangaroo was the largest aircraft in the race, and also, like the Vimy, had a four-man crew. This contemporary cartoon made a point of the 'luxury' that this arrangement afforded.