## REDCLIFFE AERO CLUB

DROFFSSIONAL AVIATION TRAINING - QUALITY AIRCRAFT HIRE





#### **RAC Board 2017**

President

Mike Cahill

**Vice President** 

Sam Keenan

Treasurer

Margot Logan

Secretary
Mark Roberts - Thomson

Directors

Bryan Galvin Tom Hassall

Ray Vuillermin

Ristan Greer

Chief Pilot / Head of Ops Daniel Smith

Alternate CP/HoO

Mal McAdam

CFO

Stephen White

**Grade 1 Instructors** 

Adrian Bartholomeusz Tom Havter

**Grade 2 Instructors** 

Callum Taggart Stephen White

Nick Pratt

Grade 3 Instructor
Mark McCann

Office Administration

Mary Treglown

**Club Life Members** 

Ron Ennis Phil Ware Mike Cahill

**AirChat Editor** 

Philip Arthur

### **CONTENTS**



3

4

From the club president

CEO update

Chief pilot's report 5

**Editorial** 6

Upcoming events 8

Great eastern fly-in

Recent achievers 10

Tom's toolbox 12

Rainforest, outback and reef safari 14

Lunch at Wellcamp 18

Cirrus life conference 20

**Graphical area forecasts** 26

Wynyard aero club 28

<u>Instructor intro</u> 30

Wings dinner 31

Let's fly down the Murray, Darling 32

Club open day 42

One of the great ones 44



## FROM THE CLUB PRESIDENT

Hi Everyone,

The end of another year is upon us and another successful year at your Club. There has been steady growth across all sectors of pilot training again this year with emphasis on the VSL (Vet Student Loans) portion of training. One of the key elements we gauge growth by is the number of new Club members that join us every month and we are consistently seeing on average 10 to 12 members join the Club every month.

Because of these numbers the Directors have implemented several social initiatives this year with the introduction of monthly "Meet and Greet" and "Happy Hour" BBQ's. We feel that it's important for members, new and old, to interact, sharing aviation stories between each other.

The Club's Flyaway Programme has been very successful again this year even though some events were "washed out" due to weather conditions not being favourable on the day. Standout events this year were our Dawn Service on ANZAC Day, the Club's Open Day and the Wings Dinner. Overall the social scene this year has been well patronised and we are looking forward to next year's events.

Financially the Club is in great shape and probably the best in its 48 year history. We have upgraded the flight simulator this year, replacing the existing sim with the latest technology in simulators. Together with the new sim, the VSL status puts our Club up there with the best in the industry in Australia

I would like to thank the Directors and Staff of the Club for your dedicated service during the last few years. I have enjoyed working with you all developing our Club to be a great place to be at.

Wishing you all a Merry Christmas and Prosperous 2018.

**Happy Landings** 

Mike Cahill

President

Redcliffe Aero Club 2017



#### **CEO UPDATE**

Dear Members,

You would have recently received our audited accounts for 2017 in preparation for the Annual General Meeting held on 22 November. Apart from another significant net profit of \$215,000 there was other interesting data contained in the report that clearly demonstrates the turnaround the club has made in the last two financial years.

For instance, turnover in 2015 was \$2,052,693 compared to \$3,054,261 in 2017. It should be noted that the 2017 turnover was all from training, charter and flying activities without any insurance income.

The 2015 year saw a net loss of \$137,168 compared to net profits for 2016 and 2017 of \$380,000 and \$215,000 respectively.

Net Assets of the Club in 2015 were \$2,141,277 compared to \$3,180,786 in 2017. Cash generated by operating activities in 2015 was a mere \$35,000 compared to 2017 of \$715,000.

Regardless of the economic metric used, whether it be turnover, net profit, net equity or cash generated by operating activities, the Club is in a very sound financial position. This turnaround is attributable to the direction set by the Board and implemented by the management and staff of your Aero Club. I would like to personally thank the Board members for their dedication in the execution of their Director's duties and the time and expertise they freely give for the benefit of the Club and its members.

The other significant change this year, which has been another initiative of the Board, has been to ramp up the social side of the Club. This is evidenced by the excellent flyaway program, monthly BBQ's held on the first Friday, seminars and the

Wing's Dinner.

Finally, with the successful commissioning and certification of the new Precision
Flight Controls DCX MAX NG simulator, the Board suggested the previous simulator be reconfigured and recommissioned in the Club Room for the use of club members, free of charge. Whilst time on the old SIM can't be logged, it still provides a valuable opportunity for club members to hone their skills, for free

I encourage you all to visit and make use of your Club's facilities, aircraft, and simulators and to participate in the flyaway and social program.

Best regards,

Stephen White

CEO



#### **CHIEF PILOT'S REPORT**

Dear RAC Members,

As I look back at the Redcliffe Aero Club during 2017 I see a year of continual change and growth. In the 12 months our instructional staff have grown in number and skill and evolved as new instructors have joined the team to replace those who have left us to continue their careers beyond instruction. Our members and students have continued to learn, improve and achieve which all leads to greater enjoyment of aviation.

Since the last issue of AirChat Callum Taggart and Nick Pratt have both joined us full time as grade 2 instructors. Please make them feel welcome and appreciated as they join our ranks. Meanwhile Naythan has stopped working at RAC (though he can still be seen here from time to time with his family) to pursue his career in the RPT sector and Joe has left us to pursue his studies and a career in the RPT sector.

While it is sad to see teammates move on, I see it as a sign of strength, that RAC is providing opportunities for our instructors to grow. It's gratifying that the wider

industry places a premium on the pilots of the Redcliffe Aero Club.
Change and growth are an essential component of a healthy and vibrant aviation business. The team members that move on rarely leave us permanently and I hope they always view their time at RAC as challenging and enjoyable. Proof that this is the case can regularly be seen at RAC events, where familiar faces resurface time and again. I'm sure that many ex-RAC instructors are reading this and fondly remembering their RAC experiences.

Thanks to our board and support from the membership there is an increased frequency of social events in the calendar, from informal BBQs and Happy Hour(s) at the bar to an extensive flyaway program. I hope these events make it easier for you to be actively involved in your club.

Our survey operations around Australia and New Zealand have kept many of us busy and away from Redcliffe. This year RAC gained approval from the NZCAA and CASA to conduct international operations. This is no small feat and I

This is no small feat and I wonder how many other Australian aeroclubs, past or present, can claim the same.

We recently prepared a new diploma course, based on our Instructor school. This course has now been approved by ASQA and from next year we have a new Diploma of Aviation (Instructor Rating) to offer our membership. This course joins our existing Diploma offerings (Commercial Licence and Instrument Rating) on our scope of training.

Summer has definitely arrived in Redcliffe and in addition to rising temps and humidity we again start to see the regular, unpredictable summer weather. The BOM have changed our familiar area forecast format to the new Graphical Area Forecast (GAF). For those that missed our information night, information on the GAFs can be found in this edition of AirChat, or ask an instructor next time you're at the club.

Merry Christmas, a happy holiday period and Safe Flying.

Dan Smith
Chief Pilot and Head of Operations



#### **EDITORIAL**

A key aim of AirChat is to inspire you, our readers, to head off and explore new destinations by air. We have a few travel stories in this edition to whet your appetite.

Following delivery of his Cirrus SR22 Mike Cahill took off to attend the 2017 Cirrus Life Conference. He has written a pictorial account of his trip to the Red Centre including stops at Birdsville. Also in this edition Graham Pukallus and Val Graham take us on a trip around southern Queensland with stops at the Gayndah Orange Festival, Carnarvon Gorge, Longreach and Lady Elliot Island. The story on our feature aeroclub at Wynyard in Tasmania covers another part of the country. Gary McArthur describes his corner of the country and invites us to take part in the 2018 Circum-Tasmania Challenge in March. Three of Australia's iconic rivers feature in an article I've included about a recent trip to Mildura.

In November the Bureau of Meteorology brought out the new Graphical Area Forecasts. The aim of "GAFs" is to make it easier to interpret weather forecasts and thereby safer for us to fly. However it's important that we know how to read them. A summary of the new format appears in this edition.

We also have a report on the Club Flyaway to Wellcamp and photos from our Open Day in September and the Wings Dinner last month

I'd like to thank all contributors for their assistance with putting together this edition. It 's great when we can share our experiences. I hope the stories in this edition encourage a few more of you to put pen to paper next year and share your love of aviation with us. Please email your stories and photos to me via the link below. Nothing is too big or too small. And no need for literary perfection either. And let me know if you have an idea for a story that someone else may want to write. The next edition is due out in April.

Have a relaxing break over Christmas and a safe and happy flying start to 2018.

Philip Arthur

airchateditor@redcliffeaeroclub.com.au



# ENGINE MANAGEMENT MADE EASY!

Do you know your engine?

How can your engine monitor pay for itself several times over?

If you want to find the best return on investment in aviation, Advanced Pilot Seminars is the answer.





## ADVANCED PILOT SEMINARS AUSTRALIA

Email us now to be notified of the next course in Australia

This course will save you money, and maybe your life.

www.advancedpilot.com or davidbrown@advancedpilot.com for more details

DON'T MISS OUT . BOOK YOUR PLACE NOW

Sep 104

#### **BOB TAIT'S AVIATION THEORY SCHOOL**

Phone 07 32040965 bobtait@bobtait.com.au www.bobtait.com.au





























Home study texts books with free support through our on-line forums





On line Exam Preps all subjects CPL Performance on line Full time classes for CPL and IREX CASA exams

#### **UPCOMING EVENTS**

The monthly Straddie Breakfast Fly-in is held on the third Saturday of each month. We'll fly there on Saturday 16th December as the final flyaway for 2017. A typical Straddie Breakfast Roll-up from one of our previous trips is shown below.

Don't forget the happy hour and barbecue every first Friday of the month starting from Friday 2nd February. All members, friends and family welcome. Check the club website for details.

We aim to organise a few flyaways throughout the year. Some ideas for destinations are Town of 1770, Lightning Ridge, Mudgee, Carnarvon Gorge, Longreach and of course the annual brass monkey pilgrimage to Stanthorpe. Join our Flyaways Facebook group to keep up to date and tell us where you'd like to go and when. Click on the link below:

#### https://www.facebook.com/67groups/678739008989427

Meanwhile, some 2018 events to keep in mind are:

11 March: Clifton Annual Fly-in

21 April: Coffs Coast Airshow, Coffs Harbour

29 April: Wings Wheels and Wine, Mudgee www.facebook.com/WingsWheelsWine/

22 June: Shute Harbour Fly-in www.facebook.com/airliebeachflyinwhitsundayairportshuteharbour/

10-12 July: Big Red Bash, Birdsville <a href="https://www.bigredbash.com.au/bigredbash/index">www.bigredbash.com.au/bigredbash/index</a>

21-22 July: Farnborough International Air Show, UK <a href="https://www.farnboroughairshow.com/public/">www.farnboroughairshow.com/public/</a>

23-29 July: Airventure, Oshkosh, USA www.eaa.org/en/airventure



## **Great Eastern Fly-in**

6 - 7 January 2018







The Great Eastern Fly-in is being held at Evans Head Aerodrome again in early January. This annual event starts on Friday evening and has two days of aircraft displays and air shows featuring many different types of aircraft. It's free admission and you can check out the aviation museum with its F1-11 while you're there. Either fly in from Friday or drive 2 hours

down the Pacific Highway from Brisbane, just past Ballina. Make a weekend of it and stay at this great little beach resort. Camping is possible on site.



Find out more via this link:

http://www.greateasternflyin.com/









#### **RECENT ACHIEVERS**

Congratulations to these students who recently completed the next level of their training at RAC.

Timo Hemminki - Flight Instrument Rating

Reece Scotchford - First Solo

William Sharman - First Solo

Chris Wallis - First Solo & Restricted Pilot Licence

Adam Starr - Multi-Engine Training Approval

Jordan Tonges - Multi-Engine Aeroplane Instrument Rating

Timothy Evans - Restricted Pilot Licence

Colin Smith - Restricted Pilot Licence

Carlos Bacca Guerra - Multi Engine Aeroplane Class Rating

Teran Black - Multi Engine Aeroplane Class Rating



Tim





Colin



Reece

William



#### **TOM'S TOOLBOX - UNDER PRESSURE**

Checking an aeroplane's tyre pressure is an important part of the pre-flight inspection. Aeroplane tyres operate at higher pressures and load than car tyres. It's really important to maintain proper inflation, as this affects the tyre life (from wear and heat) as well as performance, from hydroplaning to wheel shimmy. (Of course, improper maintenance and wear can also cause similar performance problems.)

Due to the properties of the materials from which they are constructed, aircraft tyres will expand for up to 12 hours after initial inflation. As the volume of the tyre increases, the effective pressure will decrease. Pressure adjustments must only be made when the tyre has cooled to ambient temperature. So the first flight of the day is the best time to check the pressure.

There are tyre pressure gauges available to members to check tyre pressure. Check your pilots operating handbook for the recommended tyre pressure. If you need to increase tyre pressure an instructor can assist using the compressor. Note that the nose gear tyre pressure may differ from the main landing gear pressure.

#### What about taxiing?

Tight turning of an aircraft can place high lateral loads on tyre sidewalls. The high lateral loads can damage the aircraft tyre casing and may result in tyre pressure loss.

- Align the nose landing gear in a straight ahead position before starting a manoeuvre.
- Use the largest turn radius that is possible when manoeuvring on the ground.
- The turning radius should be large enough to allow all tyres to roll throughout the turn.

Excessive taxi speed and distance can cause heat to build up in the tyre, leading to internal damage. The majority of tyre wear occurs during the taxi phase so speed, braking and turning should be kept to an absolute minimum.

What should you do if you have a flat tyre during landing or take-off?

Maintain directional control as best you can. Attempt to taxi your aircraft clear of the flight strip if possible (white gable markers). Shut down the aircraft and phone the club for assistance. If you are at Redcliffe a temporary tyre will be installed to allow the aircraft to be returned to the club hanger. Other aircraft should not land until the flight strip has been cleared.

#### Tom Hayter

Tom is our club's Head of Airworthiness and Maintenance Control (HAAMC) and is responsible for ensuring that the aircraft are well maintained.







AIRCRAFT FOR SALE www.cirrusaircraft-aunz.info

#### 2017 G6 SR22 Australis Premium

USS 711,900 + GST (less demonstrator discount)
Circus Phrispardhe+ aviancis, Spectra Wingto lighting, OWERTY keyboard, 12



#### 2015 G5 Australis Premium 1/6 Share



#### 2017 G6 SR22 GTS

US\$730.000 + GST

Circus Perspective + aviorics, Spectra wrightp lighting, aircon, yaw damper, EVS camera, SurfaceWatch, Flightstream 510. Free delivery to anywhere in Australia.



#### 2014 G5 SR22 GTS

NZ\$780.000 + GST

TT 300 hours, Circus Perapective axionics, 12" screens with Synthetic Vision, EVS camera, terrain warning, active traffic information, yaw damper, aircon. on the NZ register.



#### 2017 G6 SR22

AU\$799,000 + GST (including demonstrator discount)

Carrus Perspective + avionics, dual 10" screens with Synthetic Vision, Spectra Wingtip lighting, aircon, Yaw Damper, Garmin Traffic and more.



#### 201 2 G3 SR22T GTS

AU\$639,000 + GST

Circus Perspective avionics, 12" acreen, SVT, Perspective Glebal Connect, Lightning Detection, Yaw Damper, Traffic, eTaws, ChartView, FIKI, Duygen, EVS Camera, Aircon.



#### 2017 G6 SR20

US\$490,000 + GST

The only G6 SR20 in Australia at present, Equipped with the new Lycoming 10-390, 215HP engine, Circus Perspective+ axionics, Spectra Wingtip lighting. aircon, SurfaceWatch, Rightstream 510, Traffin, SVT, composite prop.



#### 2007 G3 SR22 GTS

AU\$41 5,000 + GST

Only 305 TT, always hangared. Andyne Entegra, EX500C RB.1, new parachute aircon, TKS anti-loe (deactive), Traffic, TAWS-B, Flight Dir, EMax & CMax, WX500.



#### 2016 G5 SR22 GTS Carbon

AU\$800,000 + GST

TT 120 hours. Circus Perspective axionics, remote keyless entry, 12" screens with Synthetic Vision, Yaw Damper, EVS camera, Traffic, ChartNew, 4-in-1 digital backup, Global Connect, aircon, Daviden, Lightweight groop, full aircraft govern battery low fug and many more extras.



#### 2006 G2 SR22 GTS

AU\$345,000 + GST



#### 2016 G3 SR20

This nearly new SR20 has only 262 hours, Cirrus Perspective axionics, 101 inside and out. Owner upgrading



TT 1165 always hangared. Avidyne with Dual 10.4" screens, EMax & Creax ® Electronic Charts, Right Director, Traffic, Stormscope, E-TAWS, Ice Protection



AU0\$555,000

screens, SVT, ADSB Transponder, leather interior, aircon, Traffic, Immaculate



#### 2005 G2 SR20

AU\$280,000 + GST

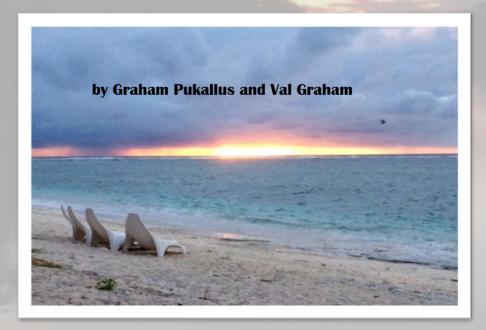
840 TT, factory remanufactured engine - Zero Hours! Avidyne Entegra, EMax & CMax, GTX335, ADSB



Australia: Melbourne | Sydney | Sunshine Coast | Perth 1300 204 170

New Zealand: Feildin +64 (0)274 438 373 Complimentary training program and additional tools provided with all pre-owned aircraft. Full specifications and images available on the Cirrus website





Earlier this year we headed off on another outback adventure. This time we flew from Redcliffe to Gayndah, then on to Carnarvon Gorge and Longreach, then across to Bundaberg where we caught a charter flight to Lady Elliot Island for a few days before heading home.

On our first day we flew to Gayndah where our visit coincided with the annual Orange Festival. We were welcomed at the airport by mayor, Rachel Chambers before we were transferred to the Golden Orange Motel by our host Ken Ogg. That evening we attended a Wine and Cheese Gala event where local council members and prominent guests of Gayndah and surrounding shires were in attendance. We all enjoyed entertainment with



special guests The Devas.

On Day 2 we all took part in the Orange Festival with their massive street parade and markets. It was a great start to our flying holiday.

Day 3 we departed for Carnarvon Gorge where we landed at Ingelara Airstrip on a property only a few kilometres from the gorge itself. We were welcomed by Stuart, the Airstrip/property owner and Anita Wills, General Manager of the Carnaryon Gorge Lodge.



Anita transferred us to the lodge and we were introduced to the entire staff who made us feel very welcome. An afternoon of exploring, visits to the local aboriginal art sites and viewing platypus in the local stream was a good introduction to our stay.

An ala carte dinner cooked by Matthew, the chef and manager at the lodge proved to be a great hit, and will certainly be remembered by us all as the best meal we experienced during the entire trip.

On Day 4 we had a half day gorge tour with a Parks and Wildlife guide who walked us through the history of the gorge and gave us a great tour of the cathedral gorge followed by the Moss Gardens which were a great hit with everyone.

We departed Carnarvon Gorge on Day 5, arriving at the Longreach airport mid-morning in perfect weather and were met by our hosts from the Outback Pioneer Company. It's a Longreach based business owned by the Kinnon family who co-ordinate a wide range of activities around Longreach, basically providing a one stop tourist shop. They transferred us to our accommodation nearby.

That evening we went to the Stockman's Hall of Fame for the Outback Show and Aussie Roast Dinner. We were joined by Channel 7's Luke and Cody who were



covering Longreach and in particular the Outback Pioneer Company for the Queensland Weekender travel show.

Day 6 was action packed starting with a Cobb and Co stagecoach ride. It was so dusty that they put the garden blower over us all to dust us off afterwards. In the afternoon we were free to visit the Hall of Fame and the Qantas Museum where we took part in the 90 minute guided tour

of the 747 and 707 jets. We all enjoyed the much-publicised outdoor baths on the entertainment deck of our Cobb and Co accommodation before we were transported to the Thompson River for the Sunset Cruise. The cruise was a big hit with everyone especially the 3 course dinner with entertainment, poetry and musical performance.



With a big day ahead, we departed Longreach early on Day 7, stopping off at Emerald for fuel, arriving at Bundaberg for an overnight stay. Tess at the Tropical Gardens Motel looked after all our transfers and after checking in we were directed across the road to the Sports Club were we all enjoyed a great meal and entertainment.

The following morning we were driven to the airport where we flew by Cessna Caravan to our Island Destination - Lady Elliot. Upon arrival on the island we were met by the manager who welcomed us and gave us a grand tour of the facilities and briefed us of the activities that would be available during our 3 day stay.

Our garden rooms were very comfortable and just a few steps from the beach. Everyone enjoyed the different water and land based activities through to sunset drinks on the opposite side of the island.

With our island holiday coming to an end we boarded the plane to return to Bundaberg where we had hangered our planes thanks to the Bundaberg Aero Club.

All good things must come to an end so we all said our goodbyes before taxiing out to fly home.

We have so many people along the way to thank for making our flying holiday an outstanding success. We're all now looking forward to our next flying safari to the Gulf Country in May 2018.







## Wellcamp for Lunch

by Sam Keenan









On the 8th October, we set off for Wellcamp Airport for lunch. The flyaway was well attended by 15 people spread across 8 aircraft. We departed Redcliffe with a ceiling of overcast cloud, which was high enough to pass over the range at Toowoomba with plenty of space. One of the standout views en-route was the new Too-



woomba Second Range Crossing Project. This certainly is an impressive piece of infrastructure from the air. Upon arrival at Wellcamp, we were greeted by two ramp staff, who expressed their pleasure in seeing some light aircraft using the airport for lunch, a nice break from larger RPT and private twin turbine aircraft that frequent the field.

Once everyone had arrived (herding cats), we were directed into the terminal building. To say this airport is well presented is an understatement. Everything was spotless, and beautiful in design. The use of glass in the departure area permits an unobstructed view of aircraft arriving and departing.

Although there appears to be a café in the baggage reclaim area, the main one is in the departure lounge (airside, back through security). It is named the Altitude Bar & Cafe. We were all impressed with how reasonable the prices were, how quickly our food was served and how nice it was!

After an hour or more of unadulterated hangar flying, one of the departure gates was opened for us, and everyone sauntered back to their aircraft for the flight home.

I can highly recommend Wellcamp as a lunch stop, and will definitely stop in there again in the future. Thank you to everyone that attended and made this flyaway an enjoyable success.







It's no secret that I always wanted to buy my own aircraft. After looking around within Australia and making several offers on aircraft that were based in Australia, with no luck, we started looking overseas. When I say we, I mean the plane was purchased with a mate of mine. Kent. After looking in the US this year we took final delivery of our new plane in late August. The story of the purchase of this plane is for another day. This story is about the plane's first major flight - to Avers Rock, I flew it there to

attend a Cirrus Life Conference. So yes it's a SR22 Cirrus.

Every two years Cirrus Aircraft Australia host a fly in convention and this year it was held at Ayers Rock. As a new Cirrus Aircraft owner I wanted to fly my plane there. This would certainly test my ability and to some point put me outside of my comfort zone. Unfortunately Kent couldn't make the flight due to work commitments, so I looked around for a pilot to fly with me. With some help from Cirrus Sunshine Coast, I found out that Lachie Smart was going to be a guest speaker at the event and he needed to get there so it was suggested that he fly with me. Lachie Smart is listed in the Guinness Book of Records as the youngest pilot to circumnavigate the world solo in a single engine aeroplane. Lachie accomplished this at the ripe old age of 18 in July/August 2016. He did it in a Cirrus SR22 so I thought that he'd be a great co-pilot, and I would learn something from this young guy. And I certainly did that. Lachie asked if his Dad could join us and I thought that would be



good. So Will joined us on the trip.

We planned to fly to the Rock over two days. Nice and easy. We departed YRED on Thursday 7th September and flew via Roma and Charleville. After refuelling at Charleville, Lachie took over as PIC, flying to Birdsville where we stayed overnight. With the help of some locals and some other Cirrus owners overnighting at Birdsville we visited a rather large sand dune called "Big Red". It's about a 30 minute drive west of Birdsville. We watched the sun set and the full moon rise over this extraordinary part of our country.



After a hearty breakfast at the famous Birdsville Pub, we departed for Ayers Rock. There were four aircraft flying the same route about 3 minutes apart, initially flying at 1,500 feet until we passed "Big Red" then we all climbed to 4,500 feet tracking direct for the red centre. This part of the outback is quite unusual, it's like the tide is out leaving behind ripples in the sand. It's so very different to what I expected, almost like at some point you could be fairly confident in saying that no man has ever walked below us, there is just nothing there.

We all adjusted our speeds so we could capture a rare photo of similar aircraft in a row airborne. Of course this was all done legally with a powerful zoom lens. Before long we were inbound Ayers Rock and with enough fuel on board we all decided to take a scenic flight around the Rock and Kata



Tjuta (The Olgas). So all four aircraft plus another local plane carried out the scenic flight with sufficient separation to each other, then joined the circuit at Ayers Rock where we landed and tied the planes down for the night.



From here on in we were in the hands of the brilliant Cirrus Life organisers. Friday night saw us all watching the sun set. Immediately following sundown we moved to a venue in the desert called "The Field of Light" where we all enjoyed fabulous food and wine. The Field of Light covers an area the size of seven football fields and has 50,000 radiant glass spheres lighting up the ground. Very spectacular.

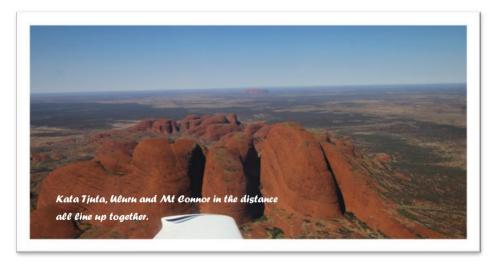
Saturday and Sunday were packed with lectures on different aviation topics and support for Cirrus owners. There were also opportunities on Saturday and Sunday to fly with a Cirrus mentor pilot. If you wished to fine tune your piloting skills this was the place to do it. I was fortunate to have the Regional Training Manager from Cirrus Training USA on Saturday and a Cirrus instructor from Melbourne on Sunday. Each session was for two hours. Between both Instructors I learnt a lot about the plane and the systems, while also getting some great photos of the area, like Kings Canyon, Uluru and Kata Tiuta.

On Saturday evening Cirrus organised a dinner at the Camel Farm. Again we had a



great meal, experiencing many different foods, e.g. kangaroo, seafood etc. and we were entertained by three "Priscilla Queen of the Desert" entertainers. Clearly everyone enjoyed themselves.

Sunday evening's gala dinner had entertainment by Brisbane based tribute band "Killer Queen". A highlight that evening was Lachie Smart's talk about his epic 2016 around the world record breaking flight. Without the use of auto queues, notes or any other prompts or references, Lachie kept the audience of about 150 people captivated for over an hour.





On Monday morning our conference was over. It had been a great experience and it was time for the flight home. Ayers Rock to Redcliffe in one day. A lot of flying, but doable. We preflighted the plane and were on our way. First stop was Birdsville. Lachie and Will put in a request for a Birdsville pie. Apparently they are to die for. So while I was refuelling they walked to the Birdsville bakery and brought back pies for lunch.

We probably over stayed our time in Birdsville as the day was moving on and we needed to get moving too. Our destination was YRED and I knew it would be a night arrival and what's more my first night landing in the Cirrus. It was good having Lachie with me to guide me with the approach. Never did this before in the Cirrus so I was open to all suggestions and advice. At 1825 local time we were on the ground at Redcliffe. What an experience we'd had!

This adventure certainly makes it tough for the organisers to come up with something as good for the next Cirrus Life Conference.





# the aviator store



Hangar 5 **Qantas Avenue Archerfield Airport 4108** Tel: 07 3272 9267 Open Mon-Fri 0830-1600 Open Saturday 0900-1200 info@theaviatorstore.com.au

Putting our customers first since 1999



Authorised dealers for Lightspeed Aviation, Bose and Sennheiser headsets and accessories





www.theaviatorstore.com.au

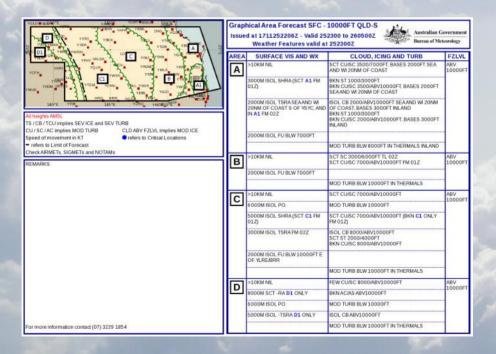
website with intergrated shopping cart credit card or direct bank payment



## **Graphical Area Forecasts**

The Bureau of Meteorology changed the format of Area Forecasts (ARFORs) from text based to graphical on 9 November 2017. The new format is known as a Graphical Area Forecast (GAF). The GAF combines graphical and textual information. The graphic is divided into areas that share common weather characteristics which are detailed in an associated table. Wind and temperature information is now presented in a separate Grid Point Wind and Temperature (GPWT) forecast product. It's a bit different from what we're all used to so take time to read up on it and learn how it works. It should help us all stay safe.

The NAIPS briefing page changed with the introduction of GAFs whereby the ARFORs were replaced by two new graphical products, GAF and GPWT Forecast. Information contained in the area briefing is now as follows: Area QNH, TAFs and METARs, any valid AIRMETs, any valid SIGMETs for the FIR, NOTAM information, GPWT Forecasts relevant to Briefing/QNH Area and GAF relevant to Briefing/QNH Area.





A user guide for the GAFs can be found at:

http://www.bom.gov.au/aviation/data/education/GAF-user-guide-V1 final 15SEPT2017.pdf

A list of Q&As about the new system can be found at:

http://www.bom.gov.au/aviation/data/education/gAF QandA.pdf

5 105°E 110°E 115°E	120°E /125°E	130°E	135°E 140	0°E 145°E	150°E 155°E	160%F
.333 012 +02 09 008 +03 06 010 +03 07 006				26 006 +03 26 010		001 +04
15 007 +11 15 007 +10 05 010 +10 08 011		013 +10 40, 612	+10 10 / 006 +10	15 006 +11  25 01:		003 +12
13 006 +17 18 005 +16 06 008 +16 08 011 17 004 +18 20 004 +18 08 008 +18 08 010						-006 +17 \ -007-+18 -
14 014 +21 16 017 +22 09 009 +23 11 007			+25 09 4008 +24	10 /013 725 13 01		011 +23
H14 014 +23 16 017 +24 09 009 +25 12 006			+27 09 6008 +26	10 013 27 13 01		011 +26 1
30 008 +05 31 009 +04 33 005 +04 36 005		006 <sup>A</sup> + 02 06 004	00 13 008 +01	14 / 010 +01 17 000		010 +03 10
		010 +09 07 016		14/021 +09 14 01		004 +10
25 010 +17 26 008 +17 04 005 +17 05 014 17 006 +20 23 006 +20 08 004 +20 05 011		007 +17 10 011 006 +21 08 009	+17 05 015 +17 +21 04 012 +21	12 009 +15 12 01 12 007 +20 12 018		007-+15 - 009 +18
14 016 +18 15 011 +18 16 007 +20 25 006						012: +23
314 016 +20 15 011 +20 16 007 +22 25 007		35 008	+29 07 003 +31	08 006 +27 13 0%		011, +24 8
25 015 +02 28 020 +03 29 027 +04 31 017			-01 36 007 -01	14 015 00 14 01		003, +02 v
19 005 +09 25 011 +10 28 016 +11 32 025 16 008 +14 18 007 +14 31 016 +46 31 023				11 008 +08 16 029 27 003 +16 12 020		003' +09 008: +13
15 013 +12 17 011 +17 29 009 +19 31 022						012 +16
15 016 +15 16 013 +15 19 010 +16	35 003 +27 01		11 009 +29	01 011 +29 09 009	9 +23 12 020 +20 09	012 +21
15 016 +17 16 013 +17 19 010 \+19		+-	11 009 +31	01 011 +31 09 007		013 +22 당
422 018 -02 26 023 -02 28 020 <del>0</del> 01 29 02:		009 - 12 25 010		26 022 -01 26 010		008 00 %
22 014 +06 23 020 +07 26 018 08 32 032 19 016 +11 22 015 +12 23 013 414 30 025		015 +08 29 010 018 +18 33 013	+06 21 005 +06 +15 31 003 +14			007 +06 009 +12
22 012 +10 20 014 +14 22 012 +16 30 011		023 +22 35 014	+19 03 005 +18	16   004 <b>+19</b>   33   015		012 +13
20 014 +14 18 015 +13 20 015 +15 27 013			+26 08 018 +24	15 010 +27 00 016	5 +26 10 010 )+20 10	014 +18
원20 015 +16 17 015 +15 20 016 +17		+-				014 +19 8
25 024 -03 23 018 -03 23 017 -03 30 026 23 021 +05 23 017 +04 23 015 +05 32 014		008 -01 30 003 007 +08 31 009	-01 25 005 -01 +07 24 006 +07	26 013 -02 23 012 27 012 +06 27 009		007 -03 s
21 017 +08 20 015 +09 21 010 +12 34 012						000 +02
21 015 +11 20 010 +10 17 013 +07 00 018	+18 05 041 +18 03	018 +16 31 013	+16 21 003 +17	21 011 +15 34 019	9 +15 35 /014 +14 06	012 +11
20 012 +10 19 010 +10 18 023 +12 16 010				19 010 +19 36 019		019 +16
20 012 +12 19 010 +12 18 024 +15 16 008	7			19 010 +21 00 010		019 +18 tg
25 040 -07 26 041 -07 28 023 -06 31 016 25 031 00 28 027 -02 28 013 00 34 016		007 -05 28 014 020 +02 30 011	-03 30 452 +05 31 012 +03	24 013 94 26 01 23 012 +04 27 00		003 -05 s
25 020 +01 28 020 +05 25 002 +06 00 011		022 +09 34 005	+09 24 004 +10	25 005 +09 31 01		008 +07
23 020 +03 26 015 +03 28 001 +05 04 008		012 +11 07 008	+04 13 005 +07	N24.005 +12434 002		011 +10
23 014 +08 27 012 +08 23 003 +09 12 018 24 013 +10 27 012 +10 23 004 +11 13 018		021 +10 07 011 019 +12 07 011		15 016 +13 16 007 15 014 +15	7 +16 01 028 +16 04 02 026 +18 05	017 +14 018 +15 A
24 013 +10 27 012 +10 23 004 +11 13 018	+11 00 030 +13 03	019 +12 07 011		23 019 -07 32 03		006 -04 6
GPWT FORECASTS (1000FT - I	L140) -	010 00 29 006				015 +02 M
AUS	-	012 +06 30 008	+05 28 004 +06	21 011 +07 N32 01	4 +06 35 027 +07 36	015 +07
PROVIDED BY AUSTRALIAN BUREAU OF	ISA	009 +02 32 005 006 +06 31 004	+02 25 007 +05 +06 21 006 +07	21 013 +05 27 01 20 014 +08 23 -01		020 +08 023 +13
METEOROLOGY	FL/FT hPa T	006 +08 31 004		20 014 +10		027 +14 &
VALID: 0000 UTC 27 Nov 2017	140 600 -13	049 -11 29 048		27 021 -08 34 020		034 -05 un
ISSUED: 0149 UTC 26 Nov 2017	10000 700 -05	032 -08 29 037	-04 29 033 -02	27 014 -01 33 01	3 -02 31 029 00 32	033 +02
DATA FORMAT: dd fff tTT	7000 800 +01	021 -02 27 014	-02 28 025 +04	27 015 +05 31 008		035 +06
dd: WIND DIR TENS OF DEG TRUE	5000 850 +05	019 +01 28 013 002 +05 28 023		28 014 +05 32 010 23 015 +05 14 004		037 +09 036 +14
ff: WIND SPEED IN KNOTS	2000 950 +11	003 +06 29 023		23 013 +07 14 008		043 +14
tTT: TEMP IN DEG CELSIUS	1000 975 +13					
FORECAST is valid for the centre of the box		130°E	135°E 140	0°E 145°E	150°E 155°E	160°E

## Feature Aero Club Wynyard Tasmania

#### **by Gary McArthur**

Wynyard is a small town (pop. 5,000) on the north-west coast of Tasmania, just 20km west of the regional city of Burnie. Situated at the mouth of the Inglis River, Wynyard was founded in the 1840's as a town to service the agriculture and timber industries. It remains an important hub for the surrounding farmland (dairy, beef, lamb, state/private forestry plantations, vegetable/ cereal/poppy crops, flower bulbs) as well as home to a Fonterra cheese factory, a small fishing port and a burgeoning light manufacturing industry.

The Wynyard Airport was established in 1930 on the flat plains immediately south of the township, to serve the Burnie-Wynyard region. It is one of the few airports in Australia that is just a 10-minute walk from the town centre. The airport has two sealed runways: 09/27 1650m (with PAL lighting) and 05/23 830m. The CTAF of 126.9MHz serves both Wynyard and Devonport Airports and Wynyard AWS weather data broadcasts on 133.35MHz.

Currently 51% owned by Burnie City Council, the airport is used by Regional Express (four S340 flights daily to/from Tullamarine), Sharp Airlines

(two Metroliner flights daily to/from King Island), Tasfast freight to/from Essendon) and regular RFDS Kingair air ambulance flights to Launceston/Hobart as required. In 2017, there were 60,000 passenger movements and 4,000 aircraft movements.

Wynyard Aero Club was founded in 1971 by a dedicated group of local flyers. It



is a small, active club with about 35 pilot members and about 50 social members. Although the club does not own an aircraft, the large club hangar houses 13 member-owned aircraft. RAA pilot training is provided by Skyflyte using a Foxbat A22LS aircraft. The club organises monthly circuit-based flying competitions, fly-aways to various parts of Tasmania, and the Circum-Tasmania Challenge as a precision navigational exercise around the Tasmanian coastline.

The climate is a cool but equable Mediterranean climate, with cool, wet winters and mild, dry summers. July temperatures average 4-13°C and January 11-22°C. Frosts can occur from March-December, while the highest maximum ever recorded is 35°C. Annual rainfall averages 1011mm, over 175 days per year. Prevailing winds are mainly westerly, with easterlies more common in the summer months. Winds from the SW quadrant are characterised by mechanical turbulence, due to the hilly terrain upwind from Wynyard.



Wynyard is blessed by its proximity to a variety of beautiful landscapes, making for some sensational flying. Within an hour's flying, pilots and their passengers can enjoy the magnificent coastal scenery, the islands of Western Bass Strait, the Tarkine temperate rainforests, the wild West Coast and the iconic mountains of central and western Tasmania, often snow-covered in winter. Less than two hour's flying puts the rest of Tasmania within reach: King Island, Flinders Island, the beautiful East Coast, the majestic Tasman Peninsula and Bruny Island, and the south-west wilderness.

The aero club will host the 2018 Circum-Tasmania Challenge from 10th -12th March and invites mainland flyers to cross the Strait to take part in this unique event. The Challenge will follow a picturesque 3-day coastal course starting and finishing at Wynyard (YWYY) with overnight stays at Queenstown (YQNS) and St Helens (YSTH). The anticlockwise route, comprising 6 half-day legs with lunch stops at Smithton on day 1, Bruny Island on day 2, and Lady Barron on Flinders Island on day 3, covers 1050nm of the sensational Tasmanian coastline. The club provides the OzRunways flight plan requiring competing aircraft to overfly numerous coastal features with actual flight paths recorded by supplied GPS trackers. Before departure on each leg, competitors will be required to estimate their exact flight time and then receive a score based on how close the actual arrival time is. Scores for navigational precision will be calculated according to how far the actual flight path was from each waypoint. Handsome trophies await the winning placegetters.

The entry fee is \$600 per aircraft, which includes bus transfers and transport of fuel to YQNS and YSTH. Competitors must cover their accom-



modation/meal costs at Wynyard, Queenstown and St Helens, fuel costs and landing fees. Due to aircraft parking restrictions, the field will be limited to 24 aircraft. Ballots will be held in late January 2018 to allocate the competing aircraft (10 from CTC2017, 12 new entries and 2 wildcards) and set the priority for emergency substitutes. For aircraft to be accepted, they must be capable of safe landing/takeoff at the YBYI 640m gravel runway and have a minimum safe endurance of 420nm).

Go to <a href="http://www.wynyardaeroclub.com.au/">http://www.wynyardaeroclub.com.au/</a> <a href="http://www.wyny

We look forward to welcoming mainland flyers at any time. Cross the Strait and visit Tasmania for some really enjoyable scenic flying. Sure, the weather conditions are often challenging, but in the right conditions, the views are breathtaking. Experience the beauty via the link below:

https://youtu.be/04FMJcWF2uM



# Instructor Intro Callum Taggart

Callum Taggart is a Grade 2 flying instructor. He has always been passionate about aviation. Whilst studying aviation at Griffith University he took on a mentoring role leading him towards a career of flight instructing. Callum enjoys instructing and he finds great satisfaction in getting the best out of his students. Callum started at Redcliffe as a member back in 2014, completing his instructor rating in 2015, before going on to help with instruction for the Hong Kong Flight Training Centre. He finds the best thing about Redcliffe is the almost constant crosswind and challenge it brings, along with the short distance to the training and scenic areas. Callum is committed to continual professional development. Having completed his Grade 2 Flight Instructor upgrade, he is now focussed on completing his ATPL theory subjects. Like many other instructors he has the long term goal of working for the airlines in his sight, but for now is enjoying the networking and adventure instructing within GA has to offer.

#### What are your Qualifications?

B Aviation, Grad Dip Flying Management (Griffith University), RA AUS Senior Instructor, CASA Grade 2 flight instructor, MEA IR all aids, Tailwheel endo (not instructing).

#### What hobbies do you have (apart from flying)?

I like film photography (have a hybrid darkroom at home), homebrewing (all grain craft beer), cooking and making stuff. I'll give everything a go. I changed my timing belt a while back (it was a pain in butt).

#### What's your history with the Club?

I started as member of RAC in 2014, did FIR with Brendan Power in 2015 then did casual work with the club. Did most of my hours for G2 up in Caloundra including RA AUS stuff. I have worked with a few operators around here including Air Queensland. Currently working towards Airlines so getting my ATPL subjects finished and renewing my MEA IR. Will do G1 if I get the hours. Would like to keep instructing like Brendan Power even after I make it into an airline. Dan says I'm one of the most chilled out people he has ever met. That's a good and a bad thing.





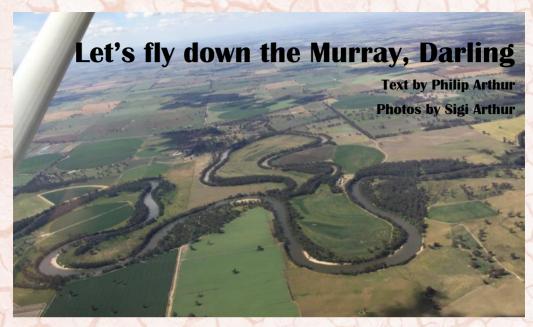
## Wings Dinner

Clockwise from above left: Club Life Member Ron Ennis addresses the guests; Warwick's Tiger Moth; award presentation time; recipients gather in front of Ron's Tiger Moth.

This year's Wings Dinner was held in the hangar again and was very successful. We had two beautifully presented vintage aircraft as the back drop to the evening. Ron Ennis and Warwick Woinarski kindly set up their Tiger Moth biplanes in the hangar. They proved to be a great draw card for discussion and the odd selfie. There were about 60 people present to enjoy the evening of award presentations, great food and drinks and into the late evening music and dancing. It was a time to celebrate all achievers during the year and to make special mention to the award winners this year who were presented with an award of excellence. Congratulations to everyone.







Australia's three iconic rivers, the Murray, the Darling and the Murrumbidgee drain around one seventh of the continent. The Murray-Darling river system from its source near the Queensland/NSW border to its mouth in South Australia is the third longest navigable river in the world, after the Amazon and the Nile. The water from these rivers has opened up thousands of square kilometres of otherwise inhospitable country to cultiva-

tion through irrigation systems that have been operating for well over 100 years. I've been fascinated by these rivers since first going on holiday to the Riverland in South Australia and north-western Victoria as a child. Earlier this year, on numerous trips from Brisbane to Adelaide, I noticed that the standard IFR route uses Mildura as a waypoint. As we passed over Mildura I'd look down from 30,000 ft to see the confluence of the Darling and the Murray at Wentworth and think how enjoyable it'd be to follow the Darling from its source to where it flows into the Murray then retrace the route of the Murray and Murrumbidgee upstream. The seed of an idea for a flying holiday that would put my recently acquired private instrument rating to good use was germinating.

We had known for some time that our daughter Sonja would be working in Mildura for a few months from August so that seemed a good reason for my wife Sigi and me to fly down the Darling to see her. I chose October as I reasoned the weather in SE Qld

and northern NSW should still be relatively stable while the weather down south should have warmed up a bit.

I booked ROC, the club's C182, for Monday 16th with a plan to fly across to Bourke and to stay somewhere on the banks of the Darling for one or two nights and then continue to Mildura, returning via Wagga.



Top: Murrumbidgee River west of Wagga

Bottom: Wentworth

However as the date of departure approached. Brisbane and SE Qld was hit by unseasonal heavy rain and strong easterly winds. My delight at having a 40 knot tail wind was tempered by the severe turbulence Sigmet that covered the whole of the south east corner of Queensland from Kingarov down to the border, centred over the Lockver Valley. This unfavourable weather was meant to clear by Monday but we ended up having to wait for 3 days.

Finally the winds abated so we could depart Redcliffe on the morning of Thursday October 19th. Due to the forecast weather patterns I reversed my original plan, deciding to travel clockwise rather than anticlockwise around NSW. Our first stop would be Mudgee, about 3 hours to the south on the west of the Great Dividing Range. There was plenty of cloud as we headed out of Redcliffe so it was a great opportunity to make the most of my instrument skills to make it through to clear air south of the border, ATC cleared us direct to Amberley at 6,000ft

and we climbed into cloud above the lowest safe altitude. After reaching 6,000ft we remained in cloud for about one hour

until we were almost at Stanthorpe. It was good IMC practice. After crossing the border into NSW it was nothing but blue skies with the occasional puffy cumulus cloud as we tracked via Inverell and Gunnedah and on to Mudgee. Perfect flying weather.

Mudgee is a pretty little town nestled within a ring of hills. It has a number of small wineries located within about 5km of the aerodrome. Very convenient for fly-in wine lovers. We stayed overnight at the Hangar House. It's an amazing property adjacent to the taxi way that was originally intended to be a flying school but is now a Bed & Breakfast with enough space in the purpose-built hangar to park ROC along with a Partenavia belonging to Alex, the owner. Alex told us that about 20% of his guests are fly-ins. He understands the problems of fly in guests who have no ground transport so kindly lent us his car so we could drive to a winery about 5 minutes away, where we tasted a few wines and shared a charcouterie platter. It was great to sit out on the verandah at Lowes enjoying the sun.



Wine tasting at Lowes

Sadly the good weather didn't last. A cold front went through overnight and Friday morning greeted us with cloud covering the tops of all the surrounding hills and steady drizzle that occasionally turned to rain. The forecast indicated it would ease by lunch time so we waited. And waited. Our plan to fly on to Wagga that day didn't look too promising and we thought we might be stuck in Mudgee for another night. Normally that wouldn't be so bad but Alex told us he had no rooms that night and that Mudgee was pretty much booked out for the weekend.





So I pre-flighted ROC, submitted another IFR flight notification, this time to Wagga Wagga via Temora, and waited for the weather to clear. After about another hour the rain stopped and the cloud lifted. I decided to take off and orbit above the aerodrome to lowest safe. Once above lowest safe we could track to Temora, climbing through the clouds. I checked with ATC that the flight plan was still valid then taxied out to the runway. After take off I made a couple of orbits over the aerodrome as we climbed and before we reached our lowest safe of 4700ft a gap in the clouds appeared in the direction of Temora so we headed off and soon were well above lowest safe. We continued to climb to 6000ft in and out of clouds. More practice at flying in IMC. Gradually the clouds started to thin out especially in the direction of Wagga so I amended the flight plan and, after advising ATC of my intention, tracked direct to Wagga, That's one of the good things about flying IFR. You can not only fly through clouds but can change your mind along the way and ATC help you get to where you want to go. You

just have to let them know where you want to go and they provide you with weather and traffic information.

Eventually we were flying over a layer of clouds and we could see the western edge of the frontal system in the distance. By the time we were abeam Temora it was blue sky and clear of clouds below us as well. We descended into Wagga, passing over the Murrumbidgee and followed a few other GA aircraft in.

After tying down the aircraft we wandered across the apron past about 20 REX training aircraft. Wagga is the headquarters of REX so they train their pilots and store their aircraft there. We were met by our friend Trudi who drove us into town by the Murrumbidgee to a park where they had various stalls set up selling local produce and nibbles and drinks and live music. It was very pleasant to be relaxing in the sun again after our gloomy morning at Mudgee.

Top: Clouds west of Mudgee

Bottom: Wagga Wagga



On Saturday morning we were up early. We wanted to fly with Trudi to Temora, about 30 minutes north, and to visit the aviation museum, before continuing our trip to Mildura in the afternoon. Trudi has started to learn to fly in Wagga and was keen to see what it's like to fly with a PPL rather than just doing circuits and drills. After a quick breakfast we took off for Temora around 10am and after a smooth 30 minute flight landed on RWY 18 and taxied to the parking area next to the museum.

The museum is a private one that specialises in military aircraft that are all restored and fully functional, including two full scale Spitfires. They have monthly flying events where the various warbirds are put through their paces. We didn't have a lot of time there but were able to see all the aircraft and also a display on Leonardo DaVinci's machines that was visiting at the time. It was a very professional setup with some really interesting hardware on display.

Soon after 12 we were taking off and heading back to Wagga. We landed, taxied to the AvGas bowser and filled the tanks ready for the trip to Mildura. We said bye to Trudi and taxied out, took off and climbed out to the west over the town.

From Wagga we tracked west, following the Murrumbidgee as it meandered its way past Nerandera, Hay and Balranald. The green pastures gave way to wheat fields and finally to irrigated vineyards as we approached Mildura. We landed, tied down the aircraft, and caught a taxi into town and enjoyed a refreshment at the Mildura Brewery, one of the establishments created by Stefano de Pieri, Mildura's own Heston Blumenthal. Sonja joined us for a late dinner after finishing her shift.





Temora Aviation Museum workshop; The Murrumbidgee west of Waqqa; Approaching Mildura

From top:



Sunday morning dawned disappointingly.

Mildura, a city famous for its blue skies, had a grey one. Overcast with cloud at about 2000ft.

We had intended to fly first thing to Mungo National Park about 30 minutes to the north but, given the weather, we decided to have a casual brunch while waiting for the clouds to clear. We dropped into Stefano's Café, another of the establishments that Stefano de Pieri created. By the time we'd finished brunch the clouds had burned off, the sun was out and there was the clear blue sky that Mildura is so famous for.

I prepared ROC for the short flight and then taxied out to RWY 18, backtracking most of its length as there's no separate taxi way. We took off to the south and turned to climb over the CBD and the river. After about 30 minutes the Mungo Lodge airstrips appeared in front of us. We continued on to the Walls of China, a line of sand dunes that curve about 30 km around the northern edge of the dry bed of Lake Mungo. After following the dunes from one end to the other we headed to Mungo Lodge and landed on one of the dirt strips. After a quick look around the lodge, a cup of coffee and a chat on the deck we prepared for our return to Mildura.

As we headed back to ROC we noticed a couple of emus strolling across one of the runways. This was a bit of a concern. Bird strikes are never good but an emu strike would be especially bad, even on the ground at low speed. So Sonja and Sigi kept a good lookout as I taxied to the active runway. I practised a soft field takeoff, flying just above emu height to pick up speed before climbing away.

About 10 miles north of Mildura we tracked west towards Wentworth so we could view the confluence of the Darling and the Murray from the air. It looked much better at 4,500 feet than at 35,000! We orbited over Wentworth where some local traffic was doing circuits and then tracked to Mildura.







From top: Murray River at Mildura; Mungo Lodge Airstrips; Walls of China

Monday was a non-flying day. I wanted to refuel ROC ready for our departure the next day, though, so drove out to the airport in the morning. The refuelling business had recently been taken over by a US company and they hadn't set up automated credit card facilities on the bowser yet so I had to call the supervisor to help me. He unlocked the bowser and as I refuelled chatted about how he recently had to refuel a plane for one of the customers because the pilot wasn't able to refuel it himself. And the reason? He was 92 years old and didn't feel safe on the ladder. He said the elderly gent was travelling around the state in his private plane with his wife who was about the same age. Impressive!

We drove over to Trentham Estate on the NSW side of the river for lunch. This is a winery we visited a couple of times in the distant past. It really impressed us then and did so again. They had a good selection of wines to taste and made a couple of platters for our lunch. The gardens looking over the river are great and the weather was perfect for a picnic.

On Tuesday it was time to depart Mildura. We were heading to Louth, a town of approximately 50 people on the left bank of the Darling River about 100km south west of Bourke. Just after 8am we drove out to the airport. When you're flying into an outback town I like to take the day's newspapers with me as the locals don't get them very often and appreciate them when they do. It worked in Lawn Hill last year and given that Louth really is "back of Bourke" it was likely that the newspapers would be a hit there too. So before departing we bought a couple, along with flat whites to provide our morning hit of caffeine.







Clockwise from left:

Vineyards north of Mildura; Murray River at Merbein; Darling River between Mildura and Menindee. After starting the engine and watching a QLink Dash 8 arrive from Melbourne we taxied out to runway 36 and took off to the north. Soon we were cruising at 6000ft while roughly following the course of the Darling River. We were definitely on our own out there. No other aircraft within cooee. Just us and ATC. There were a number of properties hugging the Darling along the way and a few airstrips associated with them and occasional mines but no sign of activity. Our first waypoint was the town of Menindee, about one hour from Mildura, on the shores of Menindee Lakes, Broken Hill's water supply.

From Menindee we tracked direct to Louth, just over an hour away and descended to 5000ft. ATC advised that there was another aircraft carrying out survey work for a new instrument approach at Wilcannia. The pilot was flying at altitudes of up to 5000ft and could potentially fly across our path. Closer to the capital cities ATC would keep us separated by referring to radar but there's no radar or ADSB coverage at 5000ft that far out. So ATC ensured that the other aircraft descended below 5000ft before we were too close to it. All done simply, smoothly and professionally. At times like that you have to love IFR.





Continuing along the Darling we passed over Tilpa, a one house town with a bridge over the river and a sealed runway. There seems to have been a project out west to install sealed runways in key locations to allow the Royal Flying Doctor to fly in with the larger aircraft they use these days.

Another 10 minutes and we started descending into Louth, known in some quarters for its annual races. Not quite as famous as Birdsville maybe but still very popular amongst the NSW outback population we're told. Back in Mudgee a friend of Alex had told us that she went to the races this year and had a great time.

We orbited over Louth at 2000ft and checked out the sealed strip from above. Cath, the owner of the local pub, Shindy's Inn, had told me on the phone that I didn't have to worry about kangaroos and emus on the strip as it was fully fenced, and so it was. A real bonus in such an out of the way place. We wouldn't have a repeat of our Mungo Lodge emu encounter. Once again some good infrastructure installed for the flying doctor.

Top: The Darling flowing out of Menindee Lakes

Left: Louth racetrack - town and airstrip in background



Louth Apron

Tackling a slight cross wind we landed smoothly and taxied to the tie down area. Following a quick call to Cath a 4WD arrived to take us the short drive to the pub where we'd booked a cabin for the night. Our cabin had a deck overlooking the Darling. The river flows through a deep tree lined channel between levee banks and you could see that the water level is much higher at times of flood. Originally we'd thought we could go for a swim in the river but after Cath told us she hadn't swum in it the 20 odd years she'd lived in Louth and wouldn't recommend it we decided to give it a miss. The temperature was only about 30C so we were quite happy to settle into the pub for a drink and lunch instead.

Louth is not big. It's really just a river crossing and road junction with the pub, a school, the race track, a cricket oval, a somewhat decrepit church, a post office that has been converted into a B&B and about 20 houses. And the bitumen only stretches to the edge of town. Then it's a 100km drive on gravel to Bourke. There were about a dozen people in the pub.

Locals in high vis vests, some grey nomads and a young guy doing a tour through NSW on his Yamaha trail bike.

Apart from the races Louth is famous for its cemetery so we wandered over to check it out. The main reason for its notoriety is the grave of Mary Mathews, the first wife of one of the early pioneers . At about 10 metres, the granite

memorial towers above all the surrounding gravestones. Mary died at age 22 after having 4 children. Thomas Matthews married three more times but 17 years after her death, and after being married to his second wife



for about 15 years, he had the memorial erected for the wife he still missed. The story goes that his second wife didn't mind too much!

Back at the pub we had a couple of beers with the locals. When they heard we'd flown in and I mentioned how good the airstrip was one complained about the deterioration of the service provided by the flying doctor.

"They used to fly in small planes that could land on any dirt strip on any property. Now with their King Airs and Pilatus's they need long sealed strips and so people have to drive from miles around to places like Louth. Not good!"

That was one angle we hadn't thought of.

Oh, and the newspapers were a great success!



Wednesday dawned with a clear blue sky. It was time to head home. We'd be following the Darling and its tributaries across northern NSW. Cath took us out to the airstrip and wished us "bon voyage". It was a short VFR hop to Bourke where we filled up with AvGas then headed off IFR to Lighting Ridge. I'd lodged a two stage flight notification with a guesstimated 90 minute stopover in Lightning Ridge. As we climbed to 7000ft we were identified by ATC who notified us that a Piper Chieftain was coming towards us a mile or so to our right descending into Bourke. We kept a lookout but didn't spot him.

We passed over some pretty desolate country on the way out of Bourke. Not much in the way of farming out that far. Officially the Darling begins about 50km east of Bourke at the confluence of the Culgoa and Barwon rivers. A large number of tributaries flow into these rivers further east with the Border Rivers around Stanthorpe and Inverell generally considered the headwaters of the Darling.

About an hour out of Bourke we descended into Lightning Ridge. Overflying the airstrip I noticed some workers with a truck parked next to the runway threshold. One of the guys called up on the radio.

"Hey mate are you planning to land here?"

"Yes sure am."

"Ok we'll get out of your way."

"Thanks."



After shutting down we wandered over to the terminal building and considered how we'd get to town. A pinup board had a hand written sign on it. "If you want a lift to town call the Outback Resort and they may help you out". So



called and explained that we wanted to get into town for some lunch.

"Oh we don't have any taxis in town love but our handyman can pick you up."

5 minutes later Barry the handyman appeared and drove us into town.

Lightning Ridge is an opal mining centre and has a largely itinerant population. A sign at the edge of town says: "Lightning Ridge – Population ???". There are thousands of claims and mullock heaps spread around the town and reaching out up to 50km according to Barry. The town has thermal baths and a few opal retailers and jewellers with some great designs for sale and a couple of nice cafes. Barry drove us to one of those. A light breeze blew through the shaded verandah as we tucked into our steak sandwiches. It was a perfect day. Apparently the tourist season was coming to an end though as the 40+ days would soon arrive. Barry returned at the agreed time and drove us back to the airport.

"Thanks for the lift Barry. How much do we owe you?"

"Oh I reckon twenty bucks would keep the boss happy."



Clockwise from above: Lightning Ridge Runway, The Darling at Bourke, Lightening Ridge

We returned to ROC and were soon cruising at 7000ft on track for Goondiwindi. The land gradually started to green up as we approached the border. Banks of puffy cumulus clouds appeared ahead of us with their bases just below 7000ft so we flew in and out of them like passing though waves of fog. It's great to fly into a cloud and pop out the other side and take in the new vista. Another plus of flying IFR. Over Goondiwindi we turned towards Brisbane and were soon passing over Wellcamp Airport on one side and Toowoomba on the other. Brisbane Centre passed us over to Amberley Approach who gave us a clearance into Redcliffe at 7000ft. We flew over Lake Wivenhoe, the upper reaches of the Brisbane River and Somerset Dam and were transferred to Brisbane Approach for our descent into Redcliffe. The sky was blue, visibility was for ever, it was a great homecoming.





We landed, emptied ROC of our belongings and dropped the keys off at the aero club. One of the instructors asked where we'd been. "Mildura,eh? You know that's where ROC comes from? It used to belong to a geologist who lived there. He chose the call sign." So there you go, we weren't the only ones who had a homecoming that week.

More Info:

www.hangarhouse.com.au

www.lowewine.com.au

www.trenthamestate.com.au

www.stefano.com.au

www.shindysinn.com.au

www.lightningridgeoutbackresort.com.au

Clockwise from below:

ROC feeling at home at Mungo Lodge; Brisbane River and Lake Somerset; Clouds over the Darling Downs







## One of the great ones - a book review

by Philip Arthur

I suppose like many people, the first time I boarded a 747 I was shocked by how large it was inside. Apparently Juan Trippe, the President of Pan Am, was similarly shocked when the cabin dimensions were first described to him in a meeting in his board room in New York in 1965. At the time Pan Am was the world's largest airline and was the company that would underwrite the 747 development. Trippe and his fellow directors were told the airliner interior would be as wide as their board room. The room

was twice as wide as any airliner that had ever flown. Picturing it as a passenger cabin boggled their minds.

This book is filled with many similar anecdotes. It's the type of book that anyone with a love of aviation, technology development, project management and/or human endeavour on a grand scale will struggle to put down. You can't buy it at your local book store but it is available on Amazon or at the souvenir shop adjacent to the Boeing Factory in Everett, north of Seattle. That's where I

found it. I'd just completed a tour of the plant hosted by a very knowledgeable retired Boeing engineer. He had a detailed answer to every question put to him about any of Boeing's aircraft developments over the past 40 years because he'd been there and witnessed it all. He clearly had a love of the 747 in particular. Although the first flight of the 787 Dreamliner had occurred one week before my visit, the 747 -8 development was a more significant event for him. He talked about a guy called Joe Sutter and how he was responsible for creation of the 747. I'd never heard of Joe Sutter but after the tour I bought this book and was astounded by his story of the 747 development.

Having grown up in Seattle, where he also studied aeronautical engineering, Joe initially planned to move to California to work for Douglas, the world's premier manufacturer of airliners before WW2. However the development of the Boeing Stratocruiser, a big propeller airliner that entered commercial service in 1949, kept him in Seattle. As a result, he was intimately involved in Boeing's subsequent successful developments of jetliners including the 707, the 727 and the 737 launched in 1958, 1964

and 1965 respectively.

The move into jetliner production had put Boeing in the big league alongside Douglas and Lockheed. In August 1965 all three companies received a request from Pan Am for a "really big jet". They wanted a double decker intercontinental aircraft that would carry at least 400 people. Douglas and Lockheed declined to be involved in such a project but Boeing agreed to develop it. However it would be a side line to the company's priority, development of a su-

personic transporter (SST). In the mid 1960s aviation strategists thought that supersonic was the way of the future. Airliners would fly at 2-3 times the speed of sound, delivering passengers to their destinations quicker and delivering higher revenue to the airlines. Boeing felt they had to compete with the British/French Concorde. An A-Team of engineers was appointed to develop the SST, code-named the "2707". Following the request from Pan Am, in August 1965 a small group of "B-Team" engineers was assembled under Joe Sutter to work on the "really big jet".



Juan Trippe had specifically ordered a double decker and was not a man to argue with, so when Joe's team determined that a double decker would present serious design challenges and that a single deck "wide body" aircraft would be more lucrative for the airlines they had to find a way to change the mind of the Pan Am president. His colleague Milt Heineman hit on a simple concept involving a 20 foot length of clothesline. He then had the honour of flying to New York to present the wide body concept to the board.

"You say you can get the full specified passenger load onto this single deck?" Trippe asked.

"Yes," Heinemann replied.

"Comfortably?"

"Yes, it's a very wide cabin." Milt looked around.
"In fact it's as wide as this room."

Milt pulled out the coiled length of clothesline from his pocket. "This cord represents the inside width of the 747 passenger cabin," he said, handing one end to the nearest Pan Am person. Instructing the man to hold it to the wall, Milt unwound the cord as he slowly backed the other way. When the far wall stopped him, he held out the end of the cord. There was a stunned silence.

This graphic demonstration of the 747's cabin width, using a piece of clothesline, piqued Trippe's interest. It gave Joe the chance to build the plane he felt the world needed and changed aviation for ever. The team challenged conventional paradigms time after time as they worked under enormous time pressures towards the final design concept for the really big jet. It was designed to be a freighter or passenger jet from the start. The idea of being able to load two full sized containers side by side through the nose of the aircraft led to the decision to raise the flight deck resulting in the bulge that is trademark of the 747. Triple redun-

dancy was built in to ensure safety and reduce concerns that it was too big to fly and to land.

Meanwhile, the SST project was abandoned. The fuel costs to propel a commercial jetliner at Mach 3 were just too high. The B-Team's project became the main game and their ranks swelled to number thousands over the course of the project.

On February 9, 1969, only three and a half years after the project commenced, and only 6 years after the first flight of a 727, the first 747, with Boeing serial number RA001, took to the skies. By this stage the B-Team was known in Boeing as "The Incredibles".

I saw Boeing's new jet as 75,000 drawings, 4.5 million parts, 136 miles of electrical wiring, 5 landing gear legs, 4 hydraulic systems and 10 million labour hours. In a few moments on an airfield 30 miles north of where I grew up dreaming of designing airplanes, we'd see whether all those pieces added up to a real flying machine."

A lot of aviation "experts" had been saying the 747 was too big for airline pilots to land safely. They asked how a pilot could judge the landing when the cockpit was three storeys off the ground. This concern was definitely on Joe's mind as RA001 turned from base leg to final approach.

Before my eyes, it descended to the runway with the stately majesty of an ocean liner. It flared gently and touched down very, very smoothly.

Joe breathed a sigh of relief. His dream was reality.



RA001 touches down after its first flight

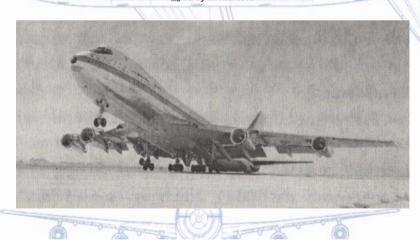
Months of flight testing followed the first flight. Some early jet transporters like the Comet had crashed shortly after take off when the pilot over rotated. Combined with insufficient thrust, such as during hot-weather operation or if an engine failed, excessively nose-high take offs could be deadly. As a result, the FAA certification required a demonstration of a premature take off attempt in which the pilot pulled the nose up so high that the aft end of the jet literally scraped the runway. Called minimum unstick or Vmu. this very dramatic departure had to be performed at maximum take off weight with one engine pulled back to idle to simulate an engine failure. Test pilot Jack Waddell conducted the 747 V<sub>mu</sub> tests with an oak plank fitted to the underside of the aft fuselage. The plank prevented the plane being damaged when its tail dragged on the concrete.

I watched as Waddell pulled power off an engine and immediately over rotated the 747 until that oak strip dragged on the runway, shooting back a trail of fire. Despite this extreme nose-high attitude, the 747 broke ground and flew successfully away on the thrust of its three remaining engines.

They were also required to perform hundreds of stalls.

Stall tests have a high "pucker factor" in very large airplanes, particularly the ones known as accelerated stalls. During the 747's flight-test program we performed many accelerated stalls in power-on turns to evaluate the jet's tendency to drop a wing and perhaps flip over. We were pleased to find out that the 747 displays very little tendency to fall off to either side during aerodynamic stalls.

V<sub>mu</sub> certification test



Charles Lindbergh was a consultant to Pan Am at the time and was brought in to review the plane as it was designed and built. Lindbergh attended one meeting when the 747 was new in service. While they were having a break he came up to Joe and Jack Waddell. Referring to the 747, he announced quietly.

"You know, this is one of the great ones."

His point was that it was the first aircraft ever to make air travel broadly available. It would bring intercontinental air travel to the masses and a revolution to the air freight business.

The book covers not only the 747 history but describes the path that Boeing had followed to arrive at the point from which such a large airliner could be developed. From Joe's childhood in Seattle observing the development of propeller machines that emerged in the 1920s though the second world war to the first successful passenger jet liners. It provides a real insight to the way in which aircraft developed from the days when happy go lucky barnstormers in their "magnificent flying machines" would thrill the public with their unpredictable antics to the highly predictable machines and systems that underpin the global aviation industry of today.

Joe Sutter continued to work after retirement from Boeing as a consultant until his death in August 2016 at the age of 95. One role he had was as a member of the presidential commission that investigated the Challenger space shuttle explosion in 1986. Joe was surprised at the somewhat cavalier approach of NASA to safety and ruffled a few feathers by recommending improvements to safety procedures that he considered basic from Boeing's perspective.



Joe Sutter

As we approach the fiftieth anniversary of the first flight of the 747 in 1969 I find it truly amazing that an airliner designed 5 decades ago is still considered a masterpiece of aviation and likely to remain in service for decades to come. It has stood the test of time incredibly well. No wonder that Joe's team was named "The Incredibles" and Charles Lindbergh believed the 747 was "one of the great ones".

747 "freighter" with space shuttle





The reason we fly.....

www.redcliffeaeroclub.com.au

07-3203 1777