

The President's Corner

Welcome to this edition of the Cessna 200 Series Association Newsletter. We have been having a cold and reasonably wet winter here in the South East of SA, which is good from a farming point of view but the last spring and autumn were very trying for livestock and grain producers. However, it was a very good vintage for the vignerons and wine makers in the area – we should see some very good 2012 wines coming onto the market.

The fly-in to Shute Harbour was great fun. We had magnificent weather; it is an amazing venue and was well hosted by Steve and Emily Baxter. There is a very good article about the weekend in this issue written by Pam McCabe.

The next fly-in is to Arkaroola, in the northern Flinders Ranges of SA. As I write this there are a few rooms left for Saturday and Sunday but you will have to be quick. It is going to be a very well attended get together. Arkaroola is truly outback Australia with magnificent scenery.

The Ridge Top tour is a "must do" especially if you have not been there before. Annie and I have done that tour twice before and we are looking forward to doing it again. As there was only limited accommodation available for the Friday night we have made Saturday the official arrival day.

Some members have secured accommodation on Friday, so there will be an informal get-together that evening and a relaxing day on Saturday. Arkaroola belongs to the Sprigg family, and Doug

Sprigg is a member of our Cessna 200 Series Association. He is a commercial pilot mainly flying a Cessna 207. He also has an Auster for fun. Make sure that you get your registration forms filled in and nominate the tours and activities that you wish to do.

The destination for the autumn fly-in for 2013 is Griffith. Patricia and Ralph have done the groundwork for us and it promises to be an interesting weekend. Kangaroo Island has been deferred so there are not two consecutive nature based fly-ins to SA. Dates will be advised when they are set.

The AGM will be held at Arkaroola on Monday 15th prior to departures. Please think about things that you would like to be discussed, including fly-in destinations and nominations for the Committee. Please email secretary@c200series.com.au with your ideas and items for the agenda.

I hope that members who have started the SIDS program for their aircraft have not experienced too much heartache. So far the work that has been done on my aircraft has gone smoothly, and I hope that continues with the remainder.

I also see that there is now a similar program for the Cessna 100 series. I consider that owners of older Cessna aircraft are fortunate that there is a manufacturer's recommendation for maintaining our aircraft for the long term. If other manufacturers do not come up with a similar programme, I can only assume that CASA will do it for them because of their concerns for ageing aircraft.

Annie and I recently spent a couple of enjoyable weeks as part of a tag-along flying trip to Coober Pedy, Kings Creek Station then west to Karijini National Park in WA, and on to Coral Bay, Monkey Mia, Geraldton, Wave Rock, Forrest and home. There was a mix of aircraft – my 210, a 182, a 172, 2 x RV7's, a Jabaru and a Pioneer 300. It was a great trip with a wonderful group of people, and the highlight for me was swimming with the whale sharks and looking at the coral at Coral Bay.

On a very different topic, Annie is learning to fly in Naracoorte. She is learning in a Sportstar and recently went solo – she was very pleased. I suppose that I will have to take the ignition key out of the 210 and lock it from now on.


I look forward to meeting up with you at Arkaroola.







Happy flying!
DAVID CRAWFORD
President



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Cheers, **NEIL RICHARDSON** – Editor

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THE AIRLIE BEACH/SHUTE HARBOUR EXPERIENCE



We have been hearing of the C200 Series club for some time from our friends Patricia Kenney & Ralph Aikin & last year, after the purchase of our Caravan, they suggested & invited us to join. We were not sure what to expect so entered with a very open mind.

We were very fortunate to have been invited to join John Tilley to fly from Adelaide to Shute Harbour in his Citation. We were committed to other obligations on the days prior and without this we would have been unable to attend. What an experience the flight was. We departed the main Adelaide West Beach Airport & in just under 3 hours landed at Shute Harbour Airport. The flight was at 40,000 feet, smooth and quick. We even had the luxury of a cup of coffee on the way!

On arrival at Shute Harbour we were met by very obliging ground crew who also ferried us into the Airlie Beach Hotel. The weather on arrival was perfect. Could not fault a thing and it stayed like that for the whole time we were there. Rain had been around the week before but for the duration of our time it was about 30 degrees max with night approx. 24. The breeze was very gentle & low humidity. It could not have been better. What a joy it was – clear blue skies, pleasant temperature & those wonderful blue seas.

We met up with Patricia and Ralph, John Tilley and his pilot Boyd Tiver for a chat and the obligatory reminisce. At 6.30 we met at the Fish d'Vine for the get together informal dinner. What a great way to meet everyone. There were about 21 members gathered. It was

all delicious "finger food" with everything from fish to oyster shots to meat balls etc etc. It just kept coming and being a "stand up" situation allowed everyone to mix & catch up while we 'new blood' were welcomed and instantly at ease. The area was compact for the numbers which was perfect as everyone had to speak & bump into everyone. We were introduced to Cam Russell's humour which continued throughout the weekend. Made for a great atmosphere to start.

Next morning saw everyone gathered by 9 a.m. Some went out to the airfield to Steve & Emily Baxter's home for a meeting. Garth Bartlett gave a comprehensive talk with an overview of the SIDs (Supplemental Inspection Documents) and the CPCP's (Corrosion Prevention & Control Programs) programmes & upgrades available. Everyone received an information folder and Garth kept the interest with photos etc and a good understanding of the issues.

Those not at the airfield spent a relaxing morning strolling along the foreshore at the local Saturday market. A few purchases were made. Atmosphere was friendly. Weather fantastic again. At 11.45 the ones not at the airfield were collected by bus & taken to join the rest of the group. On the way Andy Murray produced some great sunglasses purchased at the market. They were round and painted with the Australian flag with fine chains to go over the ears. Belle not to be outdone had some fantastic pink heart sunglasses with little sparkles around the edges. Not only

that she also had the matching pink earrings to complete the look. Both caused laughter & were photographed on several members. Both were bought at the market but only Andy & Belle had been astute enough to notice them.



us delivered us to the Shute Harbour airfield which is green, immaculate & beautiful. Steve & Emily's home is part of the Airpark. Most interesting design with the hanger in the middle and hanger area fully tiled. Living area & bedrooms upstairs all look down into the hanger (for viewing, admiring & checking on plane I imagine).

A brief meeting was conducted by David Crawford (President) which outlined finances etc. A discussion took place as to future venues for fly ins. It was suggested that Arkaroola, which is the next venue & booked, to be followed by Kangaroo Island was perhaps two places that were of similar ilk. A suggestion of Orange and Temora (instead of KI at this stage) was made. This would be interesting and being central, accessible for everyone. Patricia & Ralph are going to gather more info on the idea.

A delicious lunch of satays & wonderful salads was served. Lunch was a friendly chatty time and being right on the edge of the strip we were able to watch the various aircraft take off & land. The caravan on floats starred the most. Interesting time. Our bus collected us all for the return to Airlie Beach where we had relaxing time doing our own thing.

That night dinner was held in the Capers Restaurant. Dinner menu was superb, great choices (not looking forward to the scales on our return home). Jeff Ruddle who is the owner & operator of the Shute Harbour Airstrip and Airpark was our interesting Guest Speaker. He first conceived the idea of the Airpark 26 years ago. There are 600 Airparks in USA but very few in Australia. The key to a good one is the destination and Shute Harbour with nearby Airlie Beach is perfect. The original airstrip was built in 1961 by TAA and is older than Proserpine. Jeff bought the Whitsunday Airport in 2001 which comprises of 60 acres that have been divided into 57 blocks with 26 commercial blocks. It took him 3 years & 3 million to get approval. He dealt with 9 government departments. 110 people were involved in the building at a cost of 21 million. It all had to be drained for the wet season but was completed on time & on budget.

The area has been beautifully landscaped with plants they propagated themselves. There are currently a few blocks for sale. An Air Show was held 2 years ago which attracted 7,000 people with another planned for next May. It is a gated community so security is high. At present there is a house and hangar which is part of the Airpark for sale. It includes an above ground pool and is valued at 1.25m. Currently there are about 20 tenants and approx 100 movements a day. There are seaplanes, sky diving, helicopters etc etc. Runway lights have not been installed so nil night flights which makes it pleasant for the Airpark residents. It is a wonderful setting.

Jeff was asked about his other interest which is Sugar cane. He briefly told us he has 3 sugar cane farms which he harvests in June. Currently sugar is bringing 28cents per pound which is better than in past years.

David, the president, gave thanks to Jeff for this interesting insight into his involvement. He presented a cheque from C200 for \$200 as a donation to the Macrossan & Amiet Foundation of which Jeff is a director. This Foundation was started 100 years ago and is aimed at helping disabled & disadvantaged children. Each year they distribute about \$100,000

Next morning saw an 8am departure (thanks to Annie Haynes this had been changed from 7am.) for the harbour. Most of the attendees joined together for the day on a "Fantasea" cruise plus a couple who were friends of Annie & David. Again perfect weather. Very little wind & clear skies. The sailing was smooth. Our first stop was Hamilton Island. Some people hired buggies to traverse the area. Some went shopping & others went to the coffee shop where they stayed for the 2 hrs. This group grew during the time spent there.

Andy & Belle were more adventurous and went out on a catamaran. Hamilton Island had some wonderful views and range of various accommodations. The sea & sky were vivid blue. Sailed again & lunch on board (with a few liquid refreshments). Next stop was Whitehaven Beach. We were taken to shore where we set up small sun shelters.

We braved the stingers to go swimming (had been offered cover ups but all too vain to wear them). Luckily no stingers were sighted. A few engaged in games such as frizz bee, beach volley ball etc. Lovely time relaxing. Water was beautiful although a few timid ones spent the time on the beach near the esky's rather than brave the water. Back at Airlie Beach at 5.45 as planned.

We decided to revisit the d'Vine Restaurant as a group of approx. 16. Some had made other arrangements which also turned out to be d'Vine Restaurant. A couple of people chose Crab from the menu. They were huge and it seemed to take forever to pick the meat out which they assured us was fantastic. A meal that lasts a long time.

Said our goodbye's as next day those flying themselves departed at different times. Some were extending onto a holiday, others going on for business & generally all going in different directions.

This was our first C200 series gathering. It was exceptionally friendly and we felt accepted and part of the group from the very beginning.

A big thank you to all. It was fun. A special thank you to David as President, and an extra special thank you to Annie who helped organise the various functions and kept check on us all. It all seemed to flow so smoothly.

A relaxing and informative few days in good company.



MORE PHOTOS ON P.4>>

THE AIRLIE BEACH/SHUTE HARBOUR EXPERIENCE



ARKAROOLA FLY-IN

Sat 13th - Mon 15th October 2012



15th August 2012

Hi all

The fly in to Arkaroola is fast approaching and I am delighted to present you with the long awaited registration form.

For us to get a group discount we need to pay 'as one'. Your registration at Arkaroola is for dinner, bed and breakfast which I am sure you will agree is at a very reasonable rate.

You will see there are several options as some have managed to book in for Friday as well.

Please also note there are two different accommodation options – Mawson and Callitris. Please pay the amount appropriate to your booking.

Please add payment for the tours you wish to do. In order for the staff at Arkaroola to do the best for us they need as much notice as we can give them so please book your accommodation if you haven't already - 08 8648 4848 - and send your registrations and payment as soon as possible.

The website link is <http://arkaroola.com.au> and the aerodrome information for both Arkaroola and Balcanoona is <http://arkaroola.com.au/aerodrome.php>. The Arkaroola strip is 650 metres long. Please read all information and consult relevant Airservices information and the country airstrips guide.

I believe this will be an excellent weekend and judging by the bookings already made at Arkaroola many of you are keen to explore all this wonderful place has to offer.

As a number of you have indicated, you would like to do the Ridge Top Tour and the Observatory. I can highly recommend both. In light of this there will be no both tech talk or dinner speaker.

Please don't hesitate to contact me direct if you have any questions on the registration form.
Email: webmaster@c200series.com.au or Mobile: 0418 853 635.

I look forward to catching up at Arkaroola

Cheers

Annie



annie haynes
webmaster and fly in coordinator
web: www.c200series.com.au
mobile: 0418 853 635



Arkaroola Airstrip (YARK)

Details:

Lat: 30° 24' 5"S
Lon: 139° 20' 5"E
Length: 650 metres
Width: 60 metres
Altitude: 800 ft
Surface: Shale
Windssock: At intersection
Cross Strip Unserviceable
Taxiways: Shale
Comms: Call Arkaroola
on 126.4 MHz



Circle Village twice at safe altitude
and call on 126.4 to arrange vehicular
transfer.
Transfer fee: \$55.00

AVGAS available by prior arrangement

Local Location: 6nm 270° from Woolfana Homestead
6nm South Arkaroola Village
Arkaroola Tourist Resort Village clearly marked 'Arkaroola Village'
in 2 metre letters on roof of most easterly building.
(Not to be confused with homestead 2nm to SE marked 'Arkaroola')



Balcanoona Airstrip (YBLC)

Details:

Lat: 30° 31' 5"S
Lon: 139° 21'E
Length: 1200 metres
Width: 23 metres
Altitude: 900 ft
Surface: Bitumen
Windssock: NW side - central
Taxiway: Bitumen
Comms: Call Arkaroola
on 126.4 MHz



Circle village twice at safe altitude
and call on 126.4 to arrange vehicular
transfer.
Transfer fee: \$132.00

AVGAS not available

Local Location: 1.5nm east of Balcanoona Homestead
12nm south of Arkaroola Village
Arkaroola Tourist Resort Village clearly marked 'Arkaroola Village'
in 2 metre letters on roof of most easterly building.
(Not to be confused with homestead 2nm to SE marked 'Arkaroola')

Also see the
website at
www.arkaroola.com.au
for more details
on the
strip/s etc

ARKARoola REGISTRATION FORM

Name:	
Postal address:	
Phone:	Mobile:
Email address:	

Attendees	
Pilot:	Passenger 3:
Passenger 1:	Passenger 4:
Passenger 2:	Passenger 5:
Aircraft type	Aircraft registration

ETA Date: F12 th or S13 th Time: 1100, 1300, 1500	Arkaroala booked? <input type="checkbox"/> Mawson <input type="checkbox"/> Callitris <input type="checkbox"/>
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Registration numbers (Please indicate the number of people from your party attending each event and which day)			
Activity	Number of people	Price	Total
Registration includes DBB accommodation for Friday, Saturday, Sunday.		\$400pp twin share Mawson \$350pp twin share Callitris	
Registration includes DBB accommodation for Saturday and Sunday		\$275pp twin share Mawson \$240pp twin share Callitris	
Monday packed lunch		Included in registration	
Ridge Top Tour 4hrs Sat/Sun		\$120 pp	
Weetbix and Wallabies - 2hrs am. Sat/Sun		\$80 pp	
Bats and Bubbly - 3hrs pm Sat/Sun		\$80 pp	
Written in the rocks – 4hrs am Sat/Sun		\$110 pp	
Observatory - pm Fri/Sat/Sun		\$40 pp	

Payment by EFT (BSB 633 000Acc No 135455806) <input type="checkbox"/> or Payment by cheque (Cessna 200 Series Association) <input type="checkbox"/> Please email copy of EFT receipt to webmaster@c200series.com.au or name and call sign on back of cheque	TOTAL	
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Special requests – dietary requirements etc
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Indemnity I, the undersigned, do hereby indemnify the Cessna 200 Series Association and the members, officers and agents thereof associated with arranging functions and associated activities from all liability of any kind arising out of any function or activity arranged by or on behalf of any such person or body, or travel to and from same, and as agents for the persons or body named above, whose express permission I declare that I have obtained to do so. I do hereby indemnify each person or body arranging or associated with such functions, activity or travel from all liability. Signature: _____ Date: _____ Name: _____
Refund Policy: Refunds can not be guaranteed for late cancellations

Please send completed forms to: Email: webmaster@c200series.com.au Mail: Fly- in coordinator C200 Series Association PO Box 297 Lucindale SA 5272
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South Australia's First Legally Protected Wilderness Sanctuary

Located 600km north of Adelaide and 130km east of Leigh Creek, and in the ruggedly spectacular northern Flinders Ranges, this 610sq km multi award-winning Wilderness Sanctuary, operated by the Sprigg family, contains some of Australia's most spectacular mountain views and offers numerous Advanced Ecotourism accredited guided tours.

Arkaroola features rugged mountains, towering granite peaks, magnificent gorges and mysterious waterholes, the home to over 160 species of birds and the shy and endangered Yellow-footed Rock-wallaby.

Arkaroola is a mecca for bushwalkers and four wheel drivers. The spectacular Advanced Ecotourism accredited rugged 4WD Ridgetop Tour is world famous; journey to the depths of ancient seabeds and across razor-back ridges and peaks of the Flinders Ranges most rugged mountains to the magnificent climax at Sillers Lookout.

Being the first Flinders Ranges tourist organisation to achieve the coveted

Advanced Ecotourism accreditation, and with now a total of eleven such products available for you to enjoy, Arkaroola is truly unique.

Our third successive S.A. Tourism Award win for Ecotourism (November 2007), saw Arkaroola awarded the coveted Hall of Fame, and is undoubtedly South Australia's premier ecotourism destination.

Ridgetop Tour

Arkaroola's signature 4WD tour - an unforgettable encounter with the timeless terrain and unique natural beauty of the Arkaroola Wilderness Sanctuary.

Travelling in a specially constructed open-top 4WD vehicle, Ridgetop passengers are taken on a guided tour of some of the most spectacularly rugged country on earth. Trained tour guides share their knowledge of Arkaroola's 1600-million year geological history as they navigate the steep slopes and hair raising ascents of the famous Ridgetop Track.

Inspiring images of red granite mountains and golden spinifex covered hillsides give way to a breath-taking view across the Freeling Heights, Lake Frome and the desert beyond.

Take in the 360-degree panorama as you enjoy morning or afternoon tea at Sillers Lookout - a lofty pinnacle at the end of the Track.

The 4.5 hour Ridgetop Tour showcases the magic of the Northern Flinders Ranges and is a must see experience at Arkaroola and is one of our much-prized Advanced Ecotourism accredited tours.

Arkaroola's Astronomical Observatories:

Arkaroola is very fortunate indeed to have three fully equipped astronomical observatories, each located well above the Village area, to ensure your maximum night-skies viewing experience

2013 Autumn Fly-in Griffith NSW

The 2013 Autumn fly-in will be to Griffith in NSW. Ralph and Trisha have done a great job on the research for this and the dates will be set at the AGM. Be there to get it first hand.

AND FROM THE GRIFFITH COUNCIL WEBSITE:

Griffiththe miracle of irrigation and the spirit of its people

Immerse yourself in the sights and sounds of this bustling cosmopolitan regional city. World class wines, a rich culinary tradition, stunning scenery and a lifestyle like no other.

Explore the unique blend of cultures that make Griffith the vibrant and passionate place it is today. Follow the winery trail and delight in the tantalising flavours of our region's world class wines.

Taste the world on a plate and experience 'la dolce vita' - the good life. Then feed your soul with a little theatre, art or music. Experience contemporary country life in the heart of Australia's food bowl.

Welcome to Griffith where you can explore, embrace and enjoy everything our unique region and our friendly people have to offer.



2012 AGM

A reminder that the 2012 AGM is to be held at Arkaroola. Anyone interested in being on the committee is urged to speak to President David and/or anyone else on the committee.

There is nothing arduous about these positions and it is great to have a mix of minds and ideas for our fly ins.

Don't be shy!

WE NEED INPUT FROM MEMBERS

Do you have ideas for
merchandise you would like to
see us look into.

Do you have ideas for future
fly-ins or events? Your
committee is listening!

My Aircraft: SIDS – John Lillyston



Earlier this year, the ADAHRS on my EFIS suffered a partial failure. A nice lady told me “Attitood Failure, Attitood Failure”. Time in service: 260 hours, MTBF quoted: 14,000 hours! Where do they get these figures?

As there was no exchange unit available, my ADAHRS went back to the States for repair. I figured that would take a minimum of three weeks, so I spoke to Alistair, the Chief Engineer at Turbo Aero Maintenance about SIDs. He forwarded the document so I downloaded and printed it. All 200+ pages!

It's well worth the read. For those who haven't, here's my layman's interpretation. There are two basic concerns, cracks and corrosion. By and large, cracks are a no-no. With corrosion, a surprising amount of metal can go and still have the part serviceable after treatment.

There are six categories and all aircraft will fit into three of them. The three that yours are in dictates the frequency of inspections.

So, there are: Environment: high corrosion or low, Utilisation: high or low, Airframe hours 10,000+ or less.

TFE is high corrosion (applies to anywhere in Victoria), low utilisation and high time. Note, this does not tell you which inspections apply, they all do, just the frequency of each. And they all have to be done at the start.

As the date for compliance is the end of next year, we decided to leave the wings until the 2013 Annual.

Starting with the tail, the fin and rudder came off, followed by the horizontal stabiliser and elevators. This revealed a lot of corrosion that could not have been found any other way. Although widespread, most of it was easily removed. There was damage to the rudder, so a new skin was ordered along with some fairly minor bits and pieces. The attach brackets were removed and although the corrosion wasn't too bad, it was decided to replace them. Then corrosion was noticed under two plates on the rear spar of the horizontal stab. After removal, the centre of the spar was found to have several misaligned holes. They were caused by someone attempting to mount the plates upside down and because the holes didn't line up, they drilled new ones! Then the error must have been spotted, because they finished up the right way round, but in the meantime the rivets holding the plates to the spar weren't doing their job properly.

Alistair was naturally appalled and the spar was condemned. Now, the rear spar is an item consisting of four components laminated together, so it's not cheap. It is also very important for the strength of the horizontal stab.



The order having been increased to include the spar, attention was shifted to other areas.

The cables, pulleys, internal corrosion on doors, floors and inner side of the skins etc were all checked.

Three or four pulleys were seized and had to be replaced, but the cables were ok. They've been replaced since I've owned TFE.

Next the tube assembly that connects the pilot's and co-pilot's rudder pedals was removed for inspection. This is not done at the annual. Shocking corrosion! It could never have been seen in situ. What caused it is a mystery, but Warren the welder who made the replacement, said he'd seen similar on other model Cessnas.

Then it was on to the undercarriage. Good news there! Virtually perfect except for some brake hoses that had the outer protective covering abraded, they were replaced. Nevertheless the nose gear was removed, completely disassembled and stripped to bare metal for crack checks. Mostly visual, although one link was required to be eddy current tested. No cracks, so reassembled with fresh paint and new bolts, the nose gear including the doors are like new.

Meanwhile, back at the sheet metal shop..... Greggles the sheety had put the horizontal stab. in the jig and discovered that as well as being drilled like Swiss cheese, the spar wasn't properly aligned. The four hinges – two for each elevator – were a few millimeters out. This would have had the effect of distorting the horizontal stabiliser and causing it to flex whenever the elevators moved. Greggles assured me it wasn't dangerous, just not right.

It had been re-skinned some time ago, Greggles could tell because he found the Cessna stickers still attached. Despite a requirement to remove them as they could retain moisture a cause corrosion.

After removing the spar, he offered up the new one. Turns out the person who drilled the old one did it freehand! The holes were all over the place, including some very close to the edge of the metal. The rule when drilling rivet holes





is, the hole must be two hole diameters from the edge. These holes were 1/8th inch, therefore there needed to be 1/4 inch of metal. Some holes left barely 1/16th! So, three out of the four skins have to be replaced.

Now that the spar was out of the way, Greggles set about inspecting the ribs. Those clowns had botched the holes in the ribs to the extent they needed washers to prevent the rivets pulling through. Furthermore, some rivets hadn't pulled up tight at all and you could see daylight between the skin and the rib. Seven of the fourteen ribs need replacing.

The last step is to check the elevators. This hasn't been started yet. Alistair's gone as far as he can before the plane is re-assembled for rigging, Jacko the conehead can't fit the ADAHRS because we need to do compass swings, so there's a wait at least until the end of April.....

Now, it's fair to say I'm dismayed at the time and money this is costing, but, I'm glad it's getting done. To me, it shows Cessna got it right. I'm well aware the TFE's had a hard life, but just because an aircraft has low time doesn't guarantee no-one's done a bodgy repair at some stage before you bought it. And as I've discovered, they can remain hidden for years. And just because it's low time, it is still old, so corrosion could well be an issue and that too can be hidden from routine inspections.

To be continued....



Well It is now August. The SIDs work is finally finished. The problems caused by the re-skinning ten years ago were worse than I thought when I wrote the first installment. For instance, when the new ribs were delivered, they were pre-drilled. The associated skins were also pre-drilled. Trouble is the holes didn't line up. This hadn't worried the previous people, they'd just aligned it as best they could and drilled new holes where they saw fit! Greggles isn't like that, (thank God!), so those skins went back and he made new ones. Can you imagine working 'inside out', drilling from the rib holes to the skin? Take a look sometime at the complexity of the stab. and the elevators. They're an order of magnitude more elaborate than a 100 series. Then, he made another discovery. The trailing edges of the elevators were supposed to be 16 thou. thick, mine were 32 thou. This had caused the balance to require 'adjusting'. Which meant an extra half kilo of lead in each balance horn. As you might imagine, with each new malpractice which was uncovered, I was getting angrier about the dangerous incompetence uncovered and very uneasy about the 750+ hours I'd flown TFE since purchase. Naturally I'll never



really know, but what might have happened if I'd blasted into every cumulus I encountered, rather the requesting 'x miles left or right of track'? Personally, I think a situation might have arisen where the structure was stressed to a level requiring, say, 95% strength only to find it had less than that - possibly a good deal less. Would ATSB have made the connection? I doubt it. Just another case of pilot error - he flew into too much turbulence!

I'm currently filling out a Defect Report. The faulty work was done in July 2002, so I don't know if those responsible will be sanctioned in any way. I certainly hope so!

27 weeks after my last flight, I went for a brief check flight with Tony Smith my IFR instructor. She flies straight and level hands off, steep turns - no problem - finally a couple of stalls, gear down, full flaps about 40 knots. At 44knots Tony showed me how it was still quite controllable, though why you'd want to is beyond me!

Summary: SIDs was well worth it. TFE has got decades of life left thanks to the inspection regime. But I'm a lot sadder and wiser (and poorer) regarding repairs. I don't know if a pre-purchase could reasonably have been expected to find the defects - Garth can answer that one - but SIDs did, eventually!

Look forward to seeing you at the fly-ins!

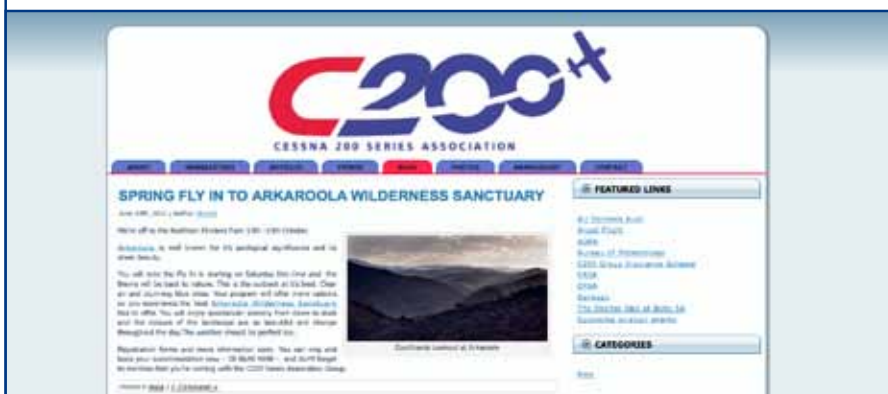
John Lillyston



Cessna 200 Series Website Updated

We have a page on the website for members photos.

Send some photos to webmaster@c200series.com.au or post a blog!



We also now have
a Facebook Page under
"Cessna 200 Series Association"



Like

...so be sure to like us
and post some photos.

OUTBACK & BACK By Suzy Tilley



A driving holiday is sooooo... different from a "flyin". The landscape from "ground level" dusty dirt roads, is quite a different experience, but one truly recommended.. Let me share a few stories from our July Outback trip.

Tilley and I chose a different mode of travel, we joined friends on a 5 car cavalcade setting off on July 26th heading north along the Medindee Lakes travelling through station country. First stop "Willow Point Station". An experience to be relished. My fascination with needing toilet stops, is no different I discovered from flying. And monsieur Tilley showed as much regard for my problem on land as he does in the air. Our hosts at "Willow Point Station" were Margie and Malcolm Whyte. Margie has always been an outback girl, growing up in the Mallee region before travelling further north to set up house with Malcom. Accommodation very basic but made

up for by the energy of these two longterm station owners, Margie being an amazing and well known outback artist and author of children's books. Time for me too, to bring out my watercolours and paint sitting on the banks of the Darling River.

After 3 fabulous days spent with the Whytes and visiting other stations in close vicinity wining and dining with owners, we moved on to our next "Shearing Quarter Stopover".

The purpose of this 10 day trip was to see for ourselves how the northern floods had affected the drought ravished country. We were amazed at the lush undergrowth and the wild life all around us kangaroos by the hundreds, emu's, and hundreds of birdlife. Sadly the droughts have left little stock in some areas but there were goats in their thousands and this has become the main financial income for many of the homesteads in the outback during the drought years.

Next destination was Nelia Gaari Station via Wilcannia. Here we managed to leave dusty roads for water logged tracks. Slipping and sliding our way along the edge of the Darling. We struck gold however, accommodation was in the Overseer's Cottage (complete luxury compared to the run down shearers quarters from our previous venue), right on the banks of the Darling.

Next stop Trilby Station near Louth. Low and behold "Up market" to say the least the shearers who get to be on this property must think they are at the Hilton. Keep going onwards we went through some really dry areas, but no doubt about those Queensland property owners (this is pretty controversial being a South Aussie relying heavily on Murray water) they know how to bleed the Darling Dry. Huge Corporate Cotton Farms, miles and miles of fields, all watered by huge canals connected to the Darling. Also to our



amazement miles of vines growing miles away from water and pumping stations bringing it to them.

Heading further north we arrived at Kilcowera Station our Hosts Greg and Toni Sherwin are true eco caring station owners. This was a very remote property on the Thargomindah – Hungerford Road in South west Queensland. They have their own airstrip near the station and we were pleased to see that 3 planes had taken the opportunity to “flyin” for a sleepover. Food for thought members! These guys had spent a weekend flying from one station to another. Facilities were basic but good, and you get to water the lawns by turning on the sprinkler ½ hour prior to showering to ensure that the water is

pumped up out of the bore.

Now how innovative and eco friendly is that!! We had the opportunity at this station to getting up close and friendly with large herds of cattle as well as viewing amazing numbers of bird life on the huge Lake Wyara.

Our last stop was a long long journey of 9 hours across to Pincally Station. Hosted by the delightful Gale family, who by the way feature on the “Austar ads currently running on TV”.

Zanna (Rasheed) Gale has turned this old property into an amazing oasis in the middle of no where. Here we dined with the owners in their beautiful dining room, enjoying true outback hospitality which included sharing our table with the Governess, and two fabulous backpackers from Ireland Heath and Orla

who had been working on the property for 3 months.

I have tried to shorten my article which only covers such a small portion of our 3,650 km journey. But can only say how lucky we are that we have such a wonderful vast country that truly inspires one to travel through be it in the air, or on land.

There is heaps to do once you reach the stations. Yabbying, tinny on the river, bird watching, walks and drives around each station.

If you want to check out more about the stations we visited google Outback beds and click on the stations I mentioned. Take time out from the air someday and come see our country at “ground level” you will love it!



TECHNICAL TALK: ENGINE HEALTH

Working on engines installed in aircraft for most of my life, and now being the owner of a Piston Engine Overhaul shop, the discussion of engines and engine problems is often a controversial one. There is always discussion about how to operate the engine properly: baby it or work it hard; rich of peak or lean of peak; change the oil often or not; overhaul at TBO or run 'on condition'...

All of these are interesting points but I find the most interesting subject often not on the agenda and that is the subject of determining an engine's health. If fact, how do we determine an engine's health? We certainly have to consider this most carefully because most of the items I've mentioned above depend on a healthy engine.

Mike Busch, one of the engine 'gurus' from the US, and father of the 'Savvy Aviator' seminars/webinars, wrote a series of articles entitled: The Six Tools that Tell Engine Health. In this article, I will discuss the fourth and fifth of these tools: Compression Tests and Borescope Inspection.

Tool 4: Compression Tests



Compression testing has been around since internal combustion engines were invented. In the aviation maintenance industry, compression tests are done on 100-hourly inspections, annual inspections and whenever it is suspected that the engine is not making rated power.

It's a simple process whereby air is pumped into the cylinder through a spark plug hole while the piston is at top dead centre (TDC). (There must be a helper hold the propeller to stop it moving during this process.) In this configuration, both the exhaust and inlet valves are closed, so in a perfect world no air should escape. The tool used to determine the leak rate (because it is very unlikely that the cylinder has absolutely no leaks) is called a cylinder differential gauge, which has an air supply and two gauges. The compressed air is pumped into the cylinder at 80psi (adjusted by a regulator on the unit) and the second gauge reads the pressure in the cylinder. The result is expressed as a ratio over 80psi. For example, if the cylinder was 80 over 80 it would be

perfect with no leakage. If it were 60 over 80, it indicates a significant leak in the cylinder.

Why do we carry out these checks? It is because the manufacturers suggest that leaking cylinders won't produce full power on their engines. As most of us are C210 owners and have Continental engines in their aircraft, I'll mainly discuss Continental's attitudes towards compression checks.

A couple of years ago, I was doing an advanced mechanic's course with Continental Motors at Bankstown and the instructor told us that one of the major costs of owning a Continental Engine was having engineers remove cylinders unnecessarily during periodic inspections. While he didn't downplay the importance of the compression check, he did tell us some interesting stories.

One story I liked was when Continental purposely assembled an engine without piston rings and ran it in their test cell in Mobile Alabama, only to find out that then engine produced full power without any trouble at all. He did, however, say that it used a lot of oil!

Before I continue, I will let you know that there are three places a cylinder can leak during the compression stroke:

- the inlet valve - during the compression check you can hear the air escaping if you put your ear near the air filter;
- the exhaust valve – you can hear it leaking if you put your ear near the exhaust outlet;
- the piston rings - leaks past the piston rings can be heard if you open the oil filler cap, remove the dipstick or listen at the outlet of the engine breather.

Because Continental was continually being bombarded by unhappy customers, due to engineers taking their cylinders off on a regular basis and generating large costs, Continental decided to investigate a different procedure to establish the serviceability of a cylinder. This came in the form of their Service Bulletin M84-15, which introduced the use of a calibrated orifice to determine the maximum leakage allowed.

The calibrated orifice (which all maintenance shops should have – please make sure), installed in the outlet line of the compression tester, will produce a leak rate of a particular amount. This may be as low as 40 psi. Continental's Service Bulletin suggests that providing the exhaust valve is not leaking, the leak rate produced by the calibrated orifice can be the determining factor for cylinder serviceability. In other words, the ratio of 40 over 80 is quite acceptable (providing the calibrated orifice indicates as low as 40psi) for the cylinder to continue in service provided that it is not the exhaust valve that is leaking.

The exhaust valve is a different kettle of fish. If during the compression tests, the exhaust valve is found leaking slightly it can continue in service, but it can only get worse. Continental suggests that a significant leak at the exhaust valve is reason to remove the cylinder for repair. If you have continuing problems with exhaust valve leaks – please come and have a chat with me – it is usually related to pilot technique in engine operation.

Tool 5: Borescope Inspection

Another tool that is required by Continental's SB M84-15 is a borescope. The inspection of the cylinder using a borescope inserted



through the spark plug hole shows the engineer the condition of the cylinder internally, which includes cylinder walls as well as the inlet and exhaust valves. The SB also has colour photos to help the engineer determine whether your cylinder looks like the photos, and if not why

not. Leaking valves can be seen very clearly and good decisions can be made to save you money.

In summary, please do not let your engineers take your cylinders off because they think they are unserviceable due to small internal leaks. Make sure that they carry out the requirements of SB M84-15, which includes the use of the calibrated orifice and the borescope.

A borescope can be purchased for less than \$1,000 and I don't mean one of the \$49.95 units from automotive warehouses because they won't do the job. I personally use a Lennox borescope. I paid \$900 for it and it works a treat. Don't let your engineers waste your money by unrequired removal of your cylinders.

Next time we'll be talking about Tool 6 – Trend Monitoring and Engine Analysis.

Garth Bartlett

LAME, Pilot and Cessna Owner

Acknowledgement: Thank you to Mike Busch for his contribution to this article.



GROUP INSURANCE

Insurance Offer – Benefit from a Group Scheme

Now we will examine the function of the underwriter in today's aviation insurance market...

The objective of the underwriter is to produce a premium proportionate with the risk in order to at the end of the day produce a profit. The underwriter will receive premium from the many and pay claims to the unfortunate. Underwriters take the risk of catastrophe/disaster events in addition to attrition losses and must be allowed to build up funds to meet such events.

With regard to the factors that are considered when looking at an individual aviation risk a prudent underwriter would give consideration to:

- (a) The previous accident record and claims experience are of paramount importance as regards both operator and aircraft type.
- (b) With smaller operators the experience of the pilots in terms of total flying hours and hours on the make and model of the aircraft being insured is a major factor. In recent times underwriters have also become increasingly aware of the important role which approved safety training courses play in moulding the attitudes of pilots.
- (d) In the case of commercial operators the basic factor comes down to good, indifferent or bad management. Experience has also shown that in some instances new types of aircraft will produce unexpected losses, either during manufacture test or, if not then, during the early period of use.

- (d) Aircraft both fixed and rotary are put to many and varied uses and the aviation underwriter must be conversant with the special hazards of, for instance:
 1. Clubs and flying training
 2. Aerial Crop Dusting
 3. Powerline patrols, fish spotting
 4. Carriage of External Loads
 5. Aerial surveying and photography
 6. Aerial Mustering
 7. Night Wombat mustering
- (e) Utilisation – the number of hours that are anticipated the aircraft will fly per year.
- (f) Geographical Location. Local conditions must be taken into account from the point of view of available repair facilities and cost of repairs, susceptibility to natural disasters (eg. Wind and/or hail storms), terrain,

weather and availability of navigation aids.

I trust that what I have written about will give you some insight into the somewhat mysterious "science" of underwriting. In conclusion it should be reiterated that premium levels must be adequate to compensate underwriters for claims, costs, expenses and funding for catastrophes. Unless underwriters get a fair return for their investments they cannot be expected to provide the service to the client. How can we manage without insurance and remember no one can provide the service better than a healthy professional insurance sector.

**Your VP
Ralph Aikin
0438 416068**



Specialist Aviation Insurance Brokers

We have moved

Please could you amend your records to the following:

Ph: 07 5438 3838

Fax: 07 5438 0001

Street Address: Level 1, 20 Innovation Parkway, Birtinya, Q, 4575

Postal Address: PO Box 545, Buddina Qld 4575

www.bmgaviation.com.au

Welcome to New Members...

New members since the last newsletter issue....

Peter Zipf
– Cooroy Qld

Simon Heuzenroeder
– Nichols Point Vic

Andrew Hogarth
– Norwood SA

Richard Heath
– Teewah Qld

Ken Parker
– Warrnambool

... and welcome back

Marjorie Pagani
– Tolga Qld

Our many thanks to John Weston of Westonprint, Kiama for the final layout of this Newsletter and its superb reproduction.

Interesting Aviation Videos



We hope to be able to include some links to interesting and relevant videos in the newsletter.

Feel free to send any links for future newsletter issues.

**The Cessna 200 Series Association does not support any unsafe or illegal flying procedures.*



WHAT'S HOT!

- Our girls in their swimmers at Whitehaven Beach
- Annie's been solo and is working toward GFPT
- iPad's and OzRunways

WHAT'S NOT!

- Temperature anywhere in SA!! Bring on the Spring sunshine.
- Not enough hours in a day.
- Annie's golf as of today

As you can see, this column is for fun and nonsense. Please contribute at will!!! Yours, from

Suzzy T

Cessna 200 Series Merchandise



There is still available a selection of Caps, Chambray Shirts and Polos for sale with the Clubs insignia. These generally will be available at our fly-ins or to order contact Neil or Robyn Shorrock - shorair@bigpond.com

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Fellow aviating members....

We are keen to welcome new members to the C200 Series association, so if you know of anyone who may be interested please share the benefits of our club.

Our club is a mix of interesting people from all walks of life throughout Australia whose pride, joy and in many cases, toy is a Cessna aircraft. However it is important to note that membership is also open to owners of aircraft other than Cessnas. There is no prejudice in the C200 Club!

Membership fees are \$100.00/yr for individuals and the committee recently introduced a joint membership @ \$150.00/yr per couple or two members from one family. Memberships are due 31st October each year in line with the renewal date for our Group Insurance Scheme.

There are some significant benefits to being a member of the C200 Series Association and we encourage you to let your aviation friends know about them.

Opportunities available include:

- The Group Insurance Scheme is arguably the best value Insurance you will get and your policy will not be compromised if others have claims.
- Discounts available with Profuels , from 3-15 cents/litre depending on your location

Social benefits are:

- Networking opportunities with like-minded people.
- Friendships with people you may not otherwise meet.
- The opportunity to discuss technical issues with professionals in the field.
- Two fly-ins each year to interesting places in Australia in Autumn and Spring.
- Interesting guest speakers at fly-ins.
- An informative Newsletter prior to each fly-in.
- The potential to promote your business via the website www.c200series.com.au
- Merchandise including– chambray shirts, polos and caps with the C200 stylish logo.

We look forward to hearing from you and your friends!

David Crawford

President

E: president@c200series.com.au

Mob: 0408 800 778

Neil Shorrock

Secretary

E: secretary@c200series.com.au

Mob: 0428 752 055

Membership Application / Renewal

Name:	1. 2.
Address: (Residential)	
Address: (Postal)	
Home Ph:	()
Business Ph:	()
Mobile No:	
Fax No:	()
Email Address:	
Aircraft Registration	VH-
Aircraft Type: (Model, Mods etc.)	
Signatures	1. 2.

Annual Subscription: ☐ \$100 Single Membership
☐ \$150 Joint Membership (per couple or 2 people same family).
☐ Pro rata available in the year of joining. Please ask secretary.

NB: Membership is for the period 31st October to 31st October the following year in line with C200 Association Group Insurance Scheme.

- ☐ Direct Deposit: BSB 633 000 A/C 135455806 (preferred) Description - Name and call sign please!
☐ Cheque: (Payable to C200 Series Association)
☐ Cash

Completed forms should be mailed to: **24 Goolabah Dr., Tallebudgera 4228**

or Email: shorair@bigpond.com or secretary@c200series.com.au

ADMIN ONLY:

Date Received		Receipt No.		Member No.	
Chq Drawer		Updated Membership List		Updated Contacts	