



PHOENIX

HISTORICAL AIRCRAFT RESTORATION SOCIETY JOURNAL

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*Wishing all our members a
Happy Christmas and a safe
and peaceful New Year*

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Cover: Plucka receiving keys to Orion
from Air Marshall Leo Davies. Photo: Mark Keech.

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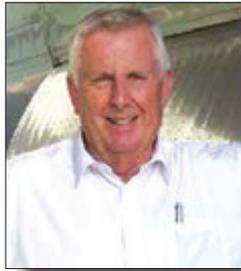
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from the President

Bob De La Hunty OAM
President and Chief Pilot .



CHRISTMAS again, seems like only yesterday!

A big year for HARS again and by the time you read this report in the Phoenix we anticipate that our full occupation certificate will have been issued following a massive year of very expensive works to comply with all the Building Code of Australia requirements. Few would realise the detail and I have to pay particular gratitude to Arthur Webster who has battled so many issues to get the job done in his quiet determined way and professional capability and resourcefulness. There are many others who should be listed here who have been a part of it but I am sure they will appreciate that to list everybody throughout the entire organisation who has made such a contribution to not only the building works, but everything we do would be quite cumbersome and difficult.

The engineering works to get our fleet flying and recover aircraft around the country has also been an outstanding team effort and despite the frustrations at times it all adds to our reputation and respect.

Some of the highlights of the year have been the Avalon Airshow with the Connie followed by its painting at Wagga, and after a year of CASA regulatory changes and arrangements we finally brought it back but so far we have not had time to finish off some of the little things that need to be done including engine inspections before we get back into the air regularly. The regulatory changes involve both Part 61 Pilot and Flight Engineer requirements and also the changes to the engineering processes and procedures which have required massive manuals to be produced and the implementation of training programmes to deal with so much change. Like everything it just takes time to get through all of this but it has had a serious impact on our operations. We are operating, as is some of the industry, on exemptions which expire next year and will either need to be reissued or the regulations and procedures made to fit. This has become a massive challenge for CASA and the industry.

Other major activities have been the handover to HARS by the Chief of Air Force of the AP3C Orion which, after almost a year of negotiating with the Americans, was approved for flying operations with HARS. This is a very significant concession. We understand also that after 5 years under our custodianship, the Defence Department are working with the Americans to allow the transfer of ownership of the F111 to HARS.

We have also hosted the Australian Aviation Hall of Fame induction dinner. In front of a crowd of 220, attended by many heads of industry and the Chief of Defence, TAA, James Strong, Nancy-Bird Walton, John Corby, Bob Tait and Eddy Connellan were inducted. John Corby who is now in his 90's has also requested that HARS take a donation of his airworthy Corby Starlet aircraft which was displayed under the DC3 representing TAA at the event.

The AAHOF function was attended by the Mayor of Shellharbour and the Deputy Mayor as well as the General Manager and has again highlighted HARS as a significant tourist destination.

On the Monday following the AAHOF event we had a visit from the Prime Minister, the Minister for Energy and a large contingent of press. The Prime Minister enjoyed a full tour of HARS with his entourage, meeting many HARS volunteers and visitors, taking the famous selfies as he went. We obviously took the opportunity to seek support for future fund

from the Vice

Maureen Massey
Vice President.



CHRISTMAS is just around the corner and another year has passed in the lives of all at HARS.

The year has been an eventful one, not without its dramas, but somehow we always find a solution and manage to battle on to the next hurdle.

Although the HARS fleet has not had many "away trips" this year, we continue to have good cash flow through the Café Connie, Shop and Tours of the Museum.

Our facility is becoming more popular each week, and it is not uncommon to have a queue of people lined up early in the morning for their cup of coffee and breakfast, sometimes to go. The new Jetgo RPT service has been successful so far, and many passengers are dropping in for their mandatory cuppa and sandwich before boarding their flight.

The Shop is being refurbished and should make an impact when entering the Museum. All takes time and money.

Our membership continues to grow with lots of interest coming from the RAAF since our acquisition of the AP-3C Orion.

May I take this opportunity to thank you all for your continuing support of HARS during the year, and I wish you and your families a special, safe and happy Christmas and New Year.

Cheers *Maureen*

raising activities from the government having highlighted a significant contribution made by a previous Prime Minister, John Howard, to support our building programme.

It is hard to imagine that it is almost 3 years since we took delivery of the Qantas 747, VH-OJA and during that time we have been able to showcase the aircraft to so many visitors. With the enormous support of our volunteers and sponsors, we have had the aircraft airconditioned thanks to Panasonic, and LED lighting installed throughout as well as external lights. After almost 3 years, as expected, the tail needed repainting and that work is well under way and probably completed, subject to weather, by the time you read this edition of Phoenix.

We obviously need to thank all of our sponsors and stakeholders for everything that they enable us to do. Everybody involved in HARS can feel proud of our achievements.

Next year we are planning an enormous amount of consolidation now that we are over most of our building programme. We have more hangar opportunities which will alleviate some of the concerns on space, particularly for engineering works. Although some people were concerned that we have too many aircraft, we need to remember that they come with sponsors and sponsorship. They provide a changing picture for our visitors and earn us recognition. Our only challenge is to manage that and that is the next major programme we will have in place.

Merry Christmas

Bob De La Hunty OAM

AROUND THE HANGARS

VH-TAA Convair Update

FURTHER to the report on the Convair VH-TAA engine change in the September issue where the engine and propeller were installed, progress to finish the project has been generally and frustratingly slower than anticipated due to a severe dose of the dreaded lurgy, frustration in sourcing spare parts and a trip to Tucson Arizona to progress the restoration of Convair VH-EAQ, all added up to slowing the

progress of the engine change. It is now pleasing to report that all accessories have been fitted, the oil tank replenished and both exhaust pipe stacks fitted. Pre-oiling the engine is approaching, to be followed after with the first ground run and performance checks. This being the first engine change on this aircraft it also has been a big learning curve for everyone involved in this project.

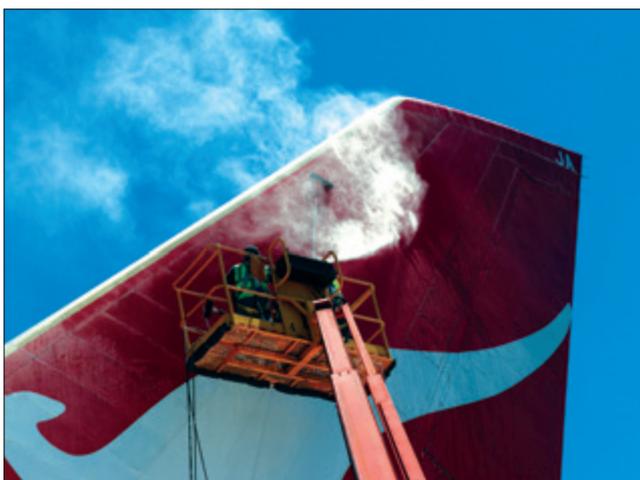
Story: Warren Goodhew
Photo: Terry Scanlan



The new R2800 engine finally fitted to VH-TAA

OJA Tail Painting

Story: Terry Scanlan
Photos: Tony Crampton



LEFT:
Preparation for painting begins

RIGHT AND BOTTOM LEFT:
Almost needing oxygen at this height



AFTER a long wait for the weather to settle down, preparation for painting the big red vertical stabiliser and rudder has begun in earnest. The secret in painting the fin is in the preparation which is a long process.

Firstly, the tail has to be cleaned and then basically cleaned again with a wax and grease remover. After that it needs to be rubbed back with buffers to remove any flaking paint, etch primer applied to any surface that has corrosion on it and then it is ready for masking.

When it is finally ready for painting a two-pack paint will be used based on the exact paint formula used by Qantas ensuring the red paint used will be exactly the same as used on the 747 fleet.

A Cat With A Problem

Story: Jim Marshall
Photos: Rosie Miles

PBZ completed its annual inspection at the end of October just in time to do an hour or so of training to re qualify the pilots and be ready for the first mission of the season, an air display over Rathmines Catalina Festival on 29 October.

Departure was planned to have us arrive at Rathmines holding area at 1315 for a 1330 display. The cruise up the coast on a beautiful spring day was glorious and right on time for our 1315 arrival. However, at 1300 and over the southern end of the lakes the No. 2 engine increased in RPM and failed to respond to the prop control. A decision was made to abort the mission and return to base as all other engine indications were OK. Before the return could be executed at around 3 minutes into the problem, the engine gushed oil from the breather and was immediately feathered in accordance with the appropriate check list.

The next question was where is the best place to put the aircraft on the ground, home base was too far on one straining engine,



Diverted to West Maitland (Rutherford)

Williamtown was considered but was discounted as was a water alighting at Rathmines in the middle of an air show and the subsequent inability to taxi on the water on one engine.

The decision was made to proceed up to the Northern end of the lakes (which gave us plenty of areas to put down on the water if some other problem arose) then a left turn for West Maitland (Rutherford) and a short overland leg to the airfield where we touched down at 1335. It was an interesting 35 minutes to say the least.

On the ground we were assisted

by the local engineer and aero club members who helped us park the aircraft and were good enough to supply us with much appreciated "beer and bickies".

Finally, the cavalry came to the rescue in the form of Bruce Simpson and his Aero commander and we were ferried back to Illawarra Regional Airport. Thank you Bruce.

At the time of writing a spare engine is being prepared and in due course will be fitted to enable the original engine to be sent for investigation of the fault.



PBZ being towed to the 'ramp'

AROUND THE HANGARS

HARS Tour Guide Function

Story and Photos:
Terry Scanlan



ON Saturday 18 December, Vice President, Maureen Massey hosted a small function to say thank you to our Tour Guides who are responsible for escorting our visitors around the museum.

The comments in the visitor's book reflect the quality and service that our guides are delivering on their tours through the museum.

The Tours and our newly commissioned Café Connie generate much needed income for HARS and this will continue to build when we start an advertising campaign



HARS To Do Inhouse Printing

Story and Photos:
Terry Scanlan



Ricoh Pro C651ex/751 Photo Copier

LONG time member and sponsor John Weston, of Westonprint Kiama has donated a Ricoh Pro C651ex/751 Photo Copier to HARS. This machine will enable HARS to print the Phoenix magazine, souvenir books, advertising material and many other items that were previously done by John at Westonprint.

This gift will benefit HARS enabling on demand inhouse printing and saving a lot of costs associated with outsourced printing.

We also have a new member who will be doing all our graphic design work thereby saving quite a lot of production costs as well.

AROUND THE HANGARS

VH-AES HAWDON Preparation For AAHOF Dinner

Story and Photos:
Terry Scanlan



ON 25 November at an Australian Aviation Hall of Fame (AAHOF) dinner in Hanger 1, six new inductees were inducted into the Australian Aviation Hall Of Fame. One of these inductees was Trans Australia Airlines (TAA) and they were represented by two aircraft from our collection. The TAA Convair 440, VH-TAA and the Hawdon DC-3, VH-AES. The HAWDON DC-3 has been undergoing several months of polishing by dedicated HARS members and the results are stunning

BELOW, HARS members polishing HAWDON



John Croll

TOUR GUIDE COORDINATOR

JOHN'S interest in aviation and vintage aircraft stems from his father's flying activities in WWII. John's dad originally learnt to fly on Tiger Moths at Narromine and then transferred to Canada as part of EATS to gain his wings on Avro Ansons and finally flying Short Sunderlands as a member of 461 SQN RAAF.

John attended a number of primary schools, including South Hurstville, while his secondary education was at Sydney Technical High School where Charles Kingsford Smith was an Old Boy. Further education followed at the University of NSW studying metallurgy under a scholarship from BHP. Seven years later he graduated with a BSc and PhD. The PhD research was on the subject of the high temperature oxidation of Fe-Cr-Ni alloys - the stuff of jet turbine blade and re-usable rocket materials.

After leaving the UNSW, John commenced working at Australian Iron & Steel, Port Kembla (now BlueScope Steel) in the R&D department after which he moved on to what is now known as Bisalloy Steels in Unanderra and progressed through numerous managerial positions finally making it to General Manager. One of the highlights of this period was being involved with developing and supplying



the high strength steel used in the hull and pressure bulkheads of the Collins Class submarines. During this time John travelled to Sweden spending time at the Malmo shipyards of Kockums AB and the steel mills operated by SAAB in Oxelosund.

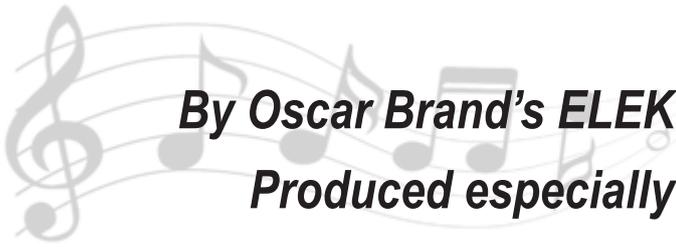
In 1997 John married Jan and gained two sons, Shane and Chris. Shane is married to Jacqui and now John has two grandchildren, a grandson Rory and grand-daughter Rylie, and they love to come to HARS' Café Connie for Sunday brunch. John says "We are both very proud of all these guys". Jan has recently joined Joan's team in the Café as well.

John retired from full time work in 2012 and subsequently joined HARS. During the Induction session it was mentioned that tour guides were needed and the rest as they say is history.



A much younger John

THE GOONEY BIRD SONG ~ LYRICS



By Oscar Brand's *ELEKTRA* album – "Up in the Air"
Produced especially for Douglas Aircraft Inc.

In 51 they tried to ground the noble DC-3,
And so some lawyers brought the case before the CAB,
The Board examined all the facts behind their great oak portal,
And then pronounced these simple words, "The Gooney Bird's
immortal.

**THEY PATCH HER UP WITH MASKING TAPE,
WITH PAPER CLIPS AND STRINGS,
AND STILL SHE FLIES. SHE NEVER DIES.
METHUSELAH WITH WINGS.**

The army toasts their Sky Train now in lousy scotch and soda,
The Tommies raise their tankards high to cheer their old Dakota,
Some claim the C-47's best, or the gallant R4D,
Forget that claim, they're all the same, the noble DC-3

(chorus)

Douglas built the ship to last, but nobody expected,
The crazy heap would fly and fly no matter how they wrecked it,
While nations fall and men retire and jets get obsolete,
The Gooney Bird flies on and on, at 11,000 feet

(chorus)

No matter what they do to her. The Gooney Bird still flies,

One crippled plane was fitted out with one wing half the size,
She hunched her shoulders, then took off. I know this makes us
laugh,

One wing askew, and yet she flew...The DC-2 and a half.

(chorus)

She had her faults, but after all, who's perfect in this sphere?
Her heating system was a gem, and we loved her for her gear.
Of course, her windows leaked a bit when the rain came pouring
down.

She'd keep you warm but in a storm it's possible you'd drown.

(chorus)

Well now she flies the feeder routes and carries mail and freight,
She's just an airborne office or a flying twelve-ton crate.

**THEY PATCH HER UP WITH MASKING TAPE,
WITH PAPER CLIPS AND STRINGS,
AND STILL SHE FLIES. SHE NEVER DIES.
METHUSELAH WITH WINGS.**

https://www.youtube.com/watch?v=-5BF2PpV_c



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AUSTRALIAN AVIATION HALL OF FAME

2017 Induction Ceremony and Dinner



Connie checking on proceedings.

SATURDAY 25th November was a memorable day for both HARS and AAHOF, when the 2017 Induction Ceremony and Dinner was held for the first time in the HARS facility at Albion Park.

The Australian Aviation Hall of Fame (AAHOF) is now into its 6th year of operation and since its inception has inducted 40 members into the Hall of Fame. The first inductee was Australia's pioneer of flight, Lawrence Hargrave. The six inductees for 2017 will bring the total of inductees to 46.

The day started early with an AGM of AAHOF followed by a meeting of the AAHOF Board of Directors.

The Jeremy Flynn Memorial Hangar (Hangar #1) was transformed into a venue seating 200 people surrounded by historical aircraft, video screens and lighting to suit the occasion. The main attractions, or centrepieces, were the aircraft on display relevant to this year's Inductees. These included the Hawdon DC3 (VH AES), which was the first aircraft to fly commercially



AAHOF Cocktails in the reception area



The late James Strong's son Nic and partner with Bob De La Hunty & Maureen Massey.

for TAA, Convair 440 (VH TAA), de Havilland Tiger Moth (VH DHV), CAC Sabre # 901, which was the first of its type to roll off the assembly line in Victoria, and the Corby Starlet. Also present was the F-111, Vampire and of course, the Queen of the HARS fleet, Connie.

At 1730hrs the cocktail party got underway, followed by dinner when guests were welcomed by Shellharbour Mayor, Marianne Saliba and AAHOF Chairman Steve Padgett.

The six inductees into the Hall of Fame this year were, Edward John Conellan AO CBE (Aviation Pioneer, Connellan Airways), John Cyril Corby

(Designer & Builder of Corby Starlet), James Strong AO (Former CEO Qantas), Robert

Walton AO OBE (Trailblazing Aviatrix), and Trans Australia Airlines (Southern Cross Award).



The Corby Starlet.

Stewart Charles Tait (Aviator, Fight Instructor and Author), Nancy-Bird

Details of the six inductees for 2017 plus the previous 40 inductees can be obtained from the AAHOF website www.aahof.com.au

The evening was a great success with special thanks going to the catering staff, HARS volunteers who assisted with preparation of the hangar and aircraft, Steve Padgett and AAHOF for organising the function, and to the guests who attended for supporting two very special historical organisations.



Guests in the Jeremy Flynn Hangar.

THE ORION HANDOVER

A Unique Gift to HARS

FOLLOWING the Australian Department of Defence's recommendation to the United States, State Department, to release for historic flying operations one of the RAAF AP-3C Lockheed Orion surveillance aircraft, a handover ceremony was held On Friday 3 November 2017.

This is a very historic event recognising the role the Historical Aircraft Restoration Society (HARS) has played in saving our aviation heritage, in particular the RAAF aircraft that have served Australia since WWII. In fact, HARS has over 20 former RAAF aircraft in its collection, many of those have been restored to flying and it is intended now that the transfer of ownership of the Orion has been approved, to also fly that aircraft in support of RAAF history.



Signing over the Orion to HARS.

This is a very significant gift as it is understood that HARS is the only aviation museum that will receive an operational military aircraft and be allowed to continue operating it.



HARS members attending the hand over ceremony.

HARS President Bob De La Hunty, OAM, Vice President Maureen Massey and Shellharbour City Council Mayor, Marianne Saliba, hosted the function which was attended by many distinguished guests from the SHCC, The Royal Australian Air Force and HARS Sponsors.

Local Aboriginal Elder, Aunty Lindy Lawler opened proceedings with a traditional 'Welcome to Country' speech.

The Chief of Air Force, Air Marshall Leo Davies, AO CSC, officially handed over ownership of A9-753 by signing the transfer documents along with HARS President, Bob De La Hunty culminating several years of negotiations by HARS member Joe Plemenuk with the RAAF.

Air Marshall Leo Davies actually flew A9-753 for several years while stationed with 10 squadron RAAF.

The Orion replaced the Lockheed Neptune aircraft that had served with the RAAF from the late 40's up to 1977. The new P-8A Poseidon aircraft is now progressively replacing



Aunty Lindy Lawler

the Orion aircraft in RAAF service which is expected to take place over the next few years. HARS not only operates and has a number of former RAAF Neptune aircraft (serial number 273 and 566 flying, 281 as a static display and now at our Parkes satellite museum, 272 as a static display). We also operate a Catalina flying boat which the Neptune replaced following WWII operations.

The HARS AP-3C Orion has itself participated in overseas operations as well as searching for the lost MH370 airliner and many other very important security and historical events and the

history of this aircraft will eventually be disclosed and showcased with it at our HARS facility.

The HARS Orion is proudly supported by OzRunways. Without the support of OzRunways (our ONLY sponsor) this project would simply stagnate. Initial sensitivities around the AP-3C Orion have now passed and full recognition of OzRunways support is now possible.



A9-753

ORION ARRIVAL





HARS AP-3C ORION – A9-753

ON Friday 3 November 2017, Chief of Air Force Air Chief Marshall Leo Davies participated in the hand-over of AP-3C Orion A9-753 from the Australian Government to HARS. Generally referred to as '753', our P-3 has accumulated some 16,400 hours and participated in most RAAF P-3 operations including the search for the missing MH370 Airliner, Operations Solania and Gateway and numerous deployments to the Middle East Area of Operations (Iraq & Afghanistan) as part of Operations Falconer, Catalyst and Slipper. 753 was delivered to the Royal Australian Air Force (RAAF) on 04 Aug 1978. Built 20 May 1978 as a P-3C Update 2.5, it was upgraded to AP-3C configuration in the early 2000s.

The Lockheed P-3 Orion has been at the forefront of Maritime Patrol operations for over 50 years and has been operated by the RAAF since the first P-3 (a B model) was

Catalina crews.

The RAAF will continue to operate the P-3 until it is replaced by the Boeing P-8 Poseidon and Northrup Grumman MQ-4C Triton (an unmanned aircraft) in around 2021. This will mean the P-3 would have been in continuous RAAF operational service for 53 years.

HARS must be unique in the world in having such a wide range of maritime patrol aircraft, the Catalina, Neptune and now the Orion. All these aircraft were operated by 11SQN. 10SQN did not operate the Catalina, having flown the Sunderland during WWII.

RAAF Service

In RAAF service, the P-3 was operated by aircrew from 10 and 11 Squadrons, maintained by technicians from 492 Squadron (now disbanded – maintenance technicians are

than upgrading the B models. The P-3C was essentially the same as the USN configuration except for the acoustic sensor system which was taken from the RAF Nimrod. The P-3C designation was changed to AP-3C during the early 2000s when the RAAF conducted an upgrade of the P-3s mission systems and flight avionics.

During the late 1990s, 3 ex USN P-3B were purchased primarily as pilot/flight engineer training aircraft and designated the TAP-3. These aircraft carried no mission systems and were used to perform high aircraft fatigue training events such as repeated touch and goes. This would then reduce the fatigue of the front line aircraft thus extending their operational life. The 3 TAP-3 aircraft were retired in 2004 when it was no longer economical to retain them.

While individual aircraft were not assigned to each squadron as a pool

system was used, you will notice the 10 and 11 SQN logos on the tail; the Chimera for 10 SQN and the Albatross for 11SQN. Both flying squadrons, 292 and 492 squadrons, headquarters and support elements made up Number 92 Wing, part of the RAAF's Surveillance and Response Group (SRG)

The Orion normally carried a crew of 11. Missions would normally last around 8 hours in the air, but could go up to around 12 hours. The crew normally consisted of 2 pilots, 2 flight engineers, the Tactical Coordinator (TACCO), The Navigator/Communicator (NAV/COM), the Sensor Employment Manager (SEM) and 4 or 5 sensor operators.

The RAAF crew construct was based on the USN P-3 crew model with the



delivered to RAAF Base Edinburgh in 1968. The P-3 Orion was developed by the United States as an Anti-Submarine and Maritime Patrol aircraft in the late 1950s and the design was based on the Lockheed L-188 Electra airliner. The P-3 replaced the existing US Navy Anti-Submarine and Maritime Patrol aircraft, the Lockheed P-2 Neptune, because of the P-3s longer range and the ability to carry more electronic sensors and weapons. I must admit, the prospect of spending 8 hours in the tube of the Neptune conducting Anti Submarine Warfare is not as appealing as doing it in the P-3. However, 8 hour missions pale to insignificance compared to the length of the missions flown by RAAF

now embedded within 10 and 11 squadrons) and trained by members of 292 Squadron, all located at RAAF Base Edinburgh near Adelaide. You will see these Squadron crests under the left cockpit window. However they are not carried on operational aircraft.

While outwardly similar, all RAAF P-3 variants have been quite different in their capabilities and internal layout. The initial B models arrived in 1968 and were a standard configuration as used by the US Navy (USN). The C model was introduced in 1978 when it was determined that a more cost effective outcome would be achieved by purchasing new aircraft rather



Four generations of Maritime Patrol Aircraft.

addition of the Sensor Employment Manager as the crew-member providing assistance to the sensor operators to manage the increasing amounts of data generated by the P-3 mission systems. Each crew would contain the same people for an extended duration of six months or more which would allow the crew to practice working together to become a tight-knit team. You would think that the 'large' personalities sometimes associated with aircrew might become a problem, however this was rarely an issue.

Operational Service

Three RAAF P-3s have been lost but none due to hostile action. One P-3B crashed on landing at NAS Moffett Field (near San Francisco) while undergoing an acceptance test flight (no fatalities), another P-3B was lost on the tarmac at RAAF Edinburgh due to a fire in the flight deck during maintenance (no fatalities) and one P-3C was lost when it ditched at Cocos Islands resulting in the death of Flying Officer Tom Henniker.

RAAF P-3s have been and still are at the forefront of many ADF operations including Operation Gateway, Australia's enduring contribution to the preservation of regional security and stability in South East Asia, Operation Solania the ADF's contribution to maritime surveillance within the Pacific Region and Operation Resolute, protection of Australia's borders and offshore maritime interests. While the

P-3's traditional home is conducting surveillance over the ocean, it is very well suited to participating in ISR (Intelligence, Surveillance and Reconnaissance) missions. With it's wide array of sensor systems and the ability to pass information to other combat units, RAAF P-3s have participated in some of the most complex of combat operations conducted in recent times.

In 2012, RAAF Orions ceased 10 years of operational service in the Middle East Area of Operations (sometimes termed the 'MEAO' by those who served there), completing 2,400 missions as part of Operations Falconer, Catalyst and Slipper. More than 3,500 personnel were deployed throughout the period. RAAF P-3s routinely conducted patrols to identify and observe vessels that may have posed a threat to Coalition naval forces. While major combat operations in Iraq were declared over on 1 May 2003, history shows that was far from reality and Australia continued to provide support to Coalition operations in the following years.

Will 753 fly again?

Having 753 as a flying member of the HARS collection was always the goal. However work needs to be done before this will happen. As part of the de-militarisation process, some important avionics were removed which now need to be replaced and we have found some areas of corrosion that need to be repaired. Of course,

there is a mountain of paperwork that needs to be completed as well. We have ground run the engines and will continue to do so at regular intervals, hopefully coinciding with Tarmac Days and other HARS events.

Sponsorship is high on the agenda with OzRunways donating funds to help with the initial acquisition costs. However, with complex aircraft come big costs and further funding is being investigated. Team P-3 has been established with Plucka (William Plemenuk – AP-3C FLTENG) as the Project Manager, Rowan McKay (AP-3C SEM) as the Deputy PM and Ron Pretlove (P-3 FLTENG amongst his many talents) as the P-3 Maintenance Manager. As the team builds and operating and maintenance procedures are established, we will provide further articles for Phoenix which will hopefully provide some further insight into our P-3.

TECHNICAL DATA

For those of us who have an interest in the technical details, here's a brief overview (don't worry, more will be forthcoming!)

- Manufacturer - Lockheed Martin
- RAAF Serial number - A9-753 (the civilian registration is intended to be VH-ORI)
- Role - Maritime surveillance and anti-submarine warfare
- Crew - Pilot, co-pilot
- Two flight engineers
- Tactical Coordinator (TACCO)
- Navigator/communication officer
- Sensor Employment Manager
- Up to six airborne electronic analysts.
- Engine - Four Allison T56-A-14 (4600 shaft horsepower each)
- Airframe - Length: 35.6m, height: 10.44m
- Wingspan - 30.8m
- Max Weight - 61,200kg
- Speed - 750km/h (405 knots) maximum, 650km/h cruise (350 knots) at 26,000 feet, 370km/h (200 knots) loiter
- Endurance - 12 hours maximum
- Ceiling - 35,000 feet
- Capacity – Sonobuoys and Maritime Marker Devices
 - Air-Sea Rescue Kit
 - Self Protection Measures
- Weapons/stores – Mk 46 lightweight anti-submarine torpedoes
 - AGM-84 Harpoon anti-ship missiles

OVER THE HUMP



C47 VH-XUX Buzz Buggy

JUST over 12 months ago, C47 VH-XUX landed in Guilin China after what should have been a ten-day delivery flight from Australia. However, the journey took a lot longer than that, and therein lies a story.

It began in 2005 when Larry Jobe, a retired United Airlines Captain, visited Yang Tong Airfield in Guilin, which had been a base for General Claire Chennault and his Flying Tigers squadrons in WW2. Larry realised that industrialisation was in danger of claiming the site, so began discussion with the local authorities to establish the "Flying Tigers Historical Park" on the airfield.

Back in the USA, Larry and retired USAF General James Whitehead formed the Flying Tigers Historical Organisation (FTHO) to help fund the project, including preservation of the cave above the airfield which served as General Chennault's HQ. Chinese funding reached \$4M and the FTHO decided to buy and deliver a C47 to China in memory of the airmen who flew "Over The Hump" of the Himalayan mountains, allowing the Chinese and American forces to continue their campaign against the Japanese occupying parts of China.

Fast forward to Bathurst (NSW) two

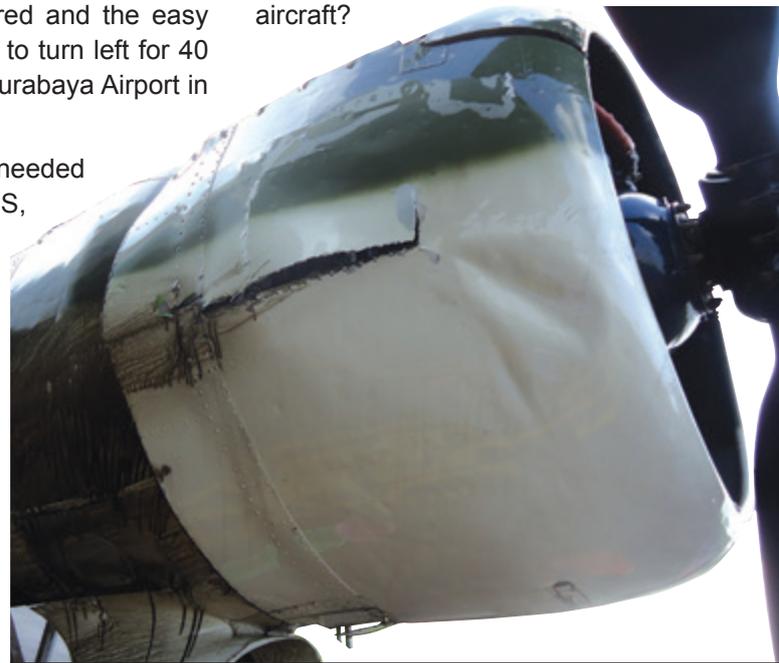
years ago when the FTHO purchased a C47, ex-USAAF, ex-MMA Airlines and ex-movie star, still wearing the WW2 D-Day paint scheme from a very forgettable movie, "Sky Pirates". With an American pilot, Dale Mueller and HARS member Alan Searle, and Engineer Barry Arlow, VH-XUX was airborne for uneventful sectors to Longreach, Darwin and Bali and the start of its "10 day delivery" flight.

An hour into the flight from Bali to Singapore, noise and vibration signaled a cylinder failure in the left engine. A brief fire followed until the engine was feathered and the easy decision was taken to turn left for 40 miles and land at Surabaya Airport in Java.

Dale Mueller was needed back in the US, leaving the flight short of a pilot. Just back from a long holiday, I was contacted by Alan, who asked "Would I like an adventure?" I agreed, as did Queensland engineer Mick O'Grady, and when a

replacement engine arrived in Surabaya, so did we.

Conditions there were not ideal, with the airport administration determined to extract every possible fee from Larry's rapidly diminishing funds. Helping Larry was American pilot Tom Claytor, Thailand based and fluent in most Asian languages. The engine was finally changed. However a requirement from the Indonesians was that we carry the failed engine with us to Singapore posed the question of how were we to position the engine uphill inside the aircraft?



Cylinder head separated from the engine.



Bob Small is he also an engineer?



Pilots do it tough!

The answer was “Russian Power” in the form of a group of very big, fit, friendly engineers working in the hangar who did it in minutes.

It was a pleasure for us to leave Surabaya for Singapore. A vehicle arrived demanding just one final “Fee” in cash before we could start engines. The flight ran well enough over the Java Sea and into Singapore. At Seletar Airport the local Aero Club provided accommodation and a 200 litre drum of oil for us, very welcome as we were still using a lot. A few days in Seletar had both engines and crew sounding better and ready

for the next leg. Out of Singapore at dawn we had a lovely flight over the Malaysian Peninsula and the Gulf of Siam to land at U-Tapao in Thailand, a large USAF B52 base during the Vietnam War. Another early morning departure, radar vectors around Bangkok and we landed in Chiang Mai, Northern Thailand. Cloud was building on the hills as we headed NW to cross the border into Myanmar. Several ranges of hills lay inside the border, needing diversions around the cloud until we descended into the valley of the Irrawaddy River to land in Mandalay.

and communication with Myanmar ATC ceased, we were still “on climb to Flight Level 270”. We crossed the Chinese border reporting our actual altitude, 12,000 feet, and were asked to climb to 15,000 feet. The radio was clear, the English good and they were clearly expecting us. While the war in China against the Japanese is not well known in Australia, even Chinese schoolchildren are taught about the Flying Tigers Squadrons and the 594 transport aircraft lost in the operation. The cloud built as we approached Kunming, and at 12,000 feet on descent, vibration in the right engine led the engineer Barry Arlow to shout “shut the f....ing thing down”. His view of the smoke and oil flowing over the wing was better than ours. Our radio call of “Engine Failure” was heard as “Engine Fire”, so after landing Alan and I spent about 4 hours explaining to the authorities why we had closed operations at this busy Chinese airport.



Russian man power set the engine into position.

The next morning was clear in Mandalay, with the hills in sight, so the flight over the Eastern Himalayas began. Our flight plan to Kunming China would only be accepted by the Myanmar ATC system if our planned altitude was at least 27,000 feet. So as we flew northeast

We now had delivered the aircraft to China and thought that it may be possible to transport it by road to Guilin, its final destination. The problem was that the roads from Kunming run through tunnels and that however it was dismantled, the C47

OVER THE HUMP continued

would not fit through. Regarding his available finance, Larry said "We had considered the worst case scenario of an en route engine failure, and that did happen - twice!" The Chinese State authorities then agreed to fund a new engine if we would fly to Guilin. A shiny engine arrived from Seattle, and space was provided in the China Eastern Airlines hangar, as were the services of three very capable Chinese engineers. They had no English language skills at all and explained through interpreters that it was an honor for them to be working on an aircraft type that to them was famous. They enquired about manuals for the job ahead, and Barry and Mick pointed to their heads, and said "Its only up here!" Plastic sheets were laid to save the pristine hangar floor and work began. Compared to Surabaya, this was heaven. When a propeller dome spanner was needed, the Chinese oxy cut one to suit, they were very proud of their achievements. With both engines running well

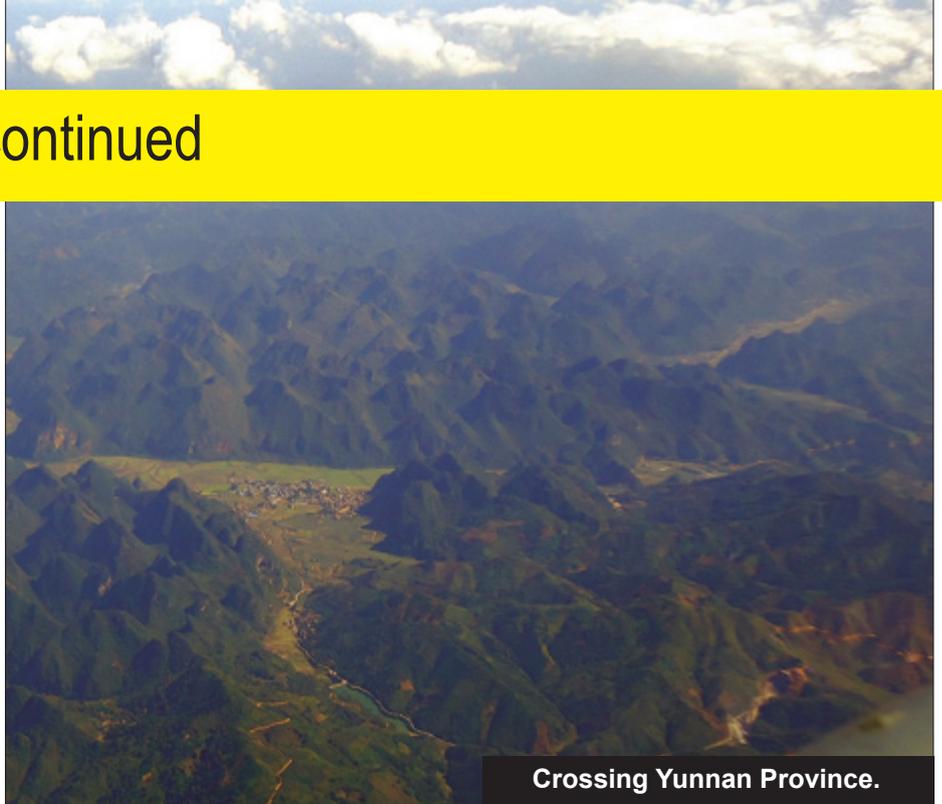
“ **Both engines that it left Australia with had failed, but what will probably be the last C47 flight "Over the Hump" was complete.** ”

again, we loaded the aircraft with all our remaining drums of fuel. It was considered 560 gallons would be enough for the flight to Guilin, and diversion if needed to Nanning. The thought of a diversion did not appeal to us as not only would no high-octane avgas be available there, but by now we only had five days left on the Australian Certificate of Airworthiness. Fortunately, the Kunming weather

was fine and the Guilin forecast reasonable. The first half of the sector across Yunnan Province was clear, with great views of the limestone hills and villages..

As we flew northeast, cloud was building, and the forecast for Guilin was not encouraging. We descended through broken cloud toward Guilin and weather which Alan subsequently described as "mist - heavy mist". Being used to instrument equipped aircraft (which we were not) the Radar Approach Controller enquired as to which instrument approach we would like. If she was surprised by the reply "Radar vectors for a visual approach" it was not apparent. She provided very skilled assistance until we had the runway in sight for the final landing.

The welcoming committee was huge, they had been expecting us for some time. Our ten day delivery flight had extended to over three months, but the 73 year old aircraft was at last in Guilin. Both engines that it left Australia with had failed, but what will probably be the last C47 flight "Over the Hump" was complete. And yes, as Alan Searle had suggested, it certainly was an adventure.



Crossing Yunnan Province.



Our welcoming crew.

OJA Wing-Walk Launch

HARS newest 747 product, the Wing Walk was launched at Albi-on Park on Wednesday 25 October 2017.

This product provides customers with the opportunity to climb onto the wing of the City of Canberra from Door Right Three by means of a ladder made by HARS engineers specifically for the purpose. Each guest is required to don a harness which is tethered to a cable anchored to the aircraft. This safety mechanism was designed by the consultants who designed

Sydney Harbour Bridge's Bridge Climb experience and enables customers to walk 15 metres along the wing to engine 4.

Local Aboriginal Elder, Aunty Lindy Lawler with 747 Project Manager Phil Mason, were the first to try out the new product which has been under development for some months. Safety was of paramount importance in designing this product and the consultants were instrumental in ensuring it complies with government safety regulations.

The spectacular view of the Illawarra Escarpment is immediately evident to those exiting the aircraft onto the rubber matting laid out on the wing. Elevated six metres above the ground, customers get a whole new perspective of the aircraft and a different appreciation of its scale.

This product will initially be made available only on Tarmac Week-ends commencing on 11 November 2017. Once an adequate number of guides are trained, it will be made available 'on de

.... it is now possible to walk on the wing, formerly the preserve of only the aircraft engineers.



Aunty Lindy on the wing with Phil Mason

WING WALK Continued



Testing the harnesses

mand' when the Museum is open. The introductory price is \$65 and if combined with another product such as Premium Tour or Cockpit Experience, this price is discounted by \$20.

Not only does HARS provide the public with the opportunity to visit areas no longer accessible such as the cockpit, it is now possible to walk on the wing, formerly the preserve of only the aircraft engineers.

Minimum age for the wing walk is 14 years. and all participants must be wearing fully enclosed flat footwear and appropriate clothing (no skirts). This facilitates the fitting of a snug safety harness.

The Wing Walk is expected to be a very popular addition to HARS' growing product offering.



Phil Mason, Aunty Lindy Lawler and Claire Rogerson.

Jetgo's Inaugural Commercial Flight From Illawarra

My arrival at Illawarra Regional Airport just before 6am on Monday 30 October 2017 was greeted by a pleasant breaking dawn. Before me, the new temporary terminal building framed by HARS Boeing 747-438 VH-OJA. On the ramp outside, Embraer ERJ-135KL VH-ZJE, which had positioned overnight for what was to be a landmark flight.

This morning I was booked on Jetgo's inaugural passenger service out of Illawarra, which was to Essendon Fields Airport, Melbourne. Later that morning, a second inaugural service would fly from Illawarra to Brisbane.

Newly-appointed staff and security busied themselves unlocking the terminal building as I alighted my car and crossed Boomerang Road during what was an amazingly convenient arrival at check-in. My excitement was matched by the Jetgo staff and contractors' enthusiasm on what they clearly saw as a very special day. Each passenger was even given a company logo cupcake to take aboard the aircraft.

Illawarra Regional Airport, owned and operated by Shellharbour City Council, began life as RAAF Albion Park in 1942 for training and as a strategic defence base covering particularly

the vital steel works at Port Kembla. Decorated fighter ace Clive Caldwell received RAAF training at the airfield.

Following World War II until 1950, TAA and ANA operated services from the airport to Canberra and Melbourne. (I remember seeing a small roll-up air stair in a corner of the apron in the late 1970s.) South Coast Airways operated a milk run from 1952; Sydney – Wollongong (Albion Park) – Bairnsdale – Sale – Melbourne (Essendon). During the 1970s Southbank Aviation introduced commuter services from Albion Park to Canberra and Newcastle flying Beech 90 King Airs. In the latter years of the twentieth century, until August 2000 in fact, Impulse Air flew nineteen-seat Beech 1900Ds from the airport to Melbourne and Newcastle.

By early this century, Shellharbour City Council had renamed the facility as Illawarra Regional Airport. Needing senior staff to regularly commute between Port Kembla and Melbourne, BlueScope Steel lobbied Qantas, which started a Dash-8-200 service on 6 June 2005. It only lasted three years, the last flight departing Illawarra on 18 July 2008. Qantas cited fuel costs, but the service definitely underperformed, with most

business travellers opting to drive the eighty kilometres to Sydney where jet comfort and performance awaited them.

Following Qantas' departure, the terminal building fell into reduced usage until a fire destroyed it in 2013.

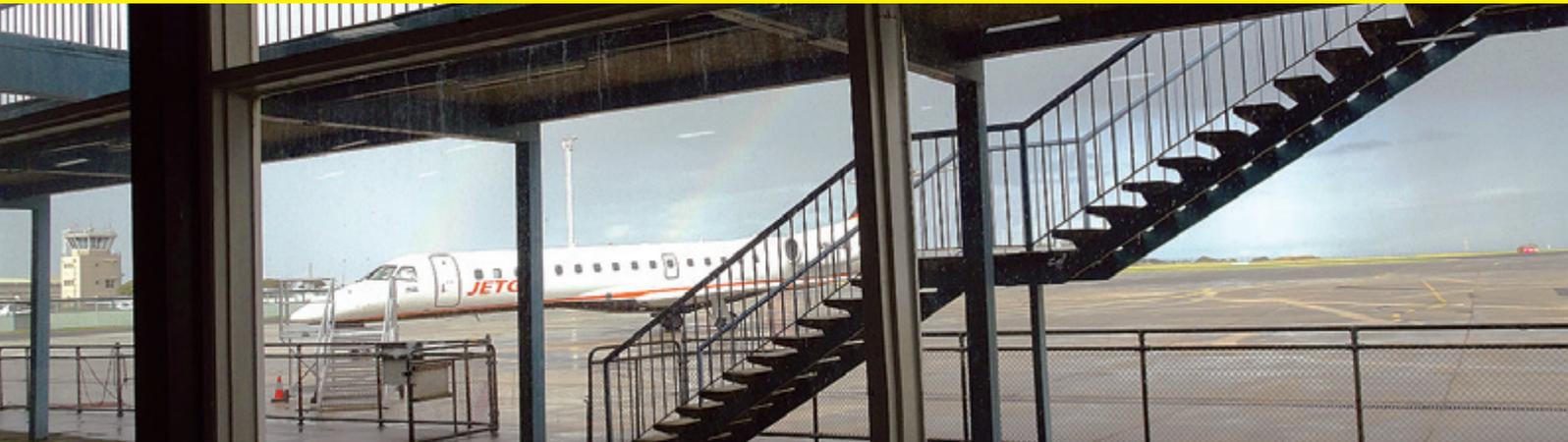
With Jetgo's 30 October departures to Essendon and later to Brisbane, it has been over nine years since an RPT service operated from Illawarra Regional Airport. So it was not unexpected that Mayor of Shellharbour, Marianne Saliba was on the flight, as well as the owners of Jetgo and a contingent of media.

Check-in and security were as swift and convenient as parking. With maximum passenger loads around forty and one aircraft at any one time, the operation was relaxed and uncrowded. Nevertheless, security was thorough as would be expected. One could not help but think of lines of travellers at Sydney Airport.

Jetgo's choice of Embraer Regional Jets (ERJs) has provided it with an opportunity to fill a niche market in the Australian RPT scene. Unique in Australia, the ERJ family provides small capacity (37 – 50 passengers) economically for ultra-thin routes.



Jetgo's Embraer Regional Jet ready for its inaugural service to Essendon.



Arrival at Essendon Fields.

But because the ERJs are jets, Jetgo is able to offer the same speed and comfort as the big jets flying the major routes. I believe it can be seen as a real effort to provide rural and regional-city Aussies with the same fair go given to city-dwellers and at competitive prices too.

Jetgo's business model is to pick up the longer, thinner routes that are neglected by the major airlines but which suit the little jets. It enables customers to avoid regional prop jets into major cities and aircraft changes to the big airlines. As Chief Operating Officer Arron Mulder commented, Jetgo is about picking up the crumbs. And with enough crumbs you can make a meal.

Started five years ago by Jason Ryder and Arron Mulder with initial services out of Brisbane to the north, Jetgo has built up a unique route network that largely avoids major centres. The Illawarra is the closest Jetgo has ventured towards Sydney so it is hardly surprising that this small enterprise has gone unnoticed in the nation's largest population centre. Perhaps Sydney-siders, both business and leisure travellers, should learn how easy and relaxing it is to drive to Illawarra Regional Airport, park the car cheaply and walk fifty paces to check-in, join fifty or less fellow

"... all-in-all, a very comfortable and relaxed experience."

passengers and board a small, fast, comfortable jetliner for a one-hour flight to Essendon Fields Airport in Melbourne where they can alight and catch a taxi barely thirty metres from the arrival gate. And Essendon, being closer to the city than Tullamarine, saves in time and cab charges. Also, Essendon offers a quiet and serene heritage atmosphere.

The ERJ family's roomy 1+2 seat arrangement is very comfortable, even for a big fella like me, with adequate leg room and plush upholstery. Jetgo flies three versions, the ERJ-135LR offering 37 seats, the longer ERJ-135KL (often referred to as the -140) with 44 seats and the longest ERJ-145LR with 50 seats.

On board the aircraft, the single cabin attendant serves tea, coffee, juice, water and snacks, just as on bigger aircraft, and has time for a friendly chat on her way through the cabin. The aisle is wide enough for a service trolley which makes service efficient and each seat has a full-size tray table. Galley is up front and toilet and galley is in the rear

The windows are generously sized to afford good views and I was able to enjoy gazing down upon HMAS Albacross south of Nowra, which for many years was an important part of HARS operations.

Although the ERJs are fitted with drop-down doors with built-in stairs, Jetgo has invested in purpose-built rollaway air stairs at each destination, which makes access for older or less-able passengers far easier.

Once we arrived in Essendon, which has been renamed Essendon Fields, a celebratory breakfast and first-flight speeches were offered in the heritage-listed terminal building. The Managing Director of Jetgo, Paul Brederick, CEO of Essendon Fields Chris Cowan and Mayor Saliba all addressed the historic event as we sipped our drinks and tucked into bacon and egg rolls. One could not but feel a wave of nostalgia when comparing the heritage sixties' open viewing decks, with the mural-sized photos around the walls, showing the same unaltered scenes fifty years prior with Ansett and TAA Electras and Viscounts.

All-in-all, a very comfortable and relaxed experience, one which I certainly intend to repeat on a future Melbourne trip, even though I do live in the north-west of Sydney.

Congratulations, Jetgo, Illawarra Regional Airport, Shellharbour City Council and Essendon Fields for bringing this to fruition. Now, over to you, the flying public, to support this great new service!



Catalina Arrives In Oz

News Item



TO the great delight and relief of the Historical Aircraft Restoration Society (HARS) and observers worldwide, PBV-6A Catalina VH-PBZ touched down in Darwin, Australia on the evening of Sunday 21 September 2003 on her ferry flight Arcachon La-Teste near Bordeaux, France to HARS home at Albion Park south of Sydney.

Following a periodic inspection of the aircraft by HARS Chief Engineer John Skidmore and engineer Gordon Glynn and repairs to landing damage which had occurred 12 months previously caused by the main gear retracting on landing after hydraulic failure., HARS wish to acknowledge their gratitude to Mr Serg Sentouq and his co-workers Claud Martinique and Pierre of Ville Marie-La-Teste Aerodrome, President Patrice Raffy and Chief Engineer Joel of the Aero Club du Bassin d'Arcachon, with a special thank you to Michael Hourneagt from BSA Excalibur. Also, the engineers and staff of the maintenance department of the

Council de Bassin d'Arcachon who so willingly gave their assistance during their national holidays to enable us to fabricate the special Jacking stands

**Pilots, Captain
Bruce Simpson and
Donna Porter,
joined the team
for the gruelling
75 hour flight to reach
Australia.**

for the landing gear retraction tests and other engineering challenges.

Pilots, Captain Bruce Simpson and Donna Porter, joined the team for the gruelling 75 hour flight to reach Australia. Captain Matt Wakelin from the NZ Catalina Club from France to Larnaca. The flight had to deal with wet weather conditions over France, handling delays at airports, hand refuelling via drums and hand pumps,

shortage of oil and fuel availability, bureaucratic difficulties through India including the denial of clearance to divert en route to Kolkata, the ever present oil and fuel leaks requiring attention at the stops (typical of this type of aircraft), loss of avionics equipment, thunderstorms over the Bay of Bengal and Singapore, freezing temperatures at altitude and poor aircraft performance at high altitudes.

The flight continued to Coffs Harbour via Cairns to attend the 75th anniversary of the Coffs Harbour Aero Club finally arriving home in October 2003

PBZ flew home via the following route:

May 2002: Seia (Portugal) – Bordeaux – Arcachon

Sep – Oct 2003: Arcachon-Bordeaux-Rome-Corfu-Cyprus-Bahrain-Muscat (Oman)-Mumbai-Calcutta-Bangkok-Singapore-Denpasar (Bali)-Darwin-Cairns-Coffs Harbour - Illawarra Regional Airport.

BLAST FROM THE PAST

Continued



Front Cover (over page): Off the Sunshine Coast enroute to Cairns to Coffs Harbour. (Photo Craig Justo, Wirraway pilot - Ed Field).

Left: The greeting at Illawarra Regional Airport, Sunday 5 October. Neptune 273 and Super Connie EAG had just arrived from Nowra (Gary Squire).

Below Left: "Fill 'er up!" - Cairns. (Gary Squire).

Below: The crew, left to right: John Skidmore, Bruce Simpson, Gordon Glynn and Donna Porter (Gary Squire).

Bottom: Catalina VH-PBZ parked in front of the terminal at Illawarra Regional Airport. (Gary Squire).

Bottom Right: Refuelling Bahrain (Peter Hunt).



2017 ANNUAL GENERAL MEETING

Story and Photos:
Terry Scanlan



LEFT: Some of the members attending the AGM.

BELOW: Don Hindle, Life Member.



THE HARS AGM was held on 2 December 2017 at our facility at Albion Park Rail with a large number of members in attendance. It was pleasing to see so many attend this important meeting and to have a platform to put forward their views on the operations of HARS moving into the future.

Long time member, Don Hindle was

inducted as a Life Member. Don was with the Royal Canadian Air Force and afterwards flew with Qantas as a 747 Captain. After retiring from Qantas Don joined HARS in 2000 and is manager of the DC3 projects. Don has always been a hands on member and is always available when work has to be done. We thank Don for his dedication to HARS and his significant

contribution to the organisation which makes HARS what it is today.

Twelve nominations for Ordinary Committee were received and after a ballot was taken the following members will serve on the HARS Committee for 2017-2018: William Smith, John Croll, Douglas Haywood, Malcolm Hallows, Ross Kelly, Robert Greinert and Gordon Glynn.

PM MALCOLM TURNBULL DROPS IN

Story: Terry Scanlan
Photos: Various



Joan with PM

MONDAY 27 November was a busy day at HARS with our tarmac area turned into a jet base with the Jet Go arrival, our visiting Global Express Jet and the Prime Minister's BBJ.

Prime Minister Malcolm Turnbull had arrived for a meeting at BlueScope Steel and his BBJ was parked on the tarmac outside Hangar #1. Bob De La Hunty escorted the Prime Minister and his aids to their vehicles with an invitation to tour the museum on his return.

Later in the day the PM returned and had a quick tour with Bob through the museum and was happy to have selfies taken with HARS members.





PHOTO:
Shaun Carpenter.

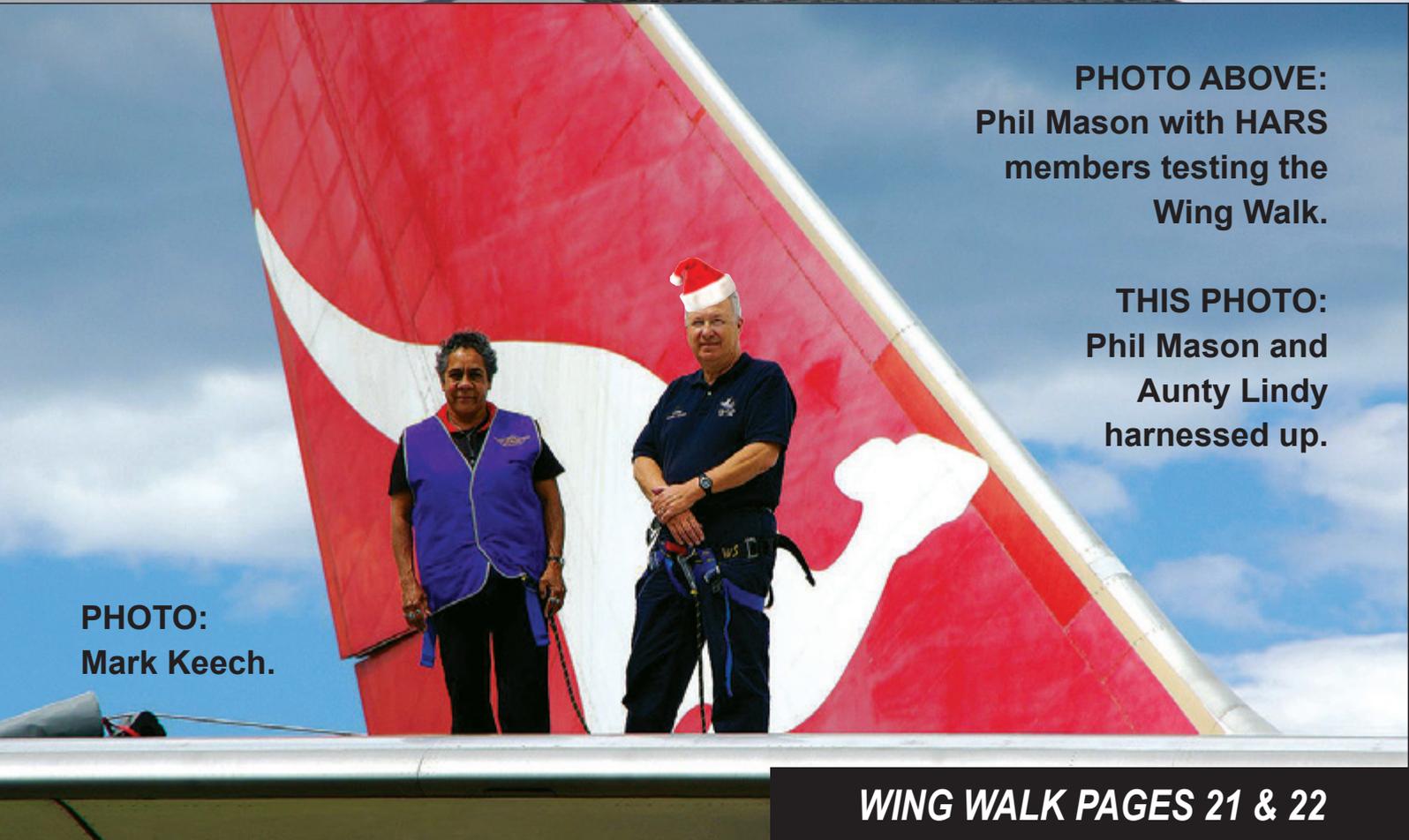


PHOTO ABOVE:
Phil Mason with HARS
members testing the
Wing Walk.

THIS PHOTO:
Phil Mason and
Aunty Lindy
harnessed up.

PHOTO:
Mark Keech.

WING WALK PAGES 21 & 22