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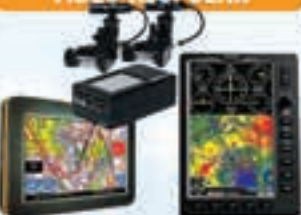
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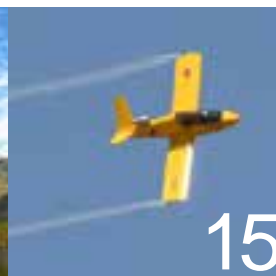




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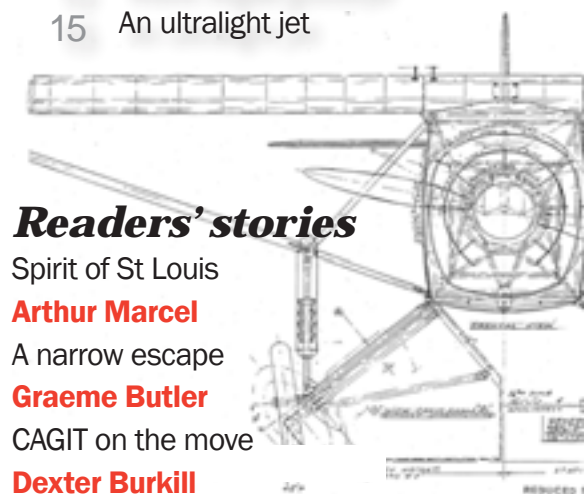
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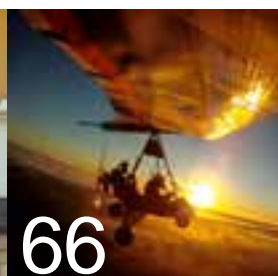
What's going wrong with Australian sport aviation that we can't do better than a tiny, overcrowded and landlocked country in central Europe?



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Sport Pilot Magazine is an official publication of Recreational Aviation Australia Inc. and is published 11 times a year by Stampils Publishing.

STAMPILS PUBLISHING

All Enquiries Ph: 1300 838 416

7/1 Grandview St, East Ballina NSW 2478

EDITOR

Brian Bigg editor@sportpilot.net.au

ADVERTISING SALES admin@stampils.com.au

FINDING YOUR NEAREST TRAINING FACILITY, SCHOOL OR CLUB ops@raa.asn.au

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HEAD OFFICE

PO Box 1265 Fyshwick

ACT 2609 Australia

Unit 3, 1 Pirie Street

Fyshwick ACT 2609

Email: admin@raa.asn.au

Web: www.raa.asn.au

ACT. AUSTRALIA

ARBN 070 931 645

ABN 40 070 931 645

international: +61 2 6280 4700

national: (02) 6280 4700

fax: +61 2 6280 4775

General Manager

Mark Clayton

(02) 6280 4700

gm@raa.asn.au

Administration Coordinator

Maxine Picker (02) 6280 4700

admin@raa.asn.au

Operations Manager

Zane Tully 0428 282 870

ops@raa.asn.au

Assistant

Operations Manager

Jill Bailey 0400 280 087

ops@raa.asn.au

Technical Manager

Wayne Mathews 0417 942 977

tech@raa.asn.au

Assistant Technical Manager

Dean Tompkins 0428 868 418

techa@raa.asn.au

RA-AUS BOARD ELECTED STATE REPRESENTATIVES

TASMANIA

Eugene Reid

0428 824 700

tas1@raa.asn.au

SOUTH AUSTRALIA

Ed Herring

0408 787 018

sa1@raa.asn.au

NEW SOUTH WALES

Paul Middleton

(Secretary)

0428 625 818

nsw1@raa.asn.au

NORTH QUEENSLAND

Election results pending

SOUTH QUEENSLAND

John McKeown 0438 728 311

sql1@raa.asn.au

Mike Smith 0418 735 785

sql@raa.asn.au

Dave Caban

0413 603 783

nsw3@raa.asn.au

VICTORIA

Rod Birrell (President)

(03) 9744 1305 vic1@raa.asn.au

NORTHERN TERRITORY

Cliff McCann

0418 897 036

nt@raa.asn.au

Jim Tatlock (Treasurer)

0403 228 986 vic@raa.asn.au

WESTERN AUSTRALIA

Ed Smith (Member elect)

0409 962 050 wa@raa.asn.au

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President's Report

RODNEY BIRRELL

A long term future?

The Recreational Pilot's Licence will be introduced by CASA later this year. Since it was first announced, the RPL has evolved into being a full licence which will directly compete with the RA-Aus Recreational Pilot's Certificate. The major difference between the qualifications will be that the RPL will have more privileges.

Depending on the funding model to be used, it is possible we will have CASA, a government funded organisation and our safety regulator, directly competing with RA-Aus for pilots and aircraft registrations.

We have received strong, welcomed, support for all Recreational Aviation Administration Organisations (RAAOs) from CASA as the safety regulator. Unfortunately, even with this support, RA-Aus would not survive if the administration of the RPL was, with aircraft safety administration, managed and paid for by CASA, while the Recreational Pilot's Certificate and its aircraft administration, was paid for by RA-Aus.

RA-Aus has been prepared to accept the parallel path principle of competing with other organisations for pilots and aircraft. We already have this situation with the Hang Gliding Federation of Australia, where the management and flying of powered weight shift aircraft is controlled by both RAAO's.

The RPL is different: We operate RA-Aus as a user pays organisation as do other RAAO's. About 95% of our funding comes from our members. The modest funding we receive from CASA, while appreciated, does not in any way cover our safety and reporting obligations.

The Civil Aviation Safety Authority does not operate its Operations and Airworthiness Departments on a direct user pays system. Without a change to either our funding from CASA or the introduction of user pays fees for the RPL, our organisation's long term existence will be threatened. Why would a new pilot obtain a Recreational Pilots Certificate if they could obtain a RPL, with more privileges, free of licence renewal fees? Why pay to renew the registration of your brand new light sport aircraft with RA-Aus every year when you could pay no renewal fee for a VH CASA registered LSA?

So what do we do? RA-Aus will be asking CASA to support us with funding to complete our safety obligations in the same way as CASA will fund the RPL (and aircraft flown under an RPL). We need a true level playing field with the same privileges. As an alternative, CASA should introduce a real user pays fee structure for RPL pilots and registered aircraft. It costs about \$2,000,000 a year to run RA-Aus, so the first option would seem to be the most reasonable.

With indexed, task valued, participation based funding from CASA, we could remove all aircraft renewal fees and all pilot certificate renewal fees - forever!

I am starting the member discussion here. For too long we have ignored the RPL. Based on early briefings, the concept was intended as a replacement to the GA General Flying Proficiency Test (GFPT). In my view, and that of many others, the new RPL has evolved into a de facto replacement for the Private Pilot's Licence (PPL).

Could RA-Aus meet CASA's requirements and manage the RPL? Yes, of course. We are well suited to put in place whatever is required to undertake this task. If RA-Aus became involved in the RPL, would it ensure the long term survival of RA-Aus? Unfortunately, no. If GA schools take on the RPL, with CASA funding the administration costs for GA schools only, our long term future and viability would be limited.

I hope and trust the new funding model for the RPL/PC has yet to be finalised. If this is the case, our concerns can be allayed and our problems resolved. We will, of course, continue talking with CASA to obtain a solution - our future depends on it. We will let you know how this matter proceeds. Further updates will be posted on the member's section on the RA-Aus website when available. 🇦🇺



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6-7 September

Birdsville races

The Ballina Aero Club will operate the Birdsville Airport during the races weekend. Hundreds of aviators are expected to gather for an authentic outback experience. Pilots who fly in can become members of the exclusive Royal Birdsville Aero Club and support the RFDS. 2013 winner's trophies include most aircraft attending from one club or organisation and longest distance flown. For more information (02) 6686 2620 or 0418 663 666.

7 September

Wings over Warwick

Queensland Recreational Aircraft Association, incorporating Warwick Aero Club (www.qraa.info) invites all pilots and enthusiasts to the annual fly-in at Warwick Aerodrome (YWCK). The strip is 1600m all bitumen. No landing fees (www.warwickaerodrome.com). Includes a display of classic cars, motorcycles and model aircraft. Food and drink available from 8am. For more information Kelvin Hutchinson 0407 733 836, Phil Goyne 0417 761 584 or Graham Hawthorne 0427 377 603.

28-29 September

Westfly

White Gum Farm has again offered its facilities for this fantastic event. There will be exhibitors, new aircraft and the chance to catch up with all your flying buddies. Check out location/maps on the website. BYO swag. Food, refreshments, stalls and live entertainment. For more information www.westfly.com.au.



12-15 September

Ausfly

Narromine will again play host to a gathering of all things aviation. All types of aircraft on display and in the air. For more information <http://www.ausfly.com.au>



14-17 September

95.10 Weekend

Grafton South Aero Club. Do you have fond memories of the grand old days of 95.10? Do you enjoy the smell of two-stroke in your nostrils and the feel of the wind through your hair? The Grafton South Aero Club will put on a weekend of fabulous fabric flying fun. For more information, Col Redding 0428 664 985 or colinhredding@gmail.com.



WINGS OF LIFE

5-6 October

Wings of Life Fly-In Drive-In

Ron Field will open up the private Archer Falls airfield again for the event which sets out to raise \$10,000 for the Royal Flying Doctor Service Queensland section and continue to inspire Youth in Aviation through Wings of Life. Arrivals from Friday 4 and departures as late as Monday 7. Camping underwing available. Caravans and tents also welcome. For more information www.archerfalls.com.au.

CALENDAR OF EVENTS

18-20

October

Broken Hill Aero Club Fly-In

The club's 75th anniversary celebration will be held in conjunction with the RFDS 85th anniversary.

The aero club will provide aviators from all over Australia a unique outback cultural experience with a very distinct country aviation theme.

Hangar get-together Friday 18. Saturday 19 static displays of modern and vintage aircraft, joyrides in an Extra 300, display of vintage Drover, one of the first aircraft used by the Australian Aerial Medical Service. All funds to the Royal Flying Doctor Service. For more information, Bruce Nevill 0428 349 143 or bneville6@bigpond.com.

26-27

October

Jacaranda Muster

The Grafton Aero Club invites aviation enthusiasts to join them for the annual celebration of the region's famous Jacaranda Festival, a world renowned event held since 1935. This is an informal fly-in with preferential treatment provided to pilots prepared to take one of the Jacaranda Queen contestants for a flight over the city on Sunday morning. No landing fees. Ample parking/tie down, under wing camping and the great facilities at the club house.

For more information, Kevin Wilson (02) 6649 1853 or Col Redding 0428 664 985. Email graftonaeroclub@gmail.com

>>>Jacaranda contestants at the airfield



18-

20

October

Tamworth Festival of Flight

Tamworth Aero Club is one of Australia's oldest. The site was used for training 600 pilots during WW2. The Festival is about celebrating that heritage and creating a future.

For more information, Adele Mazoudier (02) 6761 5104, 0419 978 011 or tamworthaero@sctelco.net.au.

2nd

Sat each Month Burnett Flyers Brekky

The flyers at historic Angelfield, south west of Murgon, QLD, put on a large hearty breakfast at their rustic Ops centre. Free underwing camping and friendly country atmosphere around the campfire. The Burnett region is worth seeing from the air. For more information, www.burnettflyers.org, email burnettflyers@yahoo.com.au or Ralph or Deb on (07) 4168 6248.

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October

Hastings District Flying Club Open Day Port Macquarie

Static displays including club history and activities. Trial flights available in our Foxbat, Eurofox and CTLS aircraft. Food and drink available. For more information Rod Davison 0419 632 477 or roddi194@yahoo.com.au Club website www.hdfc.com.au

2-3

November



Back to Holbrook Fly-in and JabFest

Holbrook Ultralight Club will again host its ultralight fly-in and Jabiru Festival at Holbrook Airpark. Forums Saturday afternoon, three course dinner among the aircraft Saturday night and hot breakfast Sunday morning. Trophies awarded at the dinner. Underwing camping and transport to and from town for accommodation and fuel will be available. For more information, www.holbrookultralightclub.asn.au or Bryan Gabriel (02) 6036 2601.

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LETTERS TO THE EDITOR



Here comes the Judge

I feel I must respond to Ken Edwards' letter ('Ken bowled over' *Sport Pilot* June 2013). I was a judge at NATFLY and also wrote the article 'Here comes the Judge' (*Sport Pilot* March 2013).

This was my third year as a judge and, after the second year, I volunteered to try and make the judging fairer for all, easier on our legs and to tighten up the details required for RA-Aus staff to enter into the system which picks the winners of each category.

Some people have called me the chief judge, but I prefer to think of myself as one of three judges. Since taking on the role, I have had many accolades, but equally as much criticism. I am sorry you felt the way you did Ken, but that was not the intention of the rule changes. I have also upset a member of my own flying club and I have to accept that. It was my suggestion to preclude past winners from entering the following year. A regular comment received, was that "I won't bother entering the judging as so-and-so always wins it".

It is a double-edged sword and you are guaranteed to upset somebody. I do, however, take on board your idea of inviting past winners as guests of honour. This suggestion I will take forward to 2014. There also seemed, to me, to be a perception among many of our members that their aircraft are not good enough for judging. Many members are unaware of the award categories. To that end, my article was designed to appear just before NATFLY, so it was fresh in their minds.

To the best of my knowledge, it was the first time anyone had attempted to explain the NATFLY judging system and one situation has become very apparent to me. I have developed a healthy respect and empathy for Dave Caban. Not only did Dave organise many of the Narromine NATFLYs, on a lot of occasions he completed the judging on his own.

I take on board your suggestions for category changes, but we have to be a little careful. Most of the trophies commemorate the passing of some of our innovators and officials. We have to respect the surviving family members of these people. With changes over time, some of the original categories of trophies now differ from that of the current aircraft attending NATFLY. NATFLY is a great event and what you get out of it is directly proportional to your input. So far, I have had judges from New South Wales, Victoria and South Australia but never any from Queensland. Maybe you could rustle up someone to assist in 2014 - preferably someone with aircraft building experience, an open mind about aircraft types and tastes and a good sense of humour.

Dave King

Petition to remove ASIC card

Michael Young's letter 'The cost of ASIC' (*Sport Pilot* June 2013) reminded us of the ongoing bugbear that is the ASIC card. It's a financial and bureaucratic burden on all pilots in Australia. And because I believe it's better to light a candle than curse the darkness, I decided to use the power of the Internet to help us remove this troublesome burden on aviation. I started an online petition on change.org and sent the link to the Aus-soaring (glider pilots) email list.

The petition has been extremely well received, getting 100 signatures in its first day. A week later it had 700 signatures. You can find the link at <http://www.change.org/en-AU/petitions/australian-federal-government-remove-asic-cards-entirely> or google change.org ASIC. I urge all RA-Aus members to visit the web page, sign the petition and to share the link via email, Facebook, bulletin boards or whatever other means you have available.

As I'm both an RA-Aus and glider pilot, I informed both the RA-Aus and GFA executive of the petition and asked them if they would investigate having photos on pilot cards as an alternative to ASIC cards. To its credit, RA-Aus was quick to respond and has already done some preliminary investigation of the equipment and processes required to do this. I'm yet to hear back from the GFA.

I expect the petition to get a few thousand more signatures in the next month. I'm yet to meet any pilot who wouldn't gladly remove the ASIC card given a choice. As we're in a lead-up to an election, politicians are more accessible than usual and hopefully more likely to take notice of a petition that represents the views of the majority of sports pilots. Once the petition has accumulated thousands of signatures, I'll be contacting MPs for a response. I have already informed local media of the petition but at this stage they don't seem interested. I'm expecting that to change as the number of signatures increases significantly.

Please do all you can to promote the petition to fellow pilots and the media. I can be contacted at greg@gregwilson.id.au.

Greg Wilson

A standard to aim for

Just a short letter of support of the article by Juris Greste called 'Foxbat wishlist' (*Sport Pilot* July 2013).

I, too, marvel at some of the things we are expected to accept in so called modern recreational aircraft. I appreciate the problems he mentions with dipping the fuel tanks.

I know seeing is believing, but in my lifetime of owning cars, I have never had a fuel gauge fail. So why not use one and dip, if possible, to double check? Unless there has been an inflight fuel leak, a quick mental calculation, erring on the side of safety, should verify if the fuel gauge is working. Also, let's not use a series of LED lights which need your full attention to understand. Juris also mentions throttle location. This is the main control of the aircraft and should be fitted on the panel, easy to reach and pretty much standardised for safety.

Again the toggle switch issue. I am aware of one pilot who had to make a forced landing and had to pay for an engine replacement because the electronic water pump switch was accidentally switched off in flight. Fuel cocks are another issue.



Again, why not keep it simple with a no fuss 'On and Off' switch which anyone understands. The list could go on and on, and I am not talking about any specific make or model. If you look closely, there are so many little things, which could be improved from door latches and access to throttle and flap controls and everything in between, at little or no cost on most aircraft. It is a whole different world, but unfortunately, I believe it is lagging years behind in modern technology.

Owen Becker

Ed - More reaction to Juris' story elsewhere in this edition.

Fast costs money

Over the years this complaint keeps surfacing in RA-Aus and as a general comment among flyers.

"Plastic fantastics are OK but we want cheaper, more affordable, aircraft."

As I see it, the problem is not that we don't have plenty of choice in factory aircraft at an affordable price, as there are plenty of aircraft - plastic, metal and fabric - ready built or comprehensive easy-to-build factory kits available, priced as little as \$15,000.

The problem is not the availability of affordable aircraft - it's the unrealistic expectations of flyers, note: I am not calling them pilots because all I am hearing is they want to go fast. Well, fast costs money, but if you want to be a good pilot, what you need is experience.

Experience and fun flying including, cross-country flights can be flown in low cost slower aircraft, even the slowest aircraft is faster than your car most of the time (allowing for head winds). After all a lot of flyers only fly around their local patch to take their friends for a ride and have fun. The cheap part of flying your own aircraft is that it costs half the price of hiring one, so you fly more and get more experience.

Then, if you need more speed, having saved some money becoming a better pilot, you can hire a faster aircraft for the occasional quick trip to places far away or sell your slower aircraft and buy a faster one if you can afford it.

Low cost factory built aircraft and kits are well designed, safe and reliable - well proven over time, parts, service and information is available.

The message is first become a better pilot, then go fast. By then, you will probably realise fast is not that important compared to being a real aviator, which is the next step after pilot.

This will take about 20 years. Standing on the ground looking up won't help - lots of flying will. Good Luck

Jim Crocker

A frustrated islander

I have been an avid fan of ultralight aircraft for years and finally earned my wings ten years ago. I retired to glorious King Island in the middle of Bass Strait from Queensland in 2004 with my trusty Savannah to get me back to western Queensland to visit the grandies.

Imagine my frustration when I discovered that, through no fault of mine my aircraft was unregistered! Even though I had submitted all the photos, paper work and cheque two weeks before the due date, I was told I couldn't fly. There was no grace period as with vehicle rego, and it could be two months before it would be registered!

Since then my wife and I have had to do four commercial flights that I would normally have done in my plane. To South Australia and to western Queensland. Both were to remote places, so were expensive. Total cost? Around \$1,800. I assume I can claim this out of future registrations?

Jim Benn

If you aren't sure - Don't

Bravo Jim and Phil for your letters to the editor (*Sport Pilot* June 2013) about pilots flying into cloud. Minimums are put there for a reason. If you're unsure about your skill level, raise your personal minimums to a better comfort level. Don't blindly follow someone else hoping their experience will get you through. Have the guts to stay put if you are unsure.

Recreational Aircraft are getting more sophisticated, with reliable auto pilots and the like. However, if you are relying on your auto pilot to get you through cloud, let me pose some questions:

1. Will your auto pilot hold in turbulence?
2. If you have a vacuum pump or electrical failure, do you have back up?
3. Is your pitot tube heated?
4. Would you know where another aircraft is, sharing the same cloud?
5. At the other end of your flight, how do you plan to exit the cloud and land?

Another scenario I would like to pose for the pilots who like to lurk close to clouds near airports. The reason I raise this is due to the anonymous story in the May issue. The pilot at first was relying on following a so-called "more reliable pilot" to Temora. Considering the conditions being reported, even IFR flights might not have gotten in. But think of two things:

1. IFR flights might be trying to get in on RNAV approaches and, if not visual, would be dangerously close to aircraft just clear of cloud whether inbound or on the missed approach; and
2. An IFR flight could possibly still depart in those conditions expecting to enter cloud at low level. That could have been the scenario with the GA twin mentioned in the May article. It sounds like the approaching VFR aircraft were well below circuit height.

I don't want this to be a VFR bashing but as an IFR and night rated pilot, I totally disagree with recreational pilots receiving instrument training. A couple of hours under the hood is not enough time to bed things in and recreational aircraft aren't equipped for it.

My advice is, stick to the VFR minimums

(1000ft /1500m) or better, not just clear of cloud (even though this can be legal), don't follow another pilot and finally, if you're not sure DON'T.

John Field

Pop go the fuel drums

The article 'Catastrophic failure' (*Sport Pilot* May 2013) about the exploding chip bag, bought back memories for me, as a young green pilot flying in Papua New Guinea in the early seventies.



I had just joined a company called Macair and, based in Lae, had been given my first twin endorsement - the venerable Brittain Norman Islander - 10 seats and two engines.

A lot of our work involved carting fuel drums - full out, empty back - and the boys, the local cargo loaders, were instructed to ALWAYS crack the fuel caps of the empties. This particular flight departed Tari in the Southern Highlands (elevation about 5,500ft) and I had to pass through the Tari gap at 10,000ft to get back to base.

So there I was - sitting in my shiny new BN2. Fat, dumb and happily enjoying the spectacular scenery that is PNG, while climbing through 9,000ft - when the first explosion rocked the aircraft, rapidly followed by eight or nine more as the empty fuel drums popped as the air pressure dropped! The boys hadn't cracked the caps and, more importantly, I hadn't checked.

I honestly s#@! myself, so I fully sympathise with Mark Pearce and his exploding chip bag.

Gus Vans-Colina

A rare bouquet

I read with interest and concern the letters in the last few magazines in reference to registration (among other things) and would like to tell my story.

Earlier this year, a friend and I imported an aircraft each from the US, an original 1941 Taylorcraft. To get things moving early in the process, I applied for a specific registration number and received it promptly, even after changing my mind about the number.

Once I had the aircraft back together, I took the required photos and filled out the paperwork.

These were submitted by post on Monday, June 17. On Sunday, June 22, I sent an email to tech@raa.asn.au asking if they had received my paperwork, thinking I would receive an answer on Monday or Tuesday. I was very pleasantly surprised when I received a reply from the RA-Aus Tech Manager the same day. "We have received your paperwork and it will be looked into tomorrow". He had only one question, which I was able to answer straight away.

I received the registration on July 1 - 15 days after posting.

Can't complain about that. In fact, I wish to commend the staff at RA-Aus. I found them polite, helpful and efficient.

Stephen Hassall

Keith's view

I have just received the latest magazine, which I believe continues to improve, thanks to the editor. Cover to cover in one and a half hours.

Just a few comments:

1. The cost of \$20,731 spent on the February special meeting. Unfortunately, this meeting was brought about by the management itself. That was admitted by all at the meeting by a show of hands and from the board. So, in fact, it was the best \$20,731 the organisation has ever spent.
2. I congratulate Ed Herring and his team on a better NATFLY this year. It wasn't the best ever as far as attendance etc. but it was better arranged.
3. To improve attendance, including the public, there needs to be more attractions to get the people there. For example, a dog show run by local kennels. Anything which would create interest using the local community.
4. What is wrong with a couple of flying competitions?

Mind you, I believe we are in better hands at the moment, while Geoff (Kidd) and Spencer (Ferrier) are within sight.

Keith Baker

Ed - Any time you pay me a nice compliment, Keith, you can have a Letter to the Editor. Regarding NATFLY, the Board and Executive have also recognised the need for more entertainment and are working on it for next year. All contributions welcome.

Bring back the comics 1

A few words of support for John Brandon and his assertion that the suppression of information concerning serious accidents is

not serving the interests of aviation safety. (Are we getting safer? *Sport Pilot* June 2013)

GA pilots will no doubt remember the publication *Aviation Safety Digest*, which along with much other useful information, detailed the circumstances of serious accidents as determined by an investigation panel in a manner which provided many lessons for pilot readers. The format used could well be a template for RA-Aus to consider.

As John points out, *Sport Pilot* and the RA-Aus website would seem to be an appropriate means of disseminating thoroughly researched accident reports, rather than it being left to social and other media.

Bob Charlton

Bring back the comics 2

In reference to the article 'Are we getting safer?' (*Sport Pilot* June 2013).

Having done my flying training with a bush aero club back in the 1960's, when communication was far slower than it is now, our main source of safety knowledge in the sticks was either our ever watchful ex-fighter pilot CFI or the regular *Aviation Safety Magazine* published by the then Department of Civil Aviation and known colloquially as the 'Crash Comics'.

By the way, aero club members were encouraged to take part in monthly flying competitions, judged by an instructor on board, which meant regular flights under supervision. This created aircraft use and, unbeknown to us, regular observation of our abilities. Competitions were generally based on those run at the time by the Royal Federation of Aero Clubs, which had an annual national competition.

They included spot landing, forced landing, blind (no instruments visible to pilot, though still in view of instructor) and precision circuits. Also included was streamer cutting, though this may not be realistic in all RA-Aus aircraft.

But perhaps the biggest influence on pilot longevity, in my opinion, was the *Crash Comics*.

This magazine introduced us to the mistakes other pilots were making, in the hope we would learn from their mistakes. All my peers read it cover to cover. I should note, however, that it is not necessarily a good idea to offer such a magazine to non-aviators as it will induce very negative opinions!

The progeny of the *Crash Comics* is still produced by some government department online, however for GA and RA-Aus pilots it has lost a lot of its interest and relevance. It is also a fact of life that many of these magazines are read one article at a time in the smallest room in the house. That room is not particularly accommodating to computers.

It is my belief that many of the articles produced in those old magazines, although written about Cessnas, Pipers, Beech and other GA aircraft of the time, are just as relevant to RA-Aus aircraft today as they were to GA then.

Perhaps the articles are available for reproduction in our magazine? I have a recollection they could be reproduced so long as recognition was given to the original source.

I am also of the opinion that the Human Factors exam, which I passed to gain my RA-Aus flying certificate was designed by a deranged psychiatrist, not an experienced safety conscious aviator. I thought it had more to do with reading the author's strange mind than it did to my safety and well-being.

John Michell.

Ed - John, RA-Aus is currently investigating a whole range of new safety training initiatives, including getting access to the articles from the government archives. Let's hope we see them in Sport Pilot soon. Regarding the Human Factors exam, I agree with you. Many of the questions are confusing, contradictory and badly worded. The exam appears to have been put together by an Inuit using the Chinese-to-English translation App on the iTunes store.



DON'T hold it in and give yourself a headache. Share it with the members and get it off your chest.

Maybe it's you and your completely reasonable opinion about the world of recreational aviation that no one else will listen to.

Email editor@sportpilot.net.au and have your say.

(By the way - the Editor reserves the right to edit Letters to the Editor to shorten them to fit the space available or in case of libel. We don't want your completely reasonable opinion to land you in court.)

NATURAL GAS POWER

Aircraft manufacturer, Aviat Aircraft, has unveiled the first dual fuel, piston powered aircraft to operate on both compressed natural gas and Avgas.

The Aviat Husky CNG can be powered by CNG or Avgas with the flip of a switch. It is a standard Aviat Husky A1-C which has been fitted with a CNG fuel tank in addition to its standard tanks with a capacity of 50 gallons. The aircraft is powered by a 200hp, four cylinder Lycoming engine with a cruise speed of 120kts. The endurance at 65 per cent power is approximately seven hours.

Compressed natural gas power is up to 80 percent cheaper than Avgas. It is also a much cleaner burning fuel, reducing smog pollutants by 90 per cent and reducing CO₂ emissions by 30 per cent. Engine oil remains significantly cleaner which should improve engine life, while aircraft performance is enhanced as CNG typically burns 138 octane versus the current 100 octane aviation gasoline. For more information

www.aviataircraft.com



New runway for Lethbridge

The Golden Plains Council in Victoria is to receive a grant of \$1Million to upgrade Lethbridge airport, including a sealed surface for its main runway.

Included in the funding is provision for a taxiway complex, fuel facilities for Avgas, Mogas and Jet fuel, and a water hydrant installation for the use of the Country Fire Authority. Additional work will be performed by Lethbridge airport to provide more than 100 hangar sites and there's even a plan for a future onsite motel and a community aviation terminal.

Lethbridge Airport is located between Geelong and Ballarat and is currently home to more than 70 aircraft.





Wave Avgas goodbye

Throw away those fuel drums. Wave goodbye to Avgas. The first of what is expected to be many electric powered aircraft has just gone onto the market in Europe and the US.

GreenWing International has started taking orders for the eSpyder, an experimental amateur built kit for sale at USD\$39,990. The company says the aircraft has achieved German DULV certification. The first deliveries are expected before Christmas.

The Yuneec 24KW (32hp) power plant propels the plane while the Motor Controller delivers power from the battery. The eSpyder uses Lithium battery technology, similar to electric cars.

The eSpyder is expected to cruise at 59kts and have a flying time of one to one and a half hours per charge.

For more information <http://greenwing.aero>.

UNDO

In the story called 'Fabulous Faeta' in *Sport Pilot* July 2013, the spec sheet listed the MTOW for the Atec Faeta aircraft at 450/472kg, which were the correct numbers for Europe. In Australia the aircraft is approved for 550kg.

The aircraft which featured in the 'Foxbat wishlist in *Sport Pilot* July 2013 was an A22LS Foxbat, not an A22LS Skyfox as stated.



An ultralight jet

Sonex Aircraft has begun accepting reservation deposits for its new SubSonex Personal Jet, with deliveries expected by the middle of next year. And it's a kit! It weighs just 408kgs, yet will gallop along at 290kmph.

A USD\$10,000 refundable deposit will get you on the list. USD\$125,000 will get you one of the first ten kits out of the factory.

The kit will ship with a pre-assembled fuselage, wings, tail and control surfaces with canopy and windshield installed. The builder will be asked to install the removable outboard wing panels, engine and fuel system, bolt-in the retractable landing gear, avionics, electrical systems and controls, install the supplied BRS full-aircraft recovery parachute system, pre-molded fiberglass components and upholstery, and add paint.

The 247lb thrust TJ-100

turbojet engine, produced by PBS Velká Bíteš of the Czech Republic, is designed for UAV, UCAV, experimental aircraft and motorised gliders. The engine is a 'plug and play' package featuring integral ECU, starter/generator and oil system, and ships complete in the SubSonex kits with instrumentation, throttle control, pre-wired harnesses and other installation components.

A total weight of 408kgs? Does that mean we will see it one day in RA-Aus? Wouldn't that be cool. For more information www.sonexaircraft.com.



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POSITION REPORT

MARK CLAYTON



The Chief Commissioner of the Australian Transport Safety Bureau (ATSB) notified the Association last month of a proposal to have Recreational Aviation Administration Organisations (which includes RA-Aus) recognised in the legislative framework for reporting aviation accidents. In particular, it is proposed to amend the *Transport Safety Investigation Regulations* (2003) to recognise RAAOs – and their members – as responsible persons now required to report immediately reportable matters (accidents/serious incidents) as soon as practicable. The Commissioner went to some length to explain that “responsible persons [are only required] to report accidents and incidents that they have knowledge of. It does not require them to actively seek out this information. Just as important, a responsible person is not required to report if they have reasonable grounds to believe that another responsible person has, or will, report the matter to the ATSB.”

Reportable matters include: deaths and serious injuries; destruction and serious damage to an aircraft; and breakdown of separation, while routine reportable matters are defined as: flight into terrain being narrowly avoided; flight crew incapacitation; use of procedures for overcoming an emergency; fuel exhaustion; and collision with an animal, including a bird.

While the proposed amendments do now include penalty provisions these are reserved for circumstances where there is a deliberate or reckless disregard for the law and there are serious safety consequences. Indeed, the Commissioner reminds us that these provisions have never been invoked, despite the Act having been in force now for a decade.

At the heart of these proposed amendments – which are provisionally scheduled to take effect on February 3, 2014 – is the ATSB’s wish to create a more comprehensive safety data set.

Like a jigsaw piece in a bigger puzzle, certain notifications can often be joined together to reveal a broader, systemic safety problem. Once we’ve identified an accident or incident trend from your notifications, we can make tangible improvements to safety through safety advisory notices, recommendations and further safety investigations.

In order to facilitate this – and possibly reduce our reporting requirements (RA-Aus members presently have to report to both RA-Aus Ops and ATSB) – the latter has developed a one-stop online reporting portal for all RAAOs.

This is undergoing Alpha testing, and we’ll be sure to let you know when this [optional] facility is available.

As foreshadowed in my last report, an initial meeting of RAAOs was held in Sydney on August 6 to explore possible avenues – and mechanisms – for collaboration. As some sage members may recall, this has been attempted – unsuccessfully – on at least two previous occasions. It was a beautiful winter’s day however (24 °C), and no amount of history it seemed was going to dampen the pervading mood of general optimism. That informal gathering now has a provisional name (Sport and Recreational Aviation Council), a determination to convene again at Ausfly 2013, an agreed purpose (to coordinate, educate, share and advocate) and a draft MoU. The early implementation of CASR Part 149 was identified as the overriding priority for all RAAOs. Once available, this Regulation would allow the Association to become an Approved Organisation with considerably enhanced regulatory powers (whereas we’re currently only permitted to operate via exemptions).

Clearly though, it’s ultimately a matter for the Board to decide if RA-Aus remains involved with this nascent group.

Sticking with CASR’s for a little longer, it might interest some – thanks Ops – to know that the Association has also recently submitted a formal response to the CASR Part 61 Manual of Standards (concerning the new Recreational Pilot Licence). From the outset CASA acknowledged that the RPL should be priced so as not to undermine RA-Aus’s membership revenue. We’ve reminded CASA that this principle has still yet to be formalised (a copy of our recent submission can be viewed online, within the Member’s Portal).

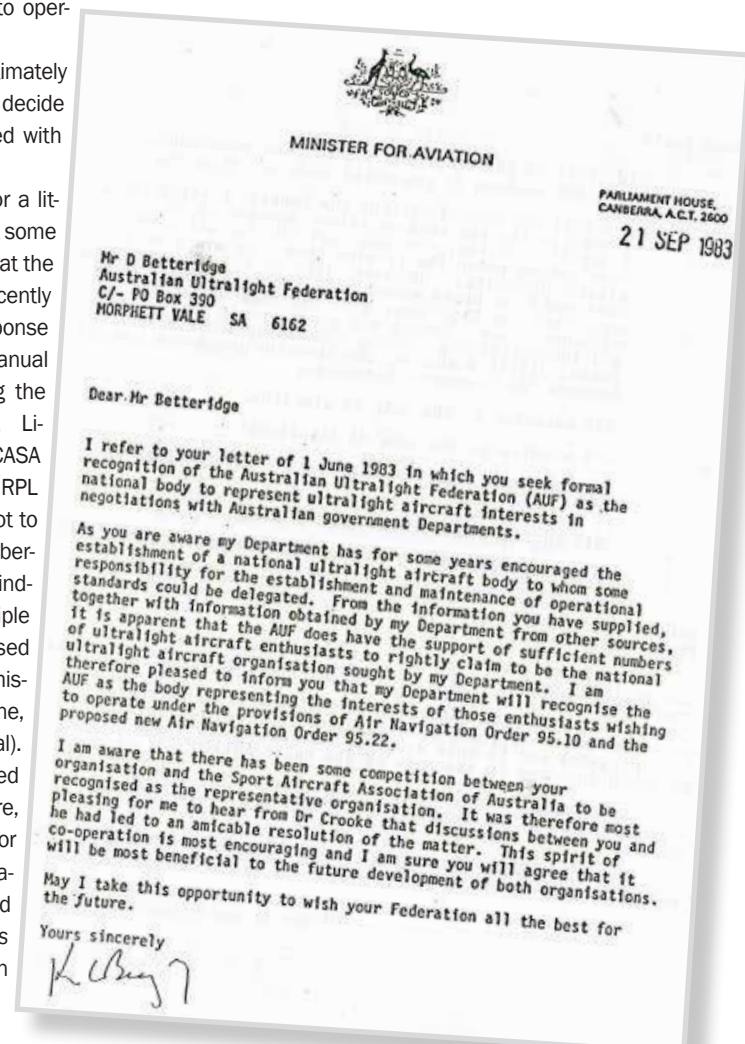
It won’t have escaped your attention, I’m sure, that this is a big year for Australian 30th anniversaries. Topping the list would have to be *Australia II*’s 1983 America’s Cup win

followed, perhaps, by Jayco’s release – that same year – of their iconic EXPANDA pop-top caravan. This was also the year that Greening Australia first took root, when the first T83 Thrusters appeared and the year when Mitsubishi unleashed its first Pajero muscle machine. Boomers might also recall listening back then, for the first time, to the memorable sounds of *Icehouse’s Great Southern Land*.

Recognising and celebrate significant milestones is commonplace and can serve also as a barometer of organisational maturity, if not health.

In common with Iva Davies (the front man for Icehouse), the quangos, manufacturers, and organisations just mentioned all have good reason to feel proud of their achievements 30 years ago and their achievements since. Not surprisingly, they’ve all gone to some considerable effort this year to commemorate and celebrate their respective successes.

RA-Aus also has a lot to be proud of. Perhaps it’s not too late for us to also mark our 30th? 🇵🇹



EDITOR'S CHOICE

BRIAN BIGG

Third time lucky

If there is one thing you learn about kids as you bring them up, it is that you can lead them to water and make them drink while they are young. But there comes a time where you lose credibility as a parent. In my case I brought it upon myself.

For years my eldest daughter believed me when I told her that the Mr Whippy man only played his music when he had run out of stock. He played the music, I told her, to let kids know he had none left.

My second child still refuses to get into the car with me after the time I announced "Who wants McDonald's?" Only after he was firmly strapped into the car did I tell him we were really going to the dentist.

And for years I got away with denying my youngest daughter a kitten by telling her that it was well known that cats can explode if you pat them the wrong way. I wasn't there to see the look on her face when, eventually her school friends convinced her it wasn't true.

So all children get to an age when they don't take everything you say as gospel. You can try to impose your own beliefs on them as much as you want, but at some point they wake up to the fact that their parents don't have all the answers and they realise they are allowed to have their own opinions about things. Often that opinion is 180° from your own, deliberately so in most cases.

I found the more I've tried to push my kids in a particular direction, the more they choose to deliberately go in the opposite direction.

Take flying for example.

I have been passionate about aviation since I was a boy. Unlike many other people, I can't trace it to a specific event such as an early joyride. But I have been flying for more than half my life now and I love it today just as much as the day I took my first lesson, which I still remember vividly. Everyone who knows me has been told that if I lose my life in an accident they have my full permission to go around telling everybody "He died do-

ing what he loved.

That's the way he would've wanted to go."

So I'm naturally interested in passing on my passion to my own children. But I have to admit to having mixed results so far.

Back in the day when I believed I could still impose my will, I dumped my eldest daughter unceremoniously into the passenger seat, strapped her in and told her 'you will enjoy this'. After two flights, she announced she was too young to die and had no intention to ever fly with me again or learning to fly on her own. No thanks, no way. Leave me alone Dad.



I had more success with a more subtle approach with my son. He trusts me (for the most part) and was prepared to entertain the idea of learning to fly. Rather than try to force him into the cockpit, I sold it to him on the basis that flying was cool, was something that no other kids his age were able to do. And I may have also hinted that flying was a surefire way of getting girls to like him.

That got him into the air. He notched up nearly 10 hours with CFI John Gardon in the Foxbat and passed his BAK. I had high hopes. But at the same time as my son was taking lessons with John, he and I had a couple of narrow escapes together on trips away. Both involved bad weather and both were scary.

Both involved judgement mistakes by me

which put our safety at risk—not seriously at risk, but at risk nevertheless and my son knew it. I learned from the experiences and have vowed never to get myself or my children in those situations again, but the damage had been done. My son never said anything to me directly, but he drifted away from flying and now I struggle even to get him to come up for a joyride on a fine Sunday morning in beautiful conditions. I could kick myself. I blew it.

So with my second daughter, I have adopted a completely new approach. I take her out to the airfield with me whenever I'm

going to wash the aircraft, blow up the tyres or just to check the aircraft is still there. I let her know that's all we are going to do. If it's a nice day, I wait for her to tell me that it might also be a good day to go flying and I gently suggest that it would be possible if she wanted to.

That generally gets her into the right seat and off the ground. Once in the air, I take things very gently and it seems to be going well. She enjoys the flights. Just lately, she has also discovered the joys of negative G. She is often at me to do parabola climbs and dives just like on the roller-coasters she's recently started

to brave as a young teenager. I never do anything that extreme and we never stay up very long, but she has been peppering me with questions about the operation of the aircraft and how hard or easy it is to fly. She can also just about reach the pedals, which she has her heart set on doing. Last week, without being prompted, she asked me if we could go flying together because it was such a perfect day. My spirits soared.

At last, possibly a child who will carry on my passion (and maybe even inherit the aircraft once I am gone). I plan to take it very gently from here. Let her come into the love of aviation at her own pace. I'm not going to push her into it. As with every other aspect of parenting, I've learned from my mistakes.

Maybe it will be third time lucky. 🍀



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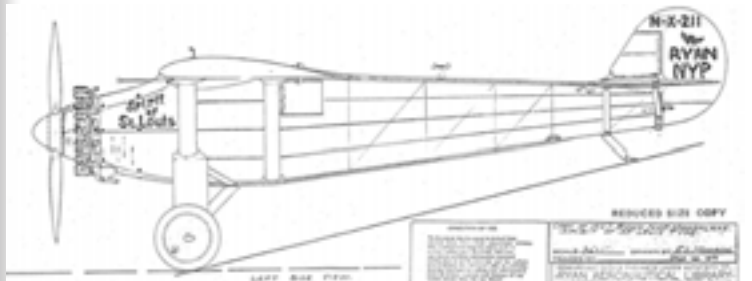
Spirit of St. Louis

By Arthur Marcel



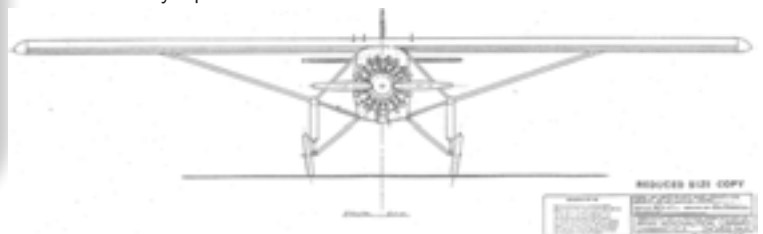
At a recent function for The Australian Vintage Aircraft Society, I came across veteran Australian aircraft designer, Bill Whitney, who told me his latest project was to design a reproduction of the famous *Spirit of St. Louis* aircraft which carried Charles Lindbergh solo across the Atlantic Ocean in 1927.

On the SOS 2 (*Spirit of St. Louis 2*) website, Bill is not only listed as the lead engineer; he appears to be the only engineer on the project. The aircraft itself is being put together in California, while Bill does all his work over the Internet from the Brisbane home where he and his wife, Denise, have lived for the past 33 years.

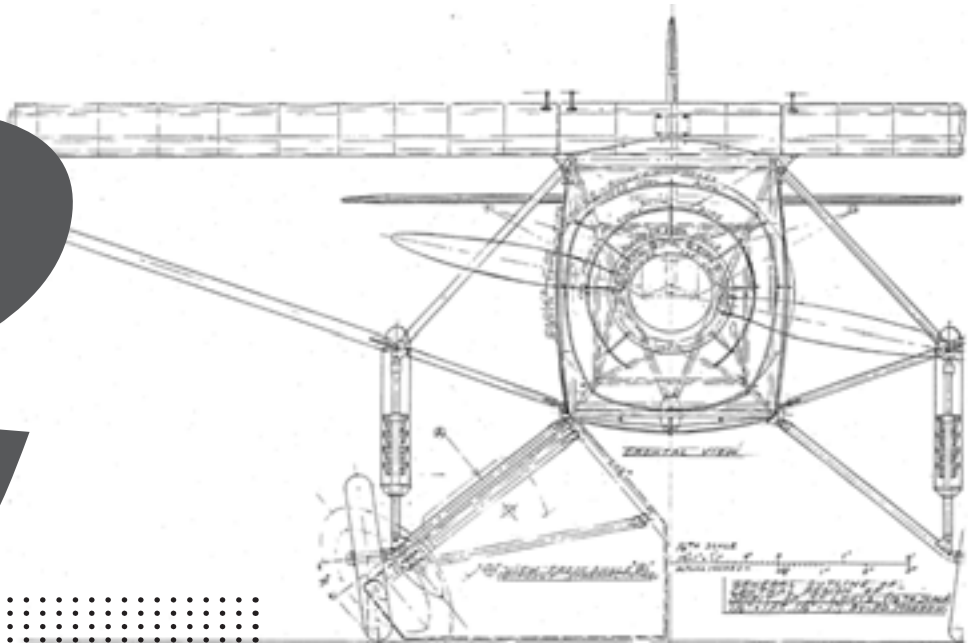


Bill Whitney has a Bachelor of Engineering in Aeronautical Engineering from Sydney University and is a member of the Royal Aeronautical Society. After graduating in 1967, he started his career with the Department of Civil Aviation analysing flight data and conducting accident investigations. It wasn't long, however, before he moved into the private sector, repairing, modifying, and performance testing existing aircraft as well as designing new aircraft types. His curriculum vitae is long and impressive, and you can find it on the SOS 2 website at: <http://www.spiritofstlouis2.com/#aeronautical-engineering-team/c1ve4>

Although many of Bill's design projects have been to do with larger aircraft (and helicopters), several of them fall into the category of recreational aircraft, including the Australian Lightwing, Cygnet, Aerobike, Boomerang, Storch and Jabiru (Rotax conversion). I took particular note of the fact that Bill did the design drawings for the Southern Cross replica in 1979 and the Vickers Vimy replica in 1994.



SOS 2



He also designed, built and flight tested two Bristol F2b replica biplanes for the TV series 'A Thousand Skies'. In addition to his aviation work, he has conducted extensive motor vehicle modification design work including left to right-hand drive conversions, braking systems, heavy vehicle chassis extension and semi-trailers. His research on helmets led to the amendment of relevant Australian Design Standards as well as the requirement in some states for full-face motorcycle helmets. There would have been very little doubt in the minds of the SOS 2 Project Management Team when they chose Bill Whitney as their aeronautical engineer that they had picked the right man for the job.



Design and construction of the SOS 2 aircraft is progressing and Bill thinks it will be completed sometime towards May next year. However, there is more to the *Spirit of St. Louis 2* project than simply building a flying reproduction of this iconic aircraft. The project's mission statement actually says a goal is the re-creation of Lindbergh's flight across the Atlantic Ocean from New York to Paris. To quote: "The SOS 2 flight will allow all of us to actually live the excitement, challenge, danger and triumph of aviation history's greatest feat that took place over 85 years ago." The



idea had its genesis in 1991, when Scott Royer, a pilot from Greeley, Colorado, founded the project. Scott's great dream had always been to one day re-enact Lindbergh's epic flight; to be the pilot of a reproduction *Spirit of St. Louis* aircraft. Unfortunately, fate intervened. Scott suffered serious injuries in a plane crash which has left him too physically impaired to make the flight.



His replacement will be Robert Ragozinno, a professional aviator for 34 years, who found fame in 1994 with the Stearman World Flight Team as the first person to ever fly an open cockpit aircraft solo around the world. The original *Spirit of St. Louis* was custom built for Lindbergh by the Ryan Aircraft Company for a total cost of US\$10,000. The plane was specifically designed to win the prestigious Orteig Prize for the first non-stop flight from New York to Paris (in either direction). Many people tried to win the money, often with tragic results. Fuel heavy, overloaded aircraft crashed on take-off, turned back due to weather or other problems, or simply disappeared and were never seen again. Prior to Lindbergh's flight, six well known aviators had lost their lives making the attempt.

The Ryan aircraft was basically a flying fuel tank with no forward visibility whatsoever. On May 20, 1927, as it lumbered down the rain soaked, muddy Roosevelt Field on Long Island, it was carrying over 1,700 litres of Avgas and barely cleared the telephone lines at the far end. By the time Lindbergh reached Le Bourget, he had been awake for 33 hours and 30 minutes. The flight had been conducted under and over bad weather, the pilot navigating by dead reckoning and the stars, several hours of it blind flying in fog. On his arrival, a crowd of about 150,000 spectators stormed the field and Lindbergh became not just the man of the moment, but a man of history.

Bill Whitney is now busy writing his own entry into that moment of history. 🍷

A narrow escape

by Graeme Butler

Landings are obviously an inevitable part of flying. We are always after that soft chirp the tyres make when a landing is greased, but they can be a problem for some pilots, including me.

I always had an interest in aircraft - one of my earliest memories was dropping a plastic model of a seaplane out the back window of my parent's car as we were going to visit friends out of town. This town, a small wheat belt village in the midwest of Western Australia, used to have its mail delivered via a silver DC3 on a country run from Perth. I would run outside as soon as I heard the rumbling of the twin Pratt & Whitney engines just to catch a glimpse of it.

My interest in aviation progressed to books and model aircraft, both control line and radio control, but thoughts of actually seeking a career in flight never seemed attainable for an academically average country bumpkin. Also adult life and its associated responsibilities intervened. However, anything aviation always held an interest in my mind.

Fast forward to when I found myself north of 50, career sorted, still happily married and children gone - with time on my hands and a secondary income waiting to be spent. My aviation interest returned with increased passion. Having moved numerous times, I was lucky enough to have settled in a city which had two flying

schools, both of which could provide lessons for me to attain an RA-Aus Certificate. I chose the not-for-profit organisation. The TIF was purely a formality because my decision to fly had already been made, however the joy of taking off and controlling the aircraft in flight was intoxicating (even though unbeknown to me, the CFI was controlling the rudder the whole time).

Ground school and flight training in the Tecnam Eaglet progressed well to the point where I had soloed (I cried), was flying circuits and visiting the training area to practice the manoeuvres required for the Pilot Certificate Flight Test.

On this day, I had just returned from the training area and joined downwind runway 07. I decided to do a couple of touch and goes before going home with the usual smile on my face. I had prided myself with generally good landings and my first landing this day was no exception. The second and last for the day was also going well as I turned onto final.

The airspeed numbers were good, flaps 30°, glide slope keeping the aiming point stationary on the windshield and the centre line of the runway right on the nose of the Tecnam. There did not appear to be any wind and I was quite comfortable with proceedings - until the flare.

All of a sudden I was thrust to my right and the aircraft lurched into a left bank, not more than three metres off the ground. I found myself no longer over the runway, but over the grassed

area off to the side. The aircraft then touched down on the left mains and my first thought was that it was going to dig the left wingtip in and spin into the ground.

But after some intense sphincter contractions, I realised the aircraft was still upright and tracking along the grass. I regained control and managed to steer between the runway lights back onto the runway proper.

Still not really aware of what had taken place, I cleared the runways and performed after landing checks with a racing pulse and a cold sweat (but thankfully clean undies).

I taxied back to the clubhouse and was relieved no one had witnessed my near disaster, not 10 hours into my solo time.

After shutdown and making a quick exit of the airfield (without my usual smile), I began the cycle of reliving the event in my mind.

Unless I'd had an unconscious spasm of my joystick arm at the critical time, the only thing I could attribute this near catastrophe to was a gust of wind under the right wing during the flare while I was congratulating myself on another greased landing.

With no damage done other than to my ego, I have taken this experience as an important reminder to myself to remain forever diligent with all aspects of flying, especially during landing.



>> Flight instructor Ellen Sorenson , Graeme Butler & Tecnam Eaglet "Elle"

PILOT TALK

Jill Bailey, Assistant Operations Manager

LSA vs Type Certified

Without stepping on Tech's toes, we felt it might be useful to provide an overview of the important differences between Light Sport Aircraft (LSA) and Type Certified aircraft registered with RA-Aus.

The hope is that we shed some light on the potentially confusing categories.

There is the possibility under the current regulations that two sister ships from a manufacturer can look identical when side by side and yet be treated very differently at registration - which can impact on how the aircraft can legally operate. These differences can include different Maximum Take-Off Weights (which may vary from 450kgs to 600kgs), different requirements for allowing modifications and even differences in what equipment can be fitted.

Prior to the introduction of LSA, all factory-built aircraft had to be assessed under Type Certified criteria and construction approved by a National Airworthiness Authority (NAA) to a suitable standard ensuring appropriate design and performance characteristics. Examples of NAAs include CASA (Australia), FAA (US), CAA (UK), CAA (NZ) and Transport Canada.

In February 2006, CASA issued Advisory Circular AC 21-42 (1) which outlined the guidelines for Australian LSA. It was welcomed by manufacturers. They were then able to self-certify their aircraft and be responsible for ensuring each was constructed to a known and approved standard. This process was obviously appealing because it meant each manufacturer would not have to go through the exhaustive and expensive process required for type certification.

LSA manufacturers construct their aircraft to an internationally recognised standard which they nominate before they purchase the raw materials. The most common is the American Society for Testing and Materials (ASTM) ASTM F2930-12 Standard Guide for Compliance with Light Sport Aircraft standards.

The LSA category not only applies to fixed wing and weight shift aircraft, but also powered parachutes, gliders, balloons and gyroplanes.

Australian LSA guidelines include an MTOW of 600kgs, or 650kgs for waterborne aircraft,

along with a stall speed less than 45kts in the landing configuration at MTOW. Additionally, the aircraft can only have two seats, one (non-turbine) engine, one propeller and a non-pressurised cabin. The aircraft can only be operated with fixed landing gear, unless it is intended for water operations, in which case the undercarriage can be re-positionable.

In the early 2000's if a European manufacturer built an aircraft to European Type Certified standards, it probably had an MTOW of 450kgs, because that was the common European standard at the time. Subsequently, when LSA standards were issued in Europe (about the same time as in Australia and the US), European manufacturers upgraded their designs to take advantage of the lucrative US market and produced aircraft with MTOW of 600kgs.

In the meantime, some Type Certified aircraft were also approved for slightly higher MTOW's of 544kgs or 560kgs. So a manufacturer could offer similar looking aircraft with vastly different MTOWs. This also applied to some Australian designs.

Consequently, RA-Aus members simply noticed an increase in MTOW for many European, US and locally manufactured aircraft, without really understanding other important differences.

All factory-built aircraft are provided with a list of approved equipment, including propeller brands and models, avionics or even the brands of instruments used to indicate oil pressure, temperature or items like flap servo motors.

If an owner of a Type Certified aircraft wants to modify the equipment, an engineer approved under CASR Part 21M (the old CAR 35) is required to issue a Supplemental Type Certificate (STC) for the modification. As a topical example, this is why owners of Gazelle or Skyfox aircraft cannot use any other propeller than the All-Size, which was approved with the Type Certificate issued for the aircraft. If a different propeller is fitted, the Type Certificate for the aircraft ceases to be valid and the aircraft is effectively grounded.

An owner can always choose to pay an approved engineer to produce a STC to fit a propeller type not specified on the Type Cer-

tificate. And, if it proves to be popular, they can share the STC with other owners to also use the same propeller type (but first check with the issuing engineer).


On an LSA aircraft, if an owner wants to modify the equipment, the manufacturer is the only authorised source. Critics of LSA have claimed this is a critical flaw, because if the manufacturer goes out of business, modifications can no longer be approved and the aircraft's Special Certificate of Airworthiness would no longer be valid. However, under LSA guidelines, CASA can appoint a suitable person to take on the role, subject to certain criteria.

The current ASTM standards do not allow for the provision of in-flight adjustable propellers for LSA aircraft. However, news has filtered from Oshkosh that this maybe about to change. But as it stands, in-flight adjustable propellers cannot be fitted on LSA aircraft used for training at RA-Aus Flight Training Facilities.

There are, therefore, two options available to owners wanting to register an LSA aircraft fitted with an in-flight adjustable propeller. In order to allow the aircraft to be used for flight training, they can swap to a fixed pitch or ground adjustable propeller specified by the manufacturer on its approved equipment list. Alternatively, they can register the aircraft as E-LSA (Experimental) and continue to use the in-flight adjustable propeller, but only for private use.

European LSA standards include in-flight adjustable propellers (EASA CS-LSA) however an LSA manufacturer must nominate a standard for construction and not 'cherry pick' provisions from various standards.

This can all lead to confusion when an aircraft is imported and submitted for registration with RA-Aus. A Type Certified aircraft can have an in-flight adjustable propeller and a MTOW of 520kgs, while a seemingly identical LSA aircraft has a MTOW of 600kgs, but cannot have an in-flight adjustable propeller (without being registered Experimental).


We advise everyone to carefully confirm that the aircraft you are all set to buy can be registered and operated for the purpose you intend 

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AUSFLY

September

12-15

Australia's recreational and sport aviators will return to Narromine in September for another year of AUSFLY. The fly-in is designed to celebrate Australia's vibrant and diverse aviation organisations. As well as lots of aeroplanes, there will be:

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AIR DISPLAYS

Aerobatics by Paul Bennet – Super Pitts
Aerobatics by Tony Blair – Rebel 300
Hawker Fury
Avenger
P51D Mustang
Wirraway
RC Aero
Wright Flyer (subject to weather and availability)



Flying in

All pilots intending to fly in for the weekend must pre-register their aircraft. There will be a SUP issued and NOTAMs throughout the weekend. Make sure you get the latest from **Airservices**.

For more information www.ausfly.com.au



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WESTFLY

28-29

September

After last year's hugely successful inaugural WESTFLY, White Gum Farm has again offered its facilities. White Gum Farm is a wonderful aviation jewel, just east of York and only about 1.5 hours drive from Perth. It has four runways on its grounds, entertainment, hangar, workshops and accommodation facilities all in the one venue.

There will be exhibitors, new aircraft, heaps to see and do and flying buddies to catch up with.

PLENTY TO DO

The idea of WESTFLY is to provide a single venue for a gathering of all aviators and aviation enthusiasts. It is not restricted to RA-Aus registered aircraft.

A concours d'élégance trophy will be on offer for the most beautiful aircraft.

Guest speaker at the dinner will be Werner Buhlmann, a West Australian aviation icon. He has had amazing aviation journey 17,000 hours, 10,000 hours instructing on 130 types.

World renowned, Flint the Iceman, will put on an ice sculpture display.

There will be a Partners of Pilots lecture for those who fly but would not be sure what to do if their partner became incapacitated in flight.

There will also be technical and operational representatives from the RA-Aus onsite to answer your organisational questions.

FLYING IN

There are a few things pilots flying in to White Gum Farm (YWGM) should know to make things easier.

RWY 09/27 will be the duty strip (700m), allowing for easy movements and plenty of parking spaces.

RWY 14/32 will be closed for the weekend due to its close proximity to the public.

If there is no active runway at the time of your arrival, you can choose any runway including runways 17/35 or 10/28 in the paddock east adjoining the farm. Park at the NW end of runway 10/28. It is a short walk to the hangars from there.

Normal circuit procedures are in effect with radio operations preferred if your aircraft is appropriately fitted and pilot properly qualified. Inbound calls should be made 10 NM out from the venue for safety reasons. Radio operations will be conducted on 126.7.

FACILITIES

Camping areas are available; bring a tent or a swag.

Food stalls will sell hotdogs, tea, coffee and cakes. The Saturday roast lamb dinner will be \$25, first come first served. Don't miss Westfly. It's going to be fun.

For more information www.westfly.com.au.





GUNNEDAH Was Great

by Darren Mottram



>>All photos by Darren Mottram



There was a time, not all that long ago, when Australians with a mind for aviation could look forward to some form of event or show throughout the year, within a sensible driving (or flying) distance, no matter where you lived.

Sadly though, with significant increases in the costs of fuel for the participants, insurance and the intimidating requirements of dealing with all the regulatory departments, the smaller shows have dwindled and it seems only larger organisations or population centres are prepared to take on the burden of running the events.

This has been most noticeable away from the big smoke. It's a shame, as aviation has played, and continues to play, a significant part in country life.

But there was a refreshing change to this trend when the Gunnedah Aero Club put on their annual airshow for the locals in June. In spite of a lot of rain leading up to the event, which made the ground quite soft, and less than ideal weather which prevented some participants and visitors from getting there, the club still managed to put on a great event and 5000 people came through the gates.

Participants from as far away as Archerfield,

Port Macquarie, Maitland and Mittagong attended in a range of aircraft from gyrocopters and recreational machines, right up to classic and heavy warbirds and even an L-39 jet.

Luckily the weather was kind over the two days and visitors were treated to displays of remote control models by Dallas Isaac and Jeff Sparkes; formation displays by Egon Mahr, Jim Eaglan, Mark Willard and Nyall Higgins of the Russian Roolettes in their Yaks and Nanchangs; aerobatic and handling displays by Cameron Rolfe-Smith in his Yak-52, David Salter in his Harvard, Rod Hall in the L-39 jet and Paul Bennet in his Wirraway and (huge) Avenger; fire fighting demonstrations by Andrew and Mick Kennedy in the NSW Rural Firefighting Service Air Tractors and high performance solo and formation aerobatic displays by Paul Bennet and Glenn Collins in Paul's Pitts Specials.

For both visitors and participants alike, the event was held in the atmosphere of legendary country hospitality and, at times, felt more like a camping weekend than just a show. On Saturday night there was a semi-formal dinner in a hangar at the field, MC'd by local identity, Peter Middlebrook, which provided a chance for some of the locals, organisers and participants

to get together and a great time was had by all. An auction was also held. You know you're in the country when the prizes range from rides in warbirds and aerobatic machines to livestock and poultry!

Among the many people and groups involved in organising and running the event, particular mention goes to sponsors Col and Ryan Taylor of Taylor Automotive in Coonabarabran (Ryan was also the display co-ordinator), Aero Club president, Harvey Stoneman, ground handling co-ordinator (and Aero Club Vice President) Roger Miller, Michael and Susan Jonas and Sam Clift.

Paul Bennet facilitated much of the planning and organising of the flying displays and liaised with CASA for authorisations and approvals for the show. Paul is also a big believer in reviving these smaller, community based shows in rural Australia and is more than happy to assist in planning and organising events with anyone who might be interested in hosting a show but is unsure of where to start or intimidated by the thought of dealing with the bureaucracy.

It would be wonderful to see more of these small, regional shows take off. In the meantime, we can at least look forward to Gunnedah 2014.



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Czech please!

By Brian Bigg



SKYLEADER 500

What is it about the Czech Republic?

Here's a country which is about the size of a stamp. Seriously. A total land area of just 78,000 km²? There are Aussies with bigger backyards than that. Yet they still somehow manage to jam 10 ½ million people in there.

And despite their runty square meterage and sweaty, jammed in masses (134 people per square kilometre - compared with Australia's roomy 2.8), the Czechs somehow keep turning out bucket loads of light aircraft designs from a seemingly endless number of factories.

It's embarrassing when you consider how much more well-endowed Australia should be in aviation, yet we don't have anything like an

aviation industry to match them. According to the Aero News network, there are 22 members of the Czech Sport Aircraft Manufacturer's Association and more than 7000 members of the Czech Light Aircraft Association (pilots, builders, designers, manufacturers and operators).

Their factories turn out more than 70 different aircraft, nine different engines, 36 paragliders, 10 para motors, parachutes and a large assortment of aviation services. They manufacture 400 aircraft every year and earn for their country more than \$51 million in export sales.

What's going wrong with Australian sport aviation that we can't do better than a tiny, overcrowded and landlocked country in central Europe? We should be kicking sand in their faces.

But going by the number of us who own and fly Czech aircraft (hands up everyone) we obviously can't argue that they know how to make aircraft we want (One in every four light sport aircraft sold in the world is either designed or built in the Czech Republic).

Which brings me to the latest Czech design to land on our shores - the Skyleader 500, in which I recently had the chance to fly.

Russell Middleton and Brett Poole, of Atlas Aviation of Maryborough in Queensland, have imported the Skyleader 500, one of five models in the line produced by the Czech Jihlavan Airplanes factory.

It's an all-metal, two seat, low wing aircraft designed for training and cruising.



Czech please! Cont.

The look

For an aeroplane that weighs just 335kg, the Skylader sits on the ground like a much bigger aircraft. That probably has to do with the high set, solidly built, trailing link undercarriage which keeps the whole package a reasonable height off the ground. The undercarriage, by the way, has suspension which makes landing a pleasure-but more boasting from me about this in a moment.

The most obvious feature of the aircraft are the 9.9m wings which have a noticeable dihedral. Having been brought up on a Piper Archer, I happen to love wings like this. The dihedral allows the aircraft to act as if it is sitting at the bottom of a large pendulum.

It makes it very stable and allows the pilot to control much of the flight using just the rudder. I once flew from Bankstown to Archerfield in an Archer and only touched the yolk on take-off and landing.

The wing on the Skylader 500 also features an optional electric Fowler flap which gives the pilot a lot more options for approach and landing. The flap and trim are also electric.

This aircraft was fitted with two 32 L fuel tanks, but two 45 L tanks are also available and would be the natural choice for most owners.

Inside

The build quality is what we have come to expect from Czech aircraft. The seats are comfortable, attractive and look hard wearing. The panel layout is clean and features a Dynon MFD as standard as well as the usual analogue gauges. The panel is, of course, customisable. There is space behind the seats for 30kg of luggage. There are air vents in the canopy and sides of the panel, so keeping cool in the Aussie summer shouldn't be a problem. The 1.18m wide cabin was just enough for the two of us 'solidly built' gentlemen to sit comfortably side by side.

I like to fly with bare feet, or just in socks. But in the Skylader that's not going to be possible. I had to exert a lot of pressure on the rudder pedals during taxiing and my tender feet started complaining straight away. Using a lot more leg power for steering the nosewheel is not a big problem, though, and I stopped thinking about it after a few moments.

In the air

Even with two 'solid' gentlemen on board, the Skylader fairly leapt off the ground, well short of the 100m mark. Russell says with just one person on board, the back wheels will be in the air after just 50m. The book says the official take-off

run is 90 - 100m but that seems conservative.

In the air, the Skylader feels well balanced and solid. The ailerons are controlled through pushrod bearings, not cables, so the feel for the pilot is stiff and positive. In turns, the aircraft feels stable and not twitchy as you might expect with such a big wing. Because of the dihedral and those wings, once you put the aircraft into a steep turn, it tends to stay in there happily without too much extra input. The whole package turns on a dime too. Very nice on my flight day because we were circling above a large humpback whale, wallowing in the blue water off Lennox Point.

Most people will immediately appreciate the fantastic 270° visibility you get from up there. The big canopy lets you see most of the sky, but I predict Aussie owners will opt for some sort of tinting or shades. The fantastic visibility may be great for Europe, but we will bake like a chicken under the Aussie sun.

Stalls were very predictable - 35kt clean and 31kts with flap according to the book, but 42kts clean and 25kts with flap on the day we did it. The Dynon lets you set the stall warning speed in the air (very cool) and the whole event was more of a non-event, which is what I want in a stall. In normal cruise, you can think about 115kts as standard.

Czech Aircraft design 10 Commandments

Landing

The biggest problem with this aircraft, according to Russell, is that it's too easy to land. And I have to agree with him.

No instructor wants a training aircraft that doesn't make his or her students work hard to get a good landing. But the Skyleader feels almost like it's on autopilot all the way down. I'd never flown this aircraft before and am not a hotshot by any means. But my first approach and landing in it was perfect -so much so that I accused Russell of quietly helping me out to make me look good. But he swore blue he had not touched it and during the next three or four touch and goes, I kept an eye on him to make sure he really wasn't helping. He wasn't either, which means the Skyleader is truly a doddle to land because every single one of my landings was a greaser. Wow. The big Fowler flaps made every approach very controllable. In a STOL landing attempt, we came down like a brick, right onto the piano keys and had the aircraft stopped well within the 50m mark.

This is going to be a nice aircraft to be in, if ever the Rotax up the front stops making the appropriate noises. By the way, the touch and goes almost aren't that at all. After touch down, I retracted half the flap and gave it full power. We leapt off the ground two seconds later. I could have landed in my driveway.

Overall

This is a fun and clever aircraft, well thought out, well-engineered and well-targeted at the training and recreational markets.

The Skyleader 500, along with its siblings the 600, the 400 and the 100, due out here later this year, will definitely find their places in the Australian light sport aircraft fleet.

The rugged suspension undercarriage will allow it to stand up to the rigours of training. Its comfort and visibility will make it an ideal cruiser and its almost too-good-to-be true landing characteristics will make it perfect for anyone who normally finds getting the wheels back down on the ground a chore -and isn't that most of us?

The Price

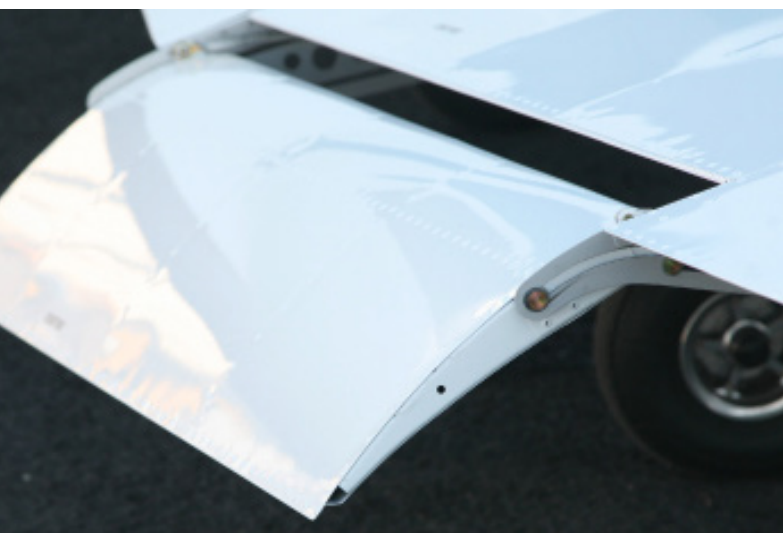
Russell and Brett say the 500 will sell for about \$135,000 flyaway, about \$10,000 more than it was a few months ago when the Aussie dollar was stronger against the Euro and the Czech Crown.

The Czechs take aircraft design very seriously. They actually have a Ten Commandments their structural designers are expected to follow.

Maybe that's why they are kicking our bums all over the park. Maybe that's why many of us like to fly their aircraft.

1. Live and breathe airplanes 24 hours a day, seven days a week.
2. Maintain contacts with a broad range of designers.
3. Use common sense and pay constant attention to planning human and material resources.
4. Trust your own strengths and abilities.
5. Practice effective leadership of employees, set construction-design goals and strictly adhere to them.
6. In drafting and testing, the following applies: 'Even a bad experience is a good experience.'
7. Be aware that you can never stop learning.
8. Correct planning is the most important phase.
9. Quality work depends on 100% commitment and passion for the project.
10. It is absolutely necessary to share knowledge and experience.

Source: <http://www.czechinvest.org>





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Never Exceed Speed (Vne) 140kts
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Manoeuvring Speed 84kts
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Basic empty weight 311kg
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Landing run 100m
Wing span 9.9m
Overall length 7m
Overall height 2.6m
Wing area 11.85m²
Aspect ratio 7.78
Cabin width 1.18m

www.atlasaviation.com.au

SKYLEADER 500





CAGIT

On the move again

By Dexter Burkill

After being 'stranded' in Tasmania for 16 months, CAGIT has finally moved. On June 19, I set off on an epic journey (for me), from my farm strip 'Destiny' at Denman in the NSW Upper Hunter Valley, in my ATEC Zephyr.

I was heading for Sandford, just a few kilometres across the Derwent River and on Ralphs Bay near Hobart to relieve Lawrie Barton-Johnson of the trophy. My journey was via a farm property called Munyabla Park near Henty to pick up a friend and student pilot, Peter Zweck, who had agreed to accompany me.

Apart from thoroughly checking over the Zephyr leading up to departure, I converted one of my collapsible jerry cans to a reserve fuel tank by fitting a marine fuel connector to its cap with the output line via a 12v Facet fuel pump to the return line to my main tank from the engine. This gave me a total fuel supply of 77 litres. I tested the system in flight a few weeks before on my flight in the Blue Mountains Bicentenary Flyover. It worked well. I was also carrying an empty collapsible jerry can on my Tassie trip to make it easier to get PULP when near towns.

The other thing I did was pitch up my FITI 3-blade prop 1.5 degrees for better cruise. Having a manifold air pressure gauge meant, I could

monitor load on the engine and the only change I needed to make was to select 4600rpm for take-off to keep MAP at 27.5", the maximum recommended by Rotax. This had no effect on take-off rolling distance (sub 200m) but reduced the rate of climb to a still commendable 1100-1400 fpm at our MTOW of 543kg with full fuel. The pitching up of the prop certainly made a huge difference in the air, giving us at times an IAS of 135kts at 5200rpm (24" MAP) and we even saw Vne a few times of 138kts.

After departing from one of Peter's paddocks, it was onward via Benalla, Seymour, Yea and over Glenburn Gap into Coldstream airfield where we were met by our friend, Mat Wreford. We checked out his wonderfully rebuilt Skyfox (VH experimental but we don't hold that against him). Mat was kind enough to share his hangar for the night. The next morning, it was back to the airfield to don our life jackets for the Bass Strait crossing via Flinders Island. We departed Coldstream at 10.28am. Leaving the coast, we climbed to 7,500ft at Welshpool and made a mandatory radio call to Air Services Melbourne Centre requesting a following schedule over the Strait. I nominated 15 minute interval operation reports.

The over water leg didn't end up being as scary as we had imagined it would be, because there was always a view of rocky outcrops and small islands.

We had studied the ditching manual from CASA, but were confident in the old adage that the engine never knows it's over water. After passing larger islands, Hogans and Deal, we were clearly able to see Flinders Island and landed there at 12.18pm. This was essentially a refuelling stop. We had sufficient fuel to make it to Hobart without it, but our reserves would be running low. We had run into strong headwinds the whole way and this wasn't forecasted to change the further south we went, even though Lawrie had texted to say all was good at Hobart. So, after topping up with the most expensive fuel ever (22 litres of AVGAS at \$3.03 a litre, plus a callout fee of \$20), it was time to depart for our destination - flying down the east coast of Tasmania after crossing a bit more of the Strait riddled with islands. The scenery down the coast was stunning from 2,000 and 3,000ft under the overcast.

When we reached Orford, the skies improved but it remained overcast with a ceiling around 4,000ft. We turned inland to skirt around the Hobart CTR to meet up with the Derwent River at

Bridgewater, then flew down the river at 2,000ft through Hobart. Yet another amazing sight. Then across Ralph's Bay to Sandford and to our ultimate destination, a private 380m strip 'Tamatis' which proved to be very challenging. After several very low passes and confirmation the Zephyr did actually physically fit between the trees on the water's edge, we landed to a small audience of seven people waiting for us with applause. Celebratory champagne from our hosts, Lawrie & Suzi Barton-Johnson, followed and then the official handover of CAGIT.

The following day, Lawrie and Suzi went out of their way to show us the sights and sounds of Hobart. They made it a great visit.

The next morning, the shortest day of the year, home beckoned and so with the CAGIT on board, we departed Sandford, back up the Derwent under a clear blue sky, this time tracking inland via the edge of Launceston CTR to reach Devonport. We passed some great scenery, but never did see Launceston because it was covered in fog.

At Devonport we turned west along the coast to land at Wynyard (Burnie Airport) to refuel and put our life jackets on once more. It was to be our longest nonstop leg - 399nm - so we pressed on to near Smithton on the northwest coast then turned towards King Island.

Once again we requested a flight following schedule from Melbourne Centre and we were again over water at a height of 8,500ft. A wall of cloud eventually forced us down to 2,500ft over King Island and we had to zigzag across the island around showers. This did, however, give us an opportunity to see the island up close, albeit briefly. Getting to the northern tip of King Island and seeing sunlight on the water ahead, I decided to climb above the cloud again to 8,500ft and with a bit of wandering around higher puffy

clouds, we were able to see the mainland at Cape Otway 70nm away. The sky cleared quickly after King Island and Cape Otway/Apollo Bay came closer with a good tailwind shortening the time. We cancelled flight following at Cape Otway and turned west along the coast to do a scenic flypast of the 12 Apostles at 1,000ft. Awesome!

From just past Peterborough, we climbed to 3,500ft and turned inland to Ballarat where we needed to refuel. We had been hoping to get back to Peter's place before dark, however, we struck 30kt headwinds on this leg, so despite having an indicated air speed of 132kts our ground speed was 102kts.

Landing at Ballarat, we quickly refuelled, conscious of remaining daylight, then we were airborne to Shepparton and arrived there just as the sun set.

After motelling the night, we were delayed at the airport, de-icing the wings because of the frost. Peter ferried buckets of water while I chamois'd the water off before it refroze.

We arrived at Munyabla Park in under an hour. After a cup of coffee, a refuel and a check of the weather, I decided to press on home, a leg of 270nm. The weather deteriorated after Young and I needed to make a number of diversions around heavy showers. Eventually, though, I found a way through to Denman over the Wollemi National Park and landed at 'Destiny' at 2.04pm.

I have now scratched some items off my Bucket List - been to Victoria - flown my own plane across Bass Strait - been to Tasmania - seen the 12 Apostles - collected the CAGIT.

I realise my trip was nothing which hadn't been done before in RA-Aus aircraft, but having tackled it myself now, I take my hat off to those who have done it in the rag and tube varieties.

Throughout the flight, I had my tracker app run-

ning on my mobile phone (www.greenalp.com) so our many relatives, pilots and friends could watch over us the whole journey (some were amused by the circle work while I was checking out Munyabla Park and Lawrie's strip 'Tamatis' at Sandford before committing to land).

Peter started a Facebook Page called CAGIT Hunters with us both as administrators, where we provided updates leading up to and during the trip for anyone interested. It is our intention to hand over this page to the next CAGIT claimant. Facebook users simply search for CAGIT Hunters to see a lot more. This is not intended to replace the RA-Aus website documentation of its journey, but is the day to day planning of the trip as it unfolds. I also have a Youtube video up (search for CAGIT), taken by Lawrie's friends of our arrival at Sandford.

By the time this story appears in *Sport Pilot*, the CAGIT will probably have moved on because two pilots from Swan Reach in South Australia, have already booked to come and get it. Let's keep it moving! 🍷

CAGIT STATISTICS

TOTAL DISTANCE FLOWN:

1,738nm

TOTAL TIME ENGINE HOURS:

18.6

TOTAL FUEL CONSUMPTION:

317.25 litres

AVERAGE SPEED

(point to point)

116kts



>> Peter Zweck, Lawrie Barton-Johnson and Dexter Burkill



This story is not about my first passenger, but probably my second or third one, and one who is very special to me, my thirty something year old daughter, Tracey.

I had spent the past couple of years travelling back and forth to Chinchilla, 180km each way, to pursue my lifelong dream of learning to fly. The trials and tribulations of this, along with descriptions of my expertise, could best be related by my CFI, Mike Touhy from the Western Downs Flying School, a pilot with nerves of steel.

However, I did my first solo circuit on my 60th birthday. As I completed the various endorsements, I ordered and took delivery of my brand new Foxcon Terrier. In the first few hours I tested the landing gear pretty well, so passengers were few and far between.

A Proud Father

by Owen Becker

Then Tracey came home for a few days. She was keen to see the new plane, so I proudly gave her the sales pitch as I took her on the big inspection.

At the end of the tour, and bearing in mind Tracey is not a good traveller (she was always accompanied by an ice cream bucket in the car) I asked if she would like to go for a fly, 'thinking I wish she had said no'. I suggested we go early the next morning when the air would be smooth.

The next morning, we were at my airstrip just after daylight and I think I did the most thorough and comprehensive on ground inspection I had ever done in my brief flying career. We climbed in and I gave her a pre-flight briefing on how it all works and what to expect. I explained we would do one very laid back circuit and told her what to do in the very unlikely event something went wrong.

We started the engine and taxied to the end of the strip, where I double checked everything. I asked Tracey if she was right to go and she said "Yes". I remember thinking 'damn, I wish she had said no'.

Full throttle and away we went, with me casually keeping her informed when the nose wheel

lifted, when we were airborne and all the rest of what was happening. After using the radio to pre-empt every move I made, we descended to about 300ft on approach. I then told her if she spoke, I might not answer because I needed to concentrate and it might be a little rough when we touched down.

Unbeknown to me, she slowly reached down between her knees and locked both hands around the pipe of the seat frame.

We did a little bounce but the landing was quite good, to my immense relief. After taxiing to the hangar and shutting off the motor, we climbed out.

Tracey was ecstatic and thought it had been great. I was as white as a ghost and visibly shaking. We agreed to go again over the next few mornings, which we did, going further afield to satisfy her growing joy of flying. I should mention that from our first flight my nervousness had disappeared.

And I am proud to say Tracey went back to her job in Bundaberg and, without my knowledge, enrolled in a flying school.

She is almost ready to go on her first solo in a Jabiru.

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FLIGHT INSTRUCTOR'S FORUM



Facilitated by the aviation guru **Professor Avius**

Tips and Hints

This month's forum again looks at the thoughts and pearls of wisdom from long time instructor, flying school owner and former RAAF pilot, Noel Kruse. He insists it is never too late to pick up a new idea or modify old, traditionally time honoured methods of Flight Instructional Techniques.

PRE-FLIGHT BRIEFINGS

Longer, detailed briefings are ideal. Students should be encouraged to pre-read before the briefing begins. The briefing itself should take about one hour and be presented, if possible, to a larger audience of students. Then a follow up briefing could be presented before the lesson's flight - linking the theory to the technique to be taught in the forthcoming flight.

To present the student with an adequate pre-flight briefing, the instructor should arm themselves with pre-prepared briefing sheets, some blank paper, a pen and a model aeroplane. These sheets could consist of unfinished outlines of important aspects of the lesson to be filled in as the briefing develops. These could be in the form of diagrams or unfinished sentences. This will assist both the instructor and the student in testing their knowledge and assessing their understanding of the concepts. The briefing then becomes more of a friendly chat to prepare the student for the flying lesson, so they have a greater understanding of what the lesson will involve.

After the flight, during the post-flight debriefing, these sheets can be referred to again to highlight points, experiences and to add further notes.

The student should keep the briefing sheets, building up a dossier of information which can be referred to at any time during their training. This will reinforce their pre-reading and most likely, add more data. (This will be particularly useful if remedial lessons are required).

USE YOUR HEAD, BY USING YOUR FEET

How many times has your student arrived for a lesson, straight from work or from gardening at home, wearing heavy, solid shoes? Noel Kruse says that when he had students start their first few lessons in the Pitts Special, he made them fly with bare feet, or at best with socks.

This allowed the student to get a real feel for the rudder and the aircraft. Perhaps without going to the bare extremes, suggest instead your student wear light, flexible soled shoes and encourage them to wear the same shoes each lesson. They will gain a greater appreciation for the dancing on the pedals required, especially in crosswind conditions. In general they will get a greater feel for the need to use their feet to keep the aircraft tracking in the direction and in balance.

SET A TASK

If your student is at the stage of heading out to the training area on a solo flight, set a task or sequence of exercises for them. The exercise should be set out on a card in the form of a set of diagrams or written as set of procedures. This could include, for example; climbing to a certain height followed by a medium turn to the right, straight and level for two minutes, followed by a descending left turn. Another great exercise is to set them the task to depart the circuit, fly out a certain distance, then turn back, make an inbound call, re-join the circuit and then depart again.

Benefits include better and more confident radio work, better scanning and lookout technique and improving the student's ability to join the circuit from a number of different directions.

EMPHASISE A POSITIVE EXPERIENCE

Besides ensuring your students' hard earned money is being well spent with good learning, don't overlook the need for building a positive relationship with them. The need for co-oper-

ation and camaraderie in the cockpit should never be overlooked.

Many students bring to their lesson memories of the student/teacher school relationship. Sometimes, this is not a good memory. Remember to always maintain two way channels of communication and be constructive and positive in all aspects of your teaching.

This way you will work together as a team to achieve their goal of learning to fly.

These valuable tips and more can be found in Noel Kruse's - book 'Flight Instructional Techniques' www.flybetter.com.au

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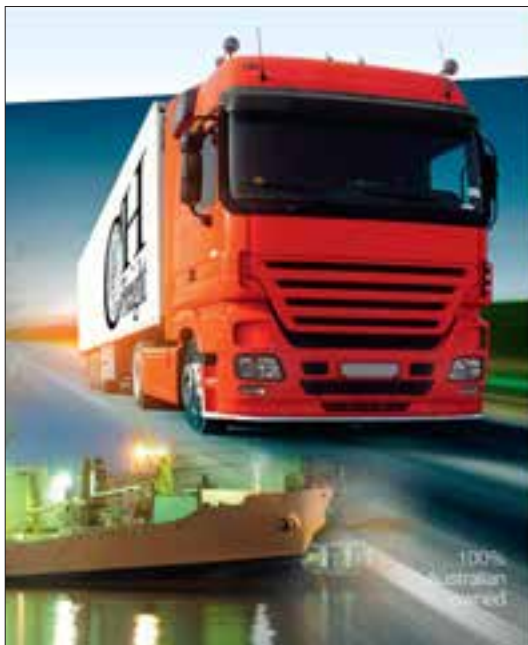
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Three Aviation Myths

PART 1

by Thomas Bisshop

During our flying careers, from our first instructor to well-meaning amateurs in discussion groups, we collect a lot of aeronautical 'facts'. But many of these are wrong and some are downright dangerous. This series of articles will debunk three of the more common myths.

Myth One

Aircraft overbanks in a turn because the outside wing is going faster, generating more lift.

Sanity Check

Let's assume for a moment this is true and see exactly how big the effect is. Take a hypothetical aircraft with an eight metre wingspan doing a rate one turn (360° in two minutes) at 100kts. Let's simplify more and assume the wings are rectangular, so the lift centroids of the wings are four metres apart.

The distance travelled in two minutes (360° for a rate one turn) at 100kts is $100 \times 2 / 60 = 3.3$ miles. So the diameter of the circle is $3.3 / \pi = 1.06$ miles, or a radius of 0.53 miles, which is a radius of 982 metres.

This means the outside wing centroid is flying at a radius of $982 + 4 = 986$ metres and the inside 978 metres. So the ratio of the centroid speeds is $986 / 978 = 1.0082$. Since lift is proportional to the square of airspeed, the lift ratio will be $1.0082 \times 1.0082 = 1.0164$.

In other words, the outside wing is getting 1.6% more lift than the inside wing. But that's not all of it.

As you bank more for a tighter turn, the horizontal difference of the centroids reduces with the cosine of the bank. For example, at a 45° bank, the lift difference is down to 1.2%.

Can you honestly say that you could detect a 1% difference? Is your aircraft really that precisely rigged? Is your passenger the same weight as you? Flying with nobody in the right seat would completely swamp this effect.

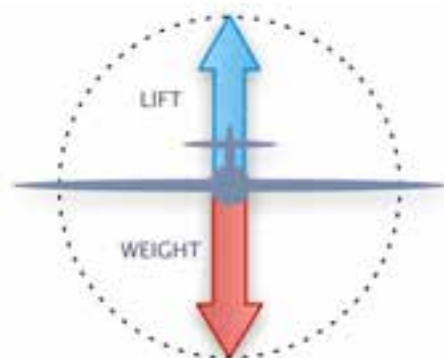
The Reality

Why do some pilots swear overbanking doesn't exist while others are justifiably scared of it? The fact is that if you fly the aircraft correctly, without use of aileron or rudder once the bank is established, it will not overbank. And if you mistakenly use aileron to correct what you think is an overbank in the circuit, you end up slipping with crossed controls and putting yourself at risk of a stall/spin accident.

So does overbanking really happen? Why do so many pilots think it does?

The diagrams show three scenarios: straight and level flight; a level (balanced) turn; and an unbalanced (descending) turn.

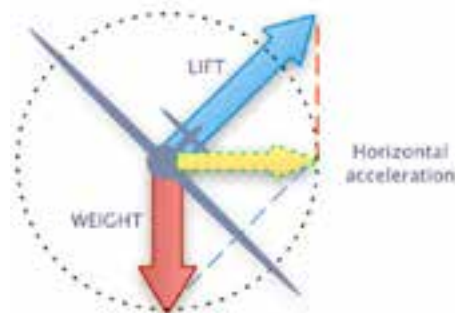
In straight and level flight, the weight of the aircraft is equal to the lift, with zero resulting force and therefore zero acceleration.



Straight & Level

In a stable balanced turn, the lift is no longer vertical so straight-and-level lift is not enough to overcome gravity. To avoid descending, the pilot adds nose-up elevator to increase the angle of attack and the lift until the vertical component of the lift is equal to the weight. Now the vector sum of lift and weight are not zero: there is a horizontal force.

Newton's Second Law says $F = ma$, or acceleration is proportional to force and in the same direction.

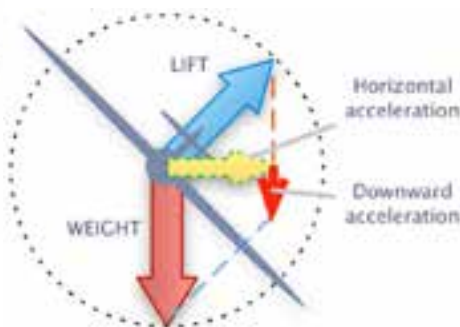


Balanced Turn 45° bank

This means there is a horizontal acceleration - which, after all, is the whole point of banking the aircraft - that's what makes it turn.

In an unbalanced turn, the pilot simply banks the aircraft but does not add up elevator. Now the vector sum of weight and lift includes a downward vertical component.

This means the aircraft is accelerating downward as well as horizontally, so it is turning toward the ground. Airspeed increases, and so does lift, but not enough to remove the downward acceleration. All it does is tighten the turn. This is not overbanking. It is the beginning of a spiral dive.



Unbalanced Turn

A pilot who doesn't think it through might think it is overbanking, because they are turning more tightly than they planned and are turning towards the ground.

To prove this to yourself, try the following on a calm day (with an instructor if you are concerned). Get up to a nice safe height and set up a straight and level cruise. Then bank to 30 degrees, using aileron only to establish the bank, and rudder only to overcome adverse yaw while establishing the bank, with enough up elevator so your altitude remains absolutely constant. Centre the aileron and rudder and add up elevator trim until there is no control pressure and the altitude stays constant. Now remove your hands and feet from the controls, and see what happens. Does it overbank?

So if you use aileron (and rudder if required) only to establish and exit the bank, and use the correct amount of elevator throughout the turn, you will not overbank.

Next time - Does Bernoulli have any principles?

Foxbat wishlist reaction

In the July 2013 edition of *Sport Pilot*, Juris Greste reported on a flight he'd made in a friend's Foxbat and listed the things he'd have changed about the aircraft if it was his. Some of the many Foxbat fans responded.

Be careful what you wish for

By Andrew Murray

Having recently acquired my own A22LS Foxbat, I was interested in the article by Juris Greste entitled 'My Foxbat wishlist'. Everyone experiences things differently and I was pleased to read about another pilot's first time impressions. However, I hadn't read far before I began to wonder whether it was in fact a Foxbat Juris flew or something else.

First, I read about two panel layout wishes, one to make the electric fuel pump switch more prominent and another to have the electric rudder trim indicator located differently. A Foxbat has no rudder trim other than the externally adjustable tab. There is electric elevator trim. There is also no electric fuel pump either, in my Foxbat or in any other I have flown. I subsequently learnt the particular aircraft, Juris, flew is the only one in the entire world to have an electric fuel pump fitted, this having been specifically requested by the owners. It isn't needed because of adequate gravity feed if the mechanical pump fails, but perhaps it is there for training purposes.

Also on the wishlist was the desire for a separate inspection hatch for the oil dipstick, so that the top cowling did not have to be removed to check the oil. I'm told early Foxbats did have this feature but it was removed. The Rotax 912 ULS uses very little oil and the level does not generally require checking more than once during the daily inspection. It is very important that the cowl DOES come off during that inspection however: the Rotax has a lot of pipes associated with the oil heater and the water cooled heads and it's essential to look at those carefully, as well as everything else under the hood, when doing the daily. The factory felt that a separate oil hatch made it just too tempting to check the oil and not remove the cowling. However, I do agree with Juris' suggestion of a wire retainer for the oil tank cap. I keep it in my hand to avoid putting it down anywhere, but no doubt one day I will forget and put it somewhere else.

Next on the wishlist was a suggestion to mark the parking brake lever with 'on' and 'off' instead of 'closed' and 'open'. On the face of it, this seems reasonable but it neglects the fact that the lever operates a non-return valve. The

parking brake is activated by closing this valve and pumping up the pressure with the brake lever on the stick (which is not crudely cut out of a piece of metal plate as suggested, by the way). The brake is therefore not necessarily 'on' when the valve is in the closed position and, if labeled as such, could easily mislead an unfamiliar pilot into starting the engine with the brake, in fact, off.

Next Juris spoke about the throttle position down on the door sill. Yes, if you choose this configuration for your Foxbat you do run some risk of snagging the crown jewels on the throttle during entry or exit and perhaps advancing the throttle while simultaneously retarding your reproductive prospects. I put up with that because (a) I like the natural resting position it gives to my throttle hand and arm; and (b) the kids are all grown up and the jewelry is mainly for decorative purposes these days.

However, if that equation comes out differently for you, the Foxbat does come with a standard yoke and centre-mounted throttle option.

Finally, Juris was unsure whether he could reach the starboard tank fuel cock, mounted on the right door post during flight. I am of average height and have no difficulty reaching it at all. I've never heard of anyone having trouble reaching it - that would certainly be a serious impediment. What I DO have difficulty reaching in flight and even eyeballing, if I have a passenger, is the sill mounted door latch on the passenger side. I am particularly careful, therefore, during my pre-taxi and pre-take-off checks to ensure it is closed. While one can fly the Foxy with the doors off, it would not be good to initiate that state unilaterally and in flight.

Juris makes the point that any ergonomic improvement must also improve safety and with that sentiment I wholeheartedly agree. The Foxbat was designed by some very pragmatic and professional people who used to design light aircraft in the former Soviet Union. They made things to last and they made them simple, though it may take some time in the Foxbat to understand why they did certain things the way they did. I have 30 hours or so in mine now, arguably not enough to be beyond the honeymoon period, but my affection for this wonderful little plane is still growing. It will never get you across the ground very fast without a stonking tailwind but the STOL performance, the outstanding visibility and the safe and precise low-speed handling more than make up for that for me.

Yesterday I spent some time dodging around rain showers on a cross-country trip and the

ability to do that at low speed with great visibility was very welcome. Oh, and one more thing about the visibility: Juris said that one can "almost see straight down". The transparent doors bulge slightly outward and there is no "almost" about it - you CAN see straight down!

A simple design

By Peter Harlow

(Foxbat Australian distributor)

First, let me say I welcome genuine and constructive comments on the Foxbat and have found the factory very helpful in continually developing the aircraft to make it even more attractive to owners.

In the nine years or so since the first Foxbat was registered in Australia, there have been many changes which have improved the quality, presentation, engineering, ground handling and flying characteristics of the aircraft. Many of these were suggestions from customers.

While Juris makes some interesting points, many of them are not really Foxbat-specific and some of them may perhaps result from inexperience or misunderstandings during the flight he took.

The basic design concept for the A22LS Foxbat is to be a simple, rugged, no-frills aircraft which is safe and fun to fly. Its short take-off and landing capabilities are becoming legendary in this class of aircraft. The cabin is wide, high and spacious, with plenty of room for even quite large people to fit comfortably. It probably has the best weight-carrying capacity in the 600kgs MTOW Light Sport/Recreational class. To paraphrase a well-known scientist: the design is as simple as possible, but no simpler.

In common with many good designs, the primary controls and main aircraft information items are given priority in their positioning, and secondary controls and other information placed according to their frequency and/or importance of use.

Thus the choke lever - typically used once a day, for the first cold start - is positioned out of the way, along with the park brake, so it is less likely to be accidentally set.

Conversely, the throttles, control stick handles and brakes fall naturally to hand when seated in the aircraft and are very relaxing to use over both short and long periods - in comparison with some panel mounted (or other strangely positioned) throttles and primary controls, which may require a continual stretch and/or contortion to reach.

The brake lever - which Juris disparagingly



referred to as "a piece of plate" - is in fact positioned and shaped to allow hands of many different sizes to operate the brakes comfortably and effectively - but not too effectively! Thus, it is difficult to over-brake and skid, and the general shape and form of the handle have worked well on several billion bicycles.

However, there is always room for improvement and I agree with Juris that the side throttle knobs could be a bit bigger and more rounded.

I also agree the trim indicator might be moved higher on the panel for students - although every experienced pilot will tell you that after setting it for take-off, elevator trim is adjusted primarily by feel, not sight. The switch labels could indeed be bigger - one of my own pet wishes; although I'm not sure spacing out the switches would make them any easier to use in bumpy air.

As Juris expects, the instrument panel content and layout is supplied almost completely at the request of the customer. Some people prefer standard analogue gauges, others the full glass cockpit treatment, with the Dynon Sk-

yView screen currently the most popular panel for pilots.

Juris makes a number of other comments in his article but most of them are not specific to the Foxbat - for example: ladders are provided at all airfield bowlers for high-wing aircraft (try refuelling a Cessna 152/172 or Piper Cub without one). Notwithstanding this, I do sometimes carry a small plastic fold-up box/stool to stand on for occasional refuelling from cans when flying outback - mine came from a well-known storage shop, folds flat, cost only a few dollars and weighs under a kilo.

Further, I have never seen an oil filler cap attached to any aircraft (maybe he should ask Rotax about that?); in my experience, fuel dipsticks on all aircraft (if they are even supplied) have to be used correctly (and often differently); pre-start checks always require the throttles to be set correctly; first of the day pre-flight checks usually require the removal of the top engine cowling to inspect the whole engine not just the oil; fuel selector valves/handles vary widely in type and positioning and I have never

heard of a pilot not being able to reach the fuel valves in the Foxbat; and so-on.

A specific word about the fuel pump - as far as I am aware, this is the only A22LS in the world with an electric back-up pump. This was installed at the school's request, as they want to be able to train students in its correct use. In the Foxbat (if not other high wing aircraft) fuel will gravity feed from the wing tanks at a more than sufficient rate to keep the engine going if the mechanical pump stops. I have not seen the fuel pump switch labelled in red on any other aircraft - maybe this is not such a bad idea?

There's one thing on which I agree wholeheartedly with Juris - even after 10 or 11 years of flying Foxbats, I still can't wait to fly one again!

Do you have an opinion about the ergonomics of the aircraft you fly? Wish it was different in some way? Email editor@sportpilot.net.au and let everyone join the discussion.



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THE Heath 'V' Parasol

>> Heath Parasol the first 95.10 in Australia

By Len Neale
Restorer and pilot

Part two of the story of the first 95.10 category aircraft ever built in Australia, the Heath Parasol (Part one featured in *Sport Pilot* August 2013). It is a gripping tale which includes the life of Vladimir Slusarenko, a Russian pilot and aircraft builder who gained the first aviation licence to be issued in Russia. In Part one, Slusarenko spent years fighting against the Bolsheviks in Russia and Siberia before being trapped in China where he spent five years before finally fleeing to Australia.

Miss Sandgate is born

In exile in Queensland, Slusarenko found a relatively normal life. He became an aircraft mechanic at Archerfield until he was able to purchase a garage in Rainbow Street at Sandgate with partner, Arthur Perkins. The business was known as the Sandgate Motor Company. The garage still exists as the Matilda Service Station.

A man with 7,000 hours flying to his credit, however, could not be content to stay on the ground and Slusarenko hankered to spread his pinions and to popularise aviation in his new land. Now known as Bill Slusar, he devoted his spare time to bringing flying within the reach of the average income.

The baby Heath Parasol monoplane was the result, born in the Sandgate Garage with parts

stored in the Sandgate Ice Factory, now the Mire 10 warehouse across the road.

The monoplane was designed by Ed Heath of the US around a modified Henderson four cylinder in-line motorcycle engine. The 1927 prototype sourced the 25-foot parasol wing from the top mainplane of a Thomas Moore Scout World War One bi-plane. It was designed to be an aeroplane anyone could build and fly.

Slusar chose the slightly more advanced 1931 Heath 'V' Parasol version with a welded steel fuselage. The plans were advertised for US\$5 in the *Popular Aviation* magazine, along with a series of articles written especially by Heath, outlining the construction methods in fine detail.

'Miss Sandgate' as the aircraft became known, would have been one of the first tubular steel fuselages welded in Queensland. Slusar went to the added effort of sliding a smaller steel tube inside the main one at each weld point. This project would have preceded the manufacture of the DH60 'Metal Moths' constructed in Australia.

With a proud Bill Slusar surveying his handiwork, 1932 photographs depict the already constructed and trial-assembled steel-tube fuselage and empennage, with wooden wing spars and ribs made from spruce. Bolts and diagonal brace tension wires had been eliminated from the previous 1927 Heath fuselage design. The original propeller was hand-carved from laminated wood slabs by a Sandgate carpenter. The wooden fairings on the rear of the steel tube 'V' struts were beautifully routed to fit perfectly and add rigidity to the strut without adding excess weight. Slusar modified his

Henderson engine by installing aluminum alloy pistons in order to gain more horsepower. He also cast and machined his own version of the extension housing which was required to fit the extra bearing to support the propeller shaft. Two large magnetos were fitted, one facing forward and the other aft, with a hole cut through the firewall to fit the latter.

There were other helpers in *Miss Sandgate's* construction, including Bill's partner, Arthur Perkins, their apprentice, Gordon Batten, and a youthful, Douglas Power. Doug remembered rushing to the garage after school to help Bill turn the wings as he covered them with Irish linen, then balloon stitched and doped them. Doug went on to learn to fly at Archerfield and actually flew the Heath.

In World War Two Doug trained with the RAAF and then the Empire Air Training Scheme in Canada. He later went to England with the RAF as a ferry pilot. On de-mobilisation back to Australia he started Powers Canvas at Toowoomba, a business his son continues to run.

On completion in 1934, Slusar's Heath Parasol was transported from Sandgate to Archerfield by Grice's Transport. Photographs of this occasion show the Heath equipped with a solid cross axle and large diameter wheels. It had 'MISS SANDGATE' proudly emblazoned down the side and is shown under the wing of an Avro 10 at Archerfield, similar to the famous Southern Cross Fokker Tri-Motor flown by Sir Charles Kingsford-Smith.

On this occasion, the aircraft had a trait which impeded Bill's efforts to get it off the ground. It slewed during the take-off run. A pilot, Captain Percival, watching Bill's efforts,



>>Bill Slusar 1932

suggested that instead of slowing momentum when the plane started to slew, Slusar should increase the speed. This was tried and proved to be the solution to the problem. It must, however, have taken its toll because the aircraft often required modification and repair during the test runs. Eventually, with the wings removed and the fuselage tied to the back of the truck with a piece of rope, the aircraft was ignominiously towed back to Sandgate.

The Heath, at this time, was not given a Certificate of Airworthiness, and was only issued a Permit to Fly by the Department of Civil Aviation, which restricted its flight to within three miles of the aerodrome.

In 1936, *Miss Sandgate* re-appeared at Archerfield with a lower slung split undercarriage using compression spring struts. This arrangement was similar to the Petersen Sportster, a later modified version of the Heath. It was

also similar to that used on the famous Avro Avian.

For a period, young men wanting to build up flying hours used the Heath at Archerfield as the local hack. Among these were Doug Power and also Bill Maddocks. Gordon Batten recalled with wonder that one intrepid young pilot even managed to loop the aircraft.

The Heath's fate immediately after this is not clear. According to Harold Kenny, there was one rather large gentleman who obtained a finer-pitched propeller for the Henderson Engine in order to try to get it off the ground with him on board. Harold swapped him the propeller for parts from an Avro Avian. Some of these parts were possibly later used in the Avian restored by Lang Kidby for his England to Australia 1998 re-enactment of Bert Hinkler's flight.

Gordon Batten heard later that shortly after the Second World War, *Miss Sandgate* was sold

for a few pounds to a man who wanted it as a toy for his son. Stories abound of a small aeroplane hanging under a house. A Mr. Peterson of Sandgate is rumored to have been its last owner before the aircraft made its way to Gympie.

As for Slusarenko, he lived to the ripe, old age of 80 before he died in the Eventide Nursing Home at Redcliffe in Brisbane. He was survived by his second wife, Claudia.

He apparently had been married in St. Petersburg and had one son called Igor, possibly named after Igor Sikorsky. But it appears both wife and son died before Slusarenko emigrated to Australia. Slusarenko's brother, Gregory, also came to Australia to live in Sydney, where his descendants George Slusarenko and Sascha White still live.

Next time: The Heath Parasol re-emerges in Gympie.



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The Long Lived Words of *Captain A.G. Lamplugh*

By Norm Sanders

Those of us who have orbited the sun many times may recall days long ago when governments took our money as taxes and gave it back to us as services. For aviators, one of the benefits was a network of Flight Service offices at many airports. A pilot could walk into such a place and be greeted by a friendly briefing officer who would help with flight plans and give weather details. These people had often been in the same location for years and could give information about the weather which no official forecast could match. Many were pilots or former pilots who knew what it felt like to be in a cockpit and gave advice accordingly. Alas, eyeball to eyeball contact is a thing of the past.

In the US, there were literally hundreds of Flight Service offices. And in each one, there was a big sign on the wall behind the counter which read:



These words have been quoted for many years, but Anonymous usually gets the credit rather than poor old Captain Lamplugh.

Turns out that Captain A.G. Lamplugh, (CBE, FRAeS, MIAeS, MCAI, FRGS) knew what he was talking about.

He was a fighter pilot in World War One and was a founding member of the UK Guild of Air Pilots and Navigators, which in the 1930's established criteria for licencing flying instructors. It was during this period he launched his now famous warning in a speech as head of the British Aviation Insurance Group. In 1945, he convinced the firm's shareholders to establish a company called British Aviation Services to ferry US built airliners to European customers. This operation soon became a major player in post war British aviation.

He retired from the Insurance Group in 1955 due to ill health and died shortly thereafter. Captain Lamplugh's words of aviation wisdom have been circulating around the globe for almost a century, a fitting memorial to a major figure in aviation. Pity Anonymous gets most of the acclaim these days. But in the end, it doesn't really matter who gave us the advice. It's the message that counts. Aviation is indeed "Terribly unforgiving of any carelessness, incapacity or neglect." You better believe it!

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WAYNE MATHEWS

Keeping up the standards

On July 18 and 19, RA-Aus was audited again by CASA, this having resulted from our Independent Technical Consultant's [June 23rd] recommendation that I be granted registration sign-off authorisation.

At the time of writing, I don't have the Authority's determination, but I do have notes I took at the closing briefing. And one of the things which came over loud and clear was the concern that factory-built aircraft are being modified without approval. It's not possible for the Association to register (or re-register) aircraft with modifications which aren't accompanied by the appropriate documentation (e.g. manufacturer's Compliance Statement, Type Certificate, or STC). If you own a factory-built aircraft and it has been modified in any way without the applicable approval, the aircraft must be put back to original condition/configuration until you get the required approval.

If you don't do this, you are operating contrary to the RA-Aus Technical Manual and the CAOs. If you have an incident while operating your aircraft with an unapproved modification, you're also potentially voiding your insurance cover. It's that serious.

Before we go any further, please let me make it clear that neither CASA or RA-Aus are responsible for the maintenance or modifications done to your aircraft. You, as the owner, have these responsibilities. If you aren't able or willing to do this, or if the aircraft is going to be used for hire and reward (i.e. Flight Training), then you are responsible for getting an L2 to do it. That is spelled out in the RA-Aus Technical Manual Section 4.0 under "Policy", and CAO 95.55, paragraph 6.1 (f) of "General Conditions".

In RA-Aus, we have two categories of factory-built aircraft:

1) Aircraft of a type and model which have been issued a Type Certificate (TC) and are commonly called Ultra Lights (ULs) and;

2) Aircraft that have been issued a Special Certificate of Airworthiness (SC of A) and are

commonly called Light Sport Aircraft (LSAs). There is also a sub-group called Experimental Light Sport Aircraft (ELSA), but they can't be used for hire and reward.

There are three fundamental differences between the UL and LSA categories. The first is that for manufacturers to get a type certificate for ULs, they have to prove to their certifying agency that the aircraft is built, and performs to, the precise standards that the agency (i.e. CASA, another national airworthiness authority (NAA) or a competent issuing authority) demands for Type Certified aircraft. This can easily cost hundreds of thousands of dollars to do. But for Light Sport Aircraft, the manufacturers only have to put their hands on their hearts and say they have met the Light Sport Aircraft standards, which aren't the same as the standards demanded of Type Certified aircraft. It really boils down to money. It is cheaper and easier for manufacturers to design, build and release Light Sport Aircraft.

The second difference is Maximum Take-Off Weight (MTOW). Under RA-Aus registration, both Type Certified aircraft and LSAs can have a MTOW up to 600kg, or 650kg if they are equipped to land on water. However, in Europe, UL type certificates have a MTOW limit of 450kg, or 472.5kg if they have a ballistic recovery parachute. So their MTOW cannot be more than 472.5kg. We can have two look-a-like aircraft sitting beside each other, and if one is UL and the other is LSA, they can, and probably will, have different MTOWs. RA-Aus will only accept a Type Certified aircraft in the configuration and limitations specified in the manufacturer's Type Certificate. It is true that some European manufacturers produce Ultra Lights and Light Sport Aircraft which are exactly the same except for the paperwork. But not in every case. The Aero-prakt Foxbat is an example. From as close as 5 metres, the UL and LSA Foxbats look the same, but the LSA Foxbat has been beefed up to give it the higher MTOW.

The third difference is the question of who is authorised to approve changes to ULs and LSAs. The old CAR 35 Authorised Persons (now referred to as subpart 21 M Authorised Persons) can approve changes on type certified aircraft (i.e. ULs) by issuing a Supplemental Type Certificate (STC) without reference to the manufacturer. But any changes to an LSA have to be approved by the manufacturer.

What this means is that if, for example, you want to put Vortex Generators (VGs) on your aircraft: with a type certified aircraft, you can buy one of the kits from the US which comes with an STC for your aircraft. And you can legally fit the VGs to your Type Certified UL aircraft without having to get the manufacturer's blessing. But with an LSA, even though the VG kit has an STC, you still have to get the manufacturer's approval. And that could be problematic if the manufacturer is no longer in business, or if they sell VG kits themselves.

This brings us to the Experimental Light Sport Aircraft (ELSAs). In the event that an LSA manufacturer is no longer in business, or you want to make a change the manufacturer would rather you didn't, or make a change which is not within the Light Sport Aircraft standards (e.g. inflight adjustable propellers), you can still make the change but you have to get an Authorised Person to issue an Experimental Special Certificate of Airworthiness. You will have to put an E in front of the 24 register number, an experimental placard in the cockpit, and you will only be allowed to use the aircraft for private operations and for the flight training of the owner.

The bottom line though, talking about factory-built aircraft to be used for hire and reward, is that irrespective of whether our aircraft is UL or LSA, it is not legal to make changes which have not been approved for the aircraft. And we, the owners and/or pilots in command, must not operate an aircraft which may no longer comply with the manufacturer's standards or, which has unapproved modifications. 🚫

25 years ago

by Mark Clayton

September/
October 1988

Inside the front cover, Bert Flood Imports had its usual full page ad, offering for sale hot new Rotax engines 'From the Rotax 277 (28hp) to the Rotax 532 (65hp)'.

In his President's report, Rod Birrell, urged members to comment on a CAA Aviation Regulatory Proposal 88/10 which would require ultralight pilots, flying 101.55 aircraft, to be registered as conventional aircraft, carry airworthiness certificates and have much of the required maintenance carried out by a LAME. Rod pointed out that while meeting all these new requirements, the pilot would still be banned from licenced airfields, prevented from flying over 5,000ft and prohibited from carrying out any commercial operations other than flight training. Rod told members he felt ARP 88/10 tried to impose most, if not all, the limitations of flying a general aviation aircraft on ultralight pilots without allowing any of the privileges.

Secretary, Graham Kevin, bemoaned the fact that many members were complaining about the AUF board. They accused the board of being distant from members and guilty of imposing a raft of tough new restrictions on pilots. Graham explained that it was the CAA which insisted on the regulations and that the AUF was

merely responsible for implementing them. He got stuck into those members he accused of being whingers and appealed for them to be more constructive and cooperative.

"With our membership now over 1,700 and by the end of the year nudging 2,000, your Federation is no longer a hillbilly outfit. It is a full flown (sic) professional organisation with a workload to match."

In the Letters to the Editor section, Mr PW Bowers, manager of the Radio Communications Operations Branch of the Department of Transport and Communications, responded to a letter from the AUF requesting a frequency for ultralight operations.

"There are already frequencies identified in our brochures for aircraft and aeronautical and gliders and sail planes, which are suitable for the purposes mentioned in your letter.

"You are able to use any of the above frequencies. However you will need to make application to the Department for an aeronautical licence to cover operation of the ground-based equipment; and an aircraft licence to cover the equipment in the aircraft.

"The licence fees for each of these services are: Aeronautical Station \$78. Aircraft Station Class B \$35. We will issue you the appropriate licences once we have received the above applications and fees."

OFF THE SHELF

True Aviator Watch

Leading US pilot supply company, Scheyden, has launched its True Aviator watch series with the introduction of its first model at Oshkosh.

The Aviator Steam Gauge offers an Aide Memoire Bi-Directional ATIS Bezel as a paperless reminder of Automated Terminal Information Service (ATIS) recordings. The lower gauge is a multi-feature digital IFR timer that can be used for timing instrument procedures or assisting with timed checklist items. The upper gauge features a Liquid Filled Magnetic Compass that provides awareness on the ground, whether traveling to an unfamiliar city or an unimproved backcountry airstrip.

Each timepiece comes with engraved airport identifiers and a serial number on the back. It is available in Brushed Stainless Steel, Stealth Black or Swiss Gold - all ion plated to increase durability.



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Lightspeed Zulu PFX

Prestige Headset maker, Lightspeed has just announced its latest bit of headgear for pilots.

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Wallaby Airlines



>>VIP passengers included Prince Charles and Princess Anne



The long and colourful history of the RAAF Caribou aircraft is to be told in a new documentary.

Sydney-based television production company, Lace Productions, has been overseeing the project. Producer, Linda Woods, has been researching the subject for the past four years and is in the final round of pre-production funding for 'Wallaby Airlines - The Caribou in war and peace'.

The 7 Network, the only Australian television channel to cover the delivery of the very last Caribou to the Australian War Memorial, has also committed to broadcasting the documentary next year to coincide with Anzac Day. 2014 will be the 50th anniversary of the first arrival of the Caribou into Australia.

It's a subject Linda is passionate about. "Now is the time to tell what happened in the 45 years the Caribou was in service," she says. "They were bought for war, but also served as an important peacetime aircraft. They and their crews came to the rescue in droughts, floods, search and rescue and medical evacuations."

"During the Timor crisis, an RAAF Caribou pilot was hijacked at gun point in a flight that came dangerously close to crashing off Darwin.

"Over the years they carried everything from livestock, to leaky bombs, to the Queen's luggage.

"VIP passengers included Prince Charles and Princess Anne, Bob Hope and the cast and crew of Survivor 2000. "Former crew members have told me their stories and have also dug out their old film and photos.

"Channel 7 has given me access to its News archives which go back to even before the aircraft entered service - to the day when De Havilland brought the plane to Australia for a sales demonstration."

As part of the final pre production round of funding, there are a limited number of positions still available for people to get financially involved.

For more information:
<http://mobcaster.com/fundraise/wallaby-airlines/pilot>
email linda@laceproductions.com.au.



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ANGELFIELD *Comes Alive*

By Ralph and Deb Percy, Burnett Flyers

With government funding cuts, councils often look to sell or commercially develop airfields. We took the approach of forming an RA-Aus affiliated club to lobby for recreational aviation and set a goal of promoting aviation in our area (inland from the Sunshine Coast).

Taking advice from others who had been in flying clubs, we limited voting rights to flyers and aircraft owners. There has been an occasion when this has saved a club from outsiders trying to 'load' club membership for their own objectives. We do have social members and they help promote the goals of the club. With a lot of hard work, and very little money, we have established a regular fly-in venue for local aviators at a field which had not seen much use for many years. Our club membership grows continually and the fly-ins bring new visitors each month.

June was our biggest at Angelfield. Twenty eight aircraft flew in from far and wide. One pilot came from Gladstone to attend the brekkie. Savannahs flew in from Caboolture and several RVs of different models buzzed the strip. Ralph was kept busy making his famous muffins.

We encourage other clubs to start a fly-in on a regular basis. Speaking to pilots who attend ours, everyone is looking for somewhere to fly, where they can sit down at the end of their trip and have a meal.

Many airfields are not close to food outlets or facilities, but we are lucky to be only 700m from Murgon's main street. Fuel can be arranged.

Profits from the brekkie are put back into the improvement of the airfield. Thanks to a donation from one club member we have been able to provide a real time weather cam and automatic weather station for our website.

For more information www.burnettflyers.org



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RA-Aus By-Election notice

The following members have been nominated for the vacant North Queensland (NQ) board position:

- Ross Millard
- David Marteene

In accordance with RA-Aus By-Law 1 and Rule 13 of the RA-Aus Constitution, members currently registered in the North Queensland region are entitled to vote for one of these nominees using the NQ By-Election Ballot Form (and pre-paid envelope) included with this magazine. Ballot Forms are also available via the member's portal on the RA-Aus website www.raa.asn.au.

Completed ballot forms must be received by head office before 4 p.m. (E.S.T.) on Friday, October 11, 2013.

Mark Clayton
General Manager
Recreational Aviation Australia Inc.



**Ross
Millard**

Thank you for considering me as a candidate for the RA-Aus North Queensland area board representative position.

Our sport and the RA-Aus organisation is, at present, in a period of serious change, requiring internal adjustments, and a serious upgrading of all its basic management structure. These problems have occurred because of continued strong growth in overall membership, external regulatory pressures and because of internal record keeping capabilities and staffing levels, which had fallen behind the required workloads.

The RA-Aus is, in fact, a victim of its own success. Our sport in this country enjoys freedoms and operating flexibilities that are the envy of many other countries, such as in Europe and the US.

These hard-won freedoms are the legacy of considerable efforts by many dedicated individuals over a period of many years.

We will need to meet the current serious challenges head-on, and with a team that has the required experience and judgement, to make the correct decisions. They will also need to have the flexibility to make rapid decisions if required, together with critical short and long term operational decisions, that will see the sport continue to grow, and continue its success into the future.

From holding past office positions in UL flying clubs, I am aware that there are those who prefer to just talk, and play politics with our sport. This is not a time for politics, but a time to step forward, put your hand up, and get the job done. I am also very aware that the majority of pilots, myself included, just really want to, in the words of Chuck Yeager "go out the back and fly ultralights".

Our main enemy is not from within our organisation, but from external sources which will attempt to over-regulate our activities, stifle the normal, and ever on-going aircraft improvements and developments, and to generally overburden the membership with requirements that will with time, destroy the basic freedoms and fun elements that we have come to enjoy in our unique sport.

How do I see our future? CASA, for one, has the ability to close us down overnight, if we give it no other choice. We need to resolve our internal management and staffing problems now.

The energies wasted on political bickering by members needs to be put instead towards strengthening our organisation, so that we are better equipped to combat future challenges to our freedoms and indeed our very existence.

When elected as your representative on the board, I promise to fully support any and all efforts that will ensure the continuing health of our organisation and the continuation of freedoms we have fought for over so many years.

Obviously, considering past efforts, our elected office holders also need to improve their respect, and communications with the membership. The membership is, after all, the very basis of our sport, and our organisations' basis for our fiscal health. They need to know

what is going on day to day within our decision making process.

I started my aviation activities at age 17, as an active skydiver at Camden NSW. In ten years I gained a D licence # 312, Senior Parachute Rigger rating # 8, and a cumulative 24 hours plus of free-fall time. Around 1982 while travelling and working in Northern California, I saw my first ultralight aircraft. Shortly afterwards, I commenced my initial flight training in an open-cockpit Eipper MXL-2, then soloed in a Quick-silver GT 400, gaining a US Ultralight Licence A001440. Around this time, I also designed and scratch-built an original UL designed aircraft, which I flew extensively throughout California. Additionally during this period, I also added an unrestricted PPL pilot's licence, with night VFR rating, together with an FAA Airframe and Powerplant mechanics rating (A&P).

Upon my return to North Queensland in 1995, I purchased a 582 Drifter which I flew actively for the next eleven years throughout North and North Western Queensland. I then traded up to an Australian Lightwing GR-912 Heliview, which I still currently operate. I have had the pleasure of experiencing over forty different UL types over the years. I am committed to the future of the sport I love and will do all I can to see it survive well into the future, despite current setbacks.

My commercial interests in aviation currently are as a contracted professional Aircraft Maintenance engineer in the GA field, plus a small amount of remuneration received from my RA-Aus Level 2 maintenance activities.

All members in my area are welcome to contact me at any time on rossm3370@optusnet.com.au.



David Marteene

I am pleased to accept nomination for member's representative on the Board for North Queensland.

I am an enthusiastic pilot who enjoys flying and maintaining our J230. My wife, Tracey, and I run a non-aviation related mechanical repair workshop we founded in Clermont 18 years ago. Over this time I have learned what makes a business successful.

Over the past two years at least, we have all seen RA-Aus not being successful in achieving what ordinary members want - to go flying safely with the minimum of regulation and cost and to be helped, not hindered, by our RA-Aus.

RA-Aus is no longer a small club. It needs to be managed like the medium sized enterprise that it is. This means putting professionals in

to manage some tasks, most notably the SMS, until it is established and running well.

As the member's representative for North Queensland on the Board I will focus on the following issues:

Two-yearly aircraft registrations and membership renewals would improve cash flow and dramatically reduce the staff workload;

The current situation with grounded aircraft and the backlog of registrations will have to be lived with in the foreseeable future but the move to better and more modern record keeping along with two year registrations should prevent this happening again;

The automatic granting of a Level 1 maintainer authorisation with the issue of a pilot certificate needs to be changed to a requirement to undertake a manufacturer's (specific) course and an RA-Aus run workshop (more generic) or a recognition of prior learning (RPL). This will increase an individual's awareness of their aircraft and increase safety with the enhanced knowledge;

We need to be looking at accident investigation data within the RA-Aus to bring to light the root causes of the increase in accidents/fatalities

we have seen over the past couple of years and I believe that within the membership there would be people very well qualified to carry out these roles;

I will endeavour to maintain an open conduit between the members, the Board and Executive.

I chose the RA-Aus route as it was a lot more achievable, cost effective and enjoyable. I never thought that I would put my hand up for the Board as all appeared to be OK.

I can see now that without strong and open leadership, the end may well be in sight for this organisation as we know it. If a governance turnaround is not initiated very quickly, we will have far more aircraft parked on airfields all over the country, while we wait for the next model of RA-Aus to be put forward.

I have no financial interest or receive any financial gain from any form of aviation related activities. I urge all members to vote, regardless of who you want to see on the Board. This is your chance to help your organisation.

I am busy, but willing to commit on behalf of my fellow members.

My mobile number and email address are 0407 144 694 and marteene1@bigpond.com.

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2671 JABIRU SP 500/6 19-3717



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2760 JABIRU J230C



First to see will buy. Excellent condition, Flies hands off, genuine 120 knots, one owner, always hangared, serviced every 20hrs, TT445 hrs engine & airframe, Microair radio, transponder, JPI Fuelscan computer, couples to Garmin 296 GPS, iPad bracket, Garmin Pilot II GPS, 10 ply tyres, Low fuel light, Dual strobes, many extras, can deliver. Reduced to \$67 500 + GST. Phone 0418 930 100

2926 JABIRU SP-6 19-3627

Jabiru 3300 engine [solid lifters] 781 hours total time. Lowrance 2000 color GPS 5". Reg till 01/14. Level 2 maintained. Microair radio/intercom, 2 Blackhawk Headsets, Spats x 3, 85lt Fuel Tank, Aircraft Covers, external power supply, professionally painted 2 pack, cruise 115kts 19lt hr. Asking \$33,900 .Ararat/ Gee-long area. Phone Doug 03 5255 2971 or 0409 084 589. dpark221@gmail.com

3028 FLIGHTSTAR 11 SC



Brand new 2 seater. Protective covering still on doors and windscreen. Airframe 0 hours. Engine 0 hours. HKS 80 HP fuel injected turbo with intercooler. Aerolux 3 blade adjustable prop with spinner and individual blade covers. Hydraulic disc brakes. Carpeted interior. Easy clean Mylar flying surfaces. ASI, VSI, Tacho, Manifold pressure, Slip indicator. \$39,500 complete or if desired, \$29,500 minus engine and prop. Phone 0419 439 976. Email formefitness@bigpond.com

3113 SPORTSTAR SL



Bargain low hour Sportstar SL, private use, 215 hours approx TTIS. Dynon D10A EFIS, almost new Varia

2-blade in-flight adjustable prop, Garmin GPS495 AirGizmo dock, electric t&b, Whelen LED landing light and external power socket. 600kgs MTOW. L2 maintained, RA-Aus registered. \$76,000 no GST. Please phone Mark 0414 642 340

3176 STORM 300 SPECIAL



Level 2 owned and maintained. 912S 100hp Rotax 780 hours. In flight adjust prop, KT79 transponder, 2X VHF radios Lightspeed headsets, carb heat, AH (Vac) Garmin 196 GPS, Man pressure, ASI, ALT, CHT, fuel, oil temp and press \$62,000 no GST for quick sale 0419 348 288 or pbug@onthenet.com.au

3195 2010 PARADISE P1



2010 Paradise P1, the Rolls Royce of LSA aircraft. Built to last. Fast, safe, comfortable with the largest baggage area of any LSA. Made for touring. Fully Instrumented with glass and convention gauges. A go anywhere aircraft capable of flying across the continent on autopilot. \$95,000 Phone 0412 834 225 Email chp@tpg.com.au

3209 X-AIR



A1 condition TT 361 nil incidents, Rotax 618eng (RAVE) for high altitude. 3 blade Bolly prop. Modified HD undercarriage, wide wheels, always hangared, yellow and green, new tail cloth. Dual headsets, intercom, radio plus UHF. Alt, compass, IAS, slip ball, EG's, eng instruments \$16k. Phone 0416 204 472 Email rooaroo12@yahoo.com.au

3210 JABIRU JT230-D



Total service time: 595.1hrs, Last service: 583hrs. Fitted with Garmin GPS 296, Microair Radio 760, Electric Turn Coordinator, Standard Flight and Engine Gauges. Serviced by L2. Registration 24-5316. Flies well. Located in Chinchilla, Queensland. \$78,000 contact Mark Murray 0499 002 642.

3218 SKYRANGER SWIFT



240TT Always hangared, Rotax 912 ULS 100hp, XLAM Covering, 90L Tank ICOM A200 Radio, SoftCom Intercom, Precision Vertical Card Compass, Duel Magnum Strobes, adjustable carb heat, Garmin 96C GPS. \$38,000 Contact Doug 0400 737 911.

3227 JABIRU J120C



November 2009, 313.2 hours total time airframe and engine. Altimeter, ASI, MicroAir radio + intercom with two headsets, Davtron chronometer, Oil pressure, Oil Temp, C.H.T, Volt meter, Slip ball, V.S.I, Tacho, landing light and strobe, Colour 296 Garmin GPS. Always hangared, perfect presentation, nil accidents never used for training. QLD \$47,750.00. Ph Owner on 0423 532 621

3241 AIRBORNE EDGE X SERIES



With Trailer Wizard wing, 582 Rotax 376 hrs TT, custom made registered trailer, heavy duty covers, helmets, Micro avionics, UL-200 headsets, Garmin GPS, stoneguard, landing light, tall windscreen, well maintained with maintenance history.

\$16 000 ono, Email bear.humphries@gmail.com or phone David 0414 256 246

3243 SEAREY AMPHIBIAN



Ultimate fun machine! Expensively restored. (\$43,000 parts alone!) Including new 100hp Rotax 912ULS engine, IVO propeller, VFR instruments, Icom A210 radio, Microair Transponder, Windscreen, Canopies, Fat wheels. Wings recovered in Ceconite. Drastically reduced for a quick sale \$61,500 ONO. Save years of work! Custom covers. Launching trolley. gwsb@yahoo.com. 07 5524 2144.

3258 STREAK SHADOW



TT947hrs, Immaculate Record Holder, 2-place tandem, rebuilt Jabaru-2200, inc Radio-GPS, Two-Axis elec-trim. Extend-Rear Foot-Well, Belly Fuel Tank, Engine-Mon camera-screen, Carb-Heat, Isolate-switch. Nil-Accidents. Rego Aug-2013. Easy to Fly, \$23,500. Dave 0402107927. Avail Enc-trailer. \$3000. Together \$25,500.00. Full Details Photos www.tp21.net

Selling your Aircraft?

RA-Aus head office & Members' Market enquiries

Ph (02) 6280 4700 Fax (02) 6280 4775

E-mail admin@raa.asn.au Web www.raa.asn.au

3287 EUROFOX 3K



\$59,990 - 2008 EUROFOX 3K. TT:1650. L2 maintained 912ULS. Excellent touring A/C. Great condition. Solid performer. Dynon D100 EFIS, AvMAP IV GPS. Hangared since new. For sale due club fleet upgrade. Contact Peter Ford (pford@mac.com) Phone 0438 882 052. Hastings District Flying Club - Port Macquarie (www.hdfc.com.au)

3290 JABIRU J120



Manufactured May 2010, 252 hours trouble free, AD's up to date, new through bolts/nuts. Nil incidents, LAME/L2 maintained, suit new aircraft buyer, Dynon EFIS, Transponder, VHF/GME UHF CB radio/intercom, Garmin 495 GPS, Leather embroidered seats, Sensenich prop, Cabin heater, booster seats, aircraft flies/runs like a dream, Always hangared, 9.5/10. \$50,000 Phone 0418 614 102

3295 JABIRU 2200 ENGINE

No: 22A 2107 250 Hrs TT. All current ADs up to date. Engine removed for 6 cyl upgrade. Includes ram air ducts, oil cooler and exhaust. \$8,500. Phone Brian 0411 135 050

3301 SAVANNAH - STOL



Rotax 912 80hp. DUC bipala prop. Slats fitted. Has extra instruments and new MGL trans and coms system fitted. King transponder. wheel spats. Fully maintained by ICP in Italy. Ideal aircraft for low hours pilot. Always hangared. \$50,000 Situated at Mandurah, contact Garth at garth.lb@bigpond.com or 0409 599 845.

3309 THRUSTER TST



Good condition, always hangared. TT 1292 hours, 348 hours Rotax 582 motor. Heavy Duty under carriage. Intercom with 2 head-sets, UHF Radio. Very reliable, making room for new aircraft. \$12,000 All reasonable offers considered. Contact Anthony 02 6993 8189 or 0429 938 189

3312 ALLEGRO 200



Allegro 2000, twin Seater, full panel with all, radio + headsets navigation equipment, Rotax Motor. Beautiful little plane well serviced + hangared in Kyabram Vic. 361.4 hours since new No damage history. \$55,000 ONO. Call John 0427156327

3315 JABIRU - SHARE THE DREAM



Your new Jabiru is closer than you think FLIGHTSYNDICATES.COM.AU Syndicates seeking members based at Caboolture, Cairns / Tablelands, Adelaide environs, Sydney environs, Adelaide / Parafield, Melbourne area, Rockhampton / Hedlow, Jandakot/Northam. 07 32892545 info@flightsyndicates.com.au www.flightsyndicates.com.au

3316 BANTAM B22J

Jabiru Engine with oil cooler, 89 hours, no accidents, always hangared, registered. Price \$25,000 ONO Contact Gloria Armbrust Phone 07 4094 3080 Email garmbrust@activ8.net.au

3329 BUSHBABY



2 Seater Rotax 582. Complete instrument panel with Icom radio, intercom, FM/CD radio and leather seats. Ideal for short field operations and touring. Always hangared. Urgent sale due to moving interstate. Price: \$ 22000.00 Neg. Call Etienne for more info or pictures on 0409 768 370

3330 HUGHES LIGHTWING HELLVIEW



GR 912S Aircraft is always hangared. Flaps, 72" warp Drive adjustable prop, long range tanks, carb heat, cabin heat, Magnum tip strobes, intercom, Dave Clark 13.4 headphones, Icom Vhf, Garmins GPS3, Fuel pressure gauge and warning light. 12v turn bank, oil temp, oil press, egt, cht, volts, VSI, Alt, Tach & hrs. \$38,000 Phone 02 6796 2203

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3331 LIGHTWING BONNET AND COWL

Lightwing GR 582 Engine bonnet and cowl. White in colour excellent condition. \$300 02 679 6203

3332 FLIGHT DESIGN CT2K



CT2K, 2004, 775 hrs, 100 hrly completed by L2, full condition report done, L2 maintained, Rego till Oct, hangared since new, adj 2 blade prop, 50 kg luggage, 16 lts ph @ 110 kts @ 4300 rpm, cruise 120 kts, rate of climb exceeds 1200 fpm, clean reliable. \$77,000. Brian 0419 156 133

3339 LIGHTNING LSA GRT



Glass cockpit, GRT Engine monitor, Auto pilot, Garmin radio, Transponder, Garmin 695 GPS, PS Intercom, Kannad ELT, Park brake, Electric trim and flap, Jabiru 3300 engine. Always hangared and in excellent condition. \$105,000 ono Phone 0408 813 501 South Australia

3352 WANTED ALL INSTRUMENTS

suitable for Zodiac 601HD equipped with lycoming 235 engine, (ALSO brake master cylinders (even to be reconditioned) and any service or operating manuals for this a/c. and exhaust system Email shackleton210@gmail.com Phone 0427 194 235

3358 SKYFOX GAZELLE



Good aircraft 900HRS T/T all new hoses top overhaul new tyres basic panel cheap to maintain nothing to spend \$29,500.00 ph 0428 582 217

3380 PACIFIC HAVEN AIRPARK



Near hervey bay. Own a share in a 3,000ft all weather bitumen runway and taxi ways with pal lighting 15/ x14/ metre hangar, 3 bedroom house on 2.5 acres, established lawns and gardens. no body corp. fees. sale due to ill health. \$595,000. Phone 07 4129 0651 or donlee@y7mail.com.

3384 VANS RV12



T.T.I.S. 30 hours, since new. Rotax 912ULS. Round gauges, Icon flipflop radio and transponder, comes with a set of wheel spats and bolly prop. Frim \$75,000.00. Contact Brian Howard 07 55462251 or email briananddale9@bigpond.com.

3387 JABIRU 3300 6CYL.



Jabiru 3300 Build Year: 2006 Thin Fin engine (Zero Hours never been started but turned by hand regularly). \$12,000 Jabiru wooden Prop, Spinner etc (all zero hours) \$1500 if purchased with engine. Phone Greg Tucker 0439 617 044 Email: greg.bathurst@harveyworld.com.au.

3396 SKYFOX GAZELLE



Comes with fresh 100 hourly. New motor out of box just installed. Inside and outside 9/10. Very tight and tidy airframe. Icom radio, King transponder, full instrument panel. NDH. Always hangared and LAME maintained. New side and roof perspex. \$45,000 + GST ONO kjeffs@bigpond.net.au Ph 0438 508 576

3398 THRUSTER T500



Thruster T500 Rotax 582, 230 hours since overhaul. UHF and ICOM VHF radio. 2 seater with long range fuel tank, doors. Flies great, well maintained. Located Lockyer Valley with own hangar on private airstrip. \$14,500 Phone Paul 0427 622 176

3406 FOXBAT A22L



Excellent condition, white in colour, 2000 TBO, Flydat instrumentation, hangared at Scone NSW. \$68,000 Phone 02 6545 9133.

3408 JABIRU UL 2.2



TT 790hrs A & E as at 23.07.13, Long wing with winglets & vortex generators. Excellent STOL performance. Cruise 95-100 knots @ 12 lph. Electric T & B, strobe, Garmin aera 500 GPS. Spare prop. Always hangared. Sth Aust. Phone John 0400 865 868. Reduced to \$35,000.

3409 STREAK SHADOW 618



1999 TT 280 hrs Rotax 618, L2 maintained, good condition, safe aircraft to fly, does not bite, good low hour pilot aircraft, 2 headsets, intercom, complete set of aircraft covers, spare prop and some spares. Price reduction \$17,500 ono mrbadgertea@gmail.com

3417 KITFOX 3



670hrs TT engine and airframe. Lame built and maintained, it has full instrumentation, 3 blade bolly prop, 100 lt tanks, burns 14lt per hr and has a 75kt cruise. Always hangared, this attractive plane is an absolute joy to own and fly. \$37,500. Phone John 03 5978 8212.

3420 SKYDART 111



197 hrs. TT eng & airframe. Rotax 447. Trailer incl. Very economical at 11Lt per hr. Great fun a/c simulate glider with power setting. ASI, ALT, M/Comp. CHT, EGT, RPM, hour meter. Cockpit similar to glider. \$8900. Phone Bob 07 4934 4299

3422 ZODIAC 601XL-B



120HP 6cyl TT169 hrs. Magnificent built aircraft

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superb looks flies like a dream no expense spared like new. Glass panel Dynon D100 & D120 Avmap4 Micro air radio/ transpdr leather seats no accidents kept in hanger. Arguably the best \$64,900 must go. Make an offer! Call for info and pics 0428 923 250

3425 JABIRU



Very nice aircraft great endurance easy to fly lots of room. Working too much not enough time to fly. All work done by level two. \$80,000 Ph. 0411 123 669

3426 CHEETAH XLS 24-7072



76 hrs airframe and engine. Jabiru 2200 PP. Single owner always hangared. Easy to fly and maintain. 110ltr tank, spacious cockpit. Digital inst with analogue backup. 75kts cruise. Based Bunbury, WA. Half share considered. \$39,500 Contact George on janspo@westnet.com.au or 0406 226 566

3428 JABIRU J230C



Great aircraft latest engine updates completed, too much work not enough time fly. New prop no accidents great touring aircraft, mains spats not shown in pic. \$88,000 Phone 0411 123 669

3436 X-AIR NEEDS TO FLY



Only 6 hrs total time on airframe and Rotax 582 blue top. 80L fuel tank, 5 hrs endurance. Electronic and analogue instruments. Xcom VHF radio/intercom with music and UHF radio. Wide entry doors. Hangared. \$18,500 ONO. Phone 0417 612 414 or email wbowkett@bigpond.com.

3439 JABIRU J230



2008, 520hrs, A-1 condition, twin Becker radios,

transponder, built-in GPS system with back-up Garmin 296, plenty of extras, \$61,000ono. Phone James 0458519296

3440 DRAGONFLY MICROLIGHT



Great little trike. Bailey 4 stroke engine (2.5 lts/hr), electric retracts, Brauniger Instruments, always hangared, low hours and in great condition. Selling due to other financial commitments, \$18,500 price is negotiable. Located Strathalbyn, Adelaide. Ph Brett 0418 747 988

Email bcollier_85@hotmail.com

3447 TECNAM P2008



Dynon Skyview, Garmin SL40 VHF comm, Garmin GTX 327 transponder, Garmin GPS Map 695, Fuel Scan FS-450 Very good example of this type. Call or email for more info. Could be converted to RAA register. \$110,000 +GST 07 3203 1777

3451 RANS S-14



Single seat high performance ultralight. Rotax 912, full instrumentation. Fighter-like agility and performance. No vices, and will trim hands-off, probably not for the very low hour pilot. A sea change means I have no time to fly it. Inspection will not dissappoint Located near Gatton Qld. \$25,000 Phone Ian 0418 880 257

3456 \$16,000 TWO SEATER



Side by side Bantam B22s, flaps, nothing to spend, only 72 hours on engine, easy to fly, no accidents, no flying faults, easy transport on car trailer. Previously advertised for \$22,000 reduced to just \$16,000 For full technical details and Video CD of take-offs and landings phone 0417 646 075

3459 CORBEN BABY ACE



65HP Continental. Microair Radio. Hours 400. Regis-

tered recreational category. Amateur built. Excellent condition. Year: 1977 Total Time: Approx 400 Engine Type: Continental A65 Prop Type: Wooden Engine hours to run: Over 1000 Prop hours-On condition Interior Condition: Open cock-pit Registration: 283745 Price: \$AUS20,000. Neg Phone: 0409 827 754

3460 SEAREY



Searey "C" Hull, 912 Rotax, Electric Gear, Dynon 180 instruments, GPS, Stobes, Nav Lights, 66 hours total time, VHF, VOR, Transponder. Alum fuel tank, tundra tyres and more. LAME /L2 owned and always hangared. \$78,000. ono. Located Victoria Phone 0419 727 077

3461 DRIFTER W/B



W/B drifter 503 with g/box 325 hrs 3 blade broлга prop, reg 01/14 dual controls, long range tank sicanite ailerons / tailplane skins good gps, icon radio, l2 maintained, built by wayne fisher for himself, top condition and flies like a dream. \$ 17,500 ono phone 02 6553 6325

3462 TEXAN 600 FLYSYNTHESIS



Noise cancelling headsets, ballistic shute, EKP1V avmap connected to trutrak auto pilot, altitude hold, garmin sl 40 comm, garmin mode c transponder, one owner, always hangared, nil accident history, rotax 912s, 3 blade prop. Beautiful aircraft, 498 hrs total time. \$104,000 Contact Paul Brown 0412 827 558, paulb@gcj.com.au

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3463 AIRBORNE XT 582 TUNDRA



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3464 SKYFOX GAZELLE



One third share in a Skyfox Gazelle located at Caloundra Queensland. Price \$10,000 Contact Peter 0429 144 991

3467 SPORTSTAR MAX



Delivered 2010, Excellent condition, leather seats, Garmin Aera 500 GPS, Icom Radio, Garmin Mode C Transponder, Toe brakes and great to fly. Will consider doing 1/3 share option. Currently online in Qld. \$90,000 0402 660 077

3469 WANTED TO BUY BANTAM

Bantam ultralight aircraft, must be Jabiru powered, will look at all offers. Please phone 0400 022 382

3471 STING S3 LSA



TTIS 740Hrs engine 560Hrs Excellent condition, a dream to fly at 110-115kn with a near new Sensenich ground adjustable prop, full set of round gauges including ADI, Zoon traffic alert, Garmin 496 GPS, GTX 327 Mode C transponder, SL 40 com and greenline EMS. Based at YBNS. \$97,000 Phone Mark on 0417 222 692 or 0429 390 131 AH

3473 XT 912 CRUZE



Virtually as new with only 29 hours on wing and base-hangared in Wollongong. Helmets headsets transponder and cover all included Contact Peter Twiney tel (02)99696857 0438407798 Email sue.twiney@bigpond.com price \$52000 ono

3479 JABIRU SP500



Powerful 6 cylinder set for cruising with 135L wet wings. Well equipped. Always hangared with full maintenance history. All ADs/MSBs current. Comes with spare Thompson prop, headsets, tie downs, chocks, spats, CO detector, 7"GPS c/w all Australian wac & vnc charts. \$46,000. Jon 0423 377 771 (Perth). Consider delivery Australia wide.

3480 RANS S65 COYOTE 2



Rotax 912 80HP, TT 1036 hours. Engine and airframe. One L2 owner, builder, maintainer since new. Always hangared. 2 place, 36kg luggage plus 5 hours fuel. Round Instruments, icom radio, lowrance GPS. Offers around \$48,000 Phone Dave King 0429 042 740 for info brochure. Hangared at Holbrook, Southern NSW

3481 PIPER ARCHER 11, VH-PZF



1977 180 HP. TT 7653, TSO 1274, maintained to IFR & Charter until recent. GPS 296C, fresh 100 hrl, Rad 43/47, Instru 8 done. Bendix King VHF plus more. Worth a look. \$68,000 no GST. Ph 0458 122 990. Email ziggy.390@bigpond.com for more photos.

3483 TECNAM P96 GOLF



Tecnam P96 Golf 100hp 24-4868 3200hrs total time with 100hrs remaining on engine. Always hangared and LAME maintained. Bendix King NAVCOM with built in VOR, Bendix King Transponder. Flightcom intercom. \$55,000

3484 TECNAM P92 ECHO SUPER



Tecnam P92 Echo Super Airframe hours 768 Full glass dash & steam driven gauges Large Tecnam tyres 6.00-6 Comes with spare GT Prop Aircraft painted cream & gold trimmings \$75,000 plus GST Located at Lethbridge Airport Ph Garry 0429 354 717

3485 JABIRU J160C FACTORY BUILT



J160C factory built 2006. Option 2 Panel with Dynon EFIS, Garmin 296 GPS, Micro Radio & Transponder. 10 hours since engine overhaul & upgrade. Always hangared, beautiful to fly. \$58,550. Phone Alan 0427 763 375

3486 SKYRANGER



First registered January 2007. Rotax 912s 100 hp Glass cockpit. Dynon EFIS and EMS. SL40 vhf, transponder, AVmap GPS. Nil Damage 180 hrs total time. \$50,000 Phone 0414 450 015

3487 JABIRU SPT-6 TAILDRAGGER



Zero hrs, Never flown. Factory new 3.3 hydraulic fine finned engine, 85 litre tank, STD Jabiru dash, ready to register. Gloss white ready for your decals. One of only four Jab 6cyl taildraggers. YBNS airport. \$68000. Make an offer, must go. Phone Martin 0412 617110

3489 JABIRU SP6,



Regd 19-3845 to 27/6/14; ttis a/f 451 hrs engine 20 hours (3300/120hp) hydraulic lifter. Garmin 126/8gps, icoma200 radio/intercom, ASI, Alt, RPM, Egt, Turn co-ord, Oil pressure and light, Vsi, Cht, Oil temp, elec fuel pump, compass, lock, wheel pants, two place, build books/ extras vne 132 ray 0411 956734/ 03 5155 5181 rjwheels@gmail.com asking \$47,000 o.n.o.

3490 JABIRU 170D



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3491 JABIRU LSA 2.2



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3492 HANGAR SPACE

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3494 PIETENPOL PROJECT



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3495 FOXBAT



TT700hr Rotax 912 100hp L2 maintained Excellent condition, New Kiev prop & tyres recently fitted, Hangared near Ballina nsw Transponder, Fuel flow meter, Microair radio, Garmin 196, ALT, ASI, VSI, Flydat monitoring system, AH-Trutrack ADI pilot 2, headsets x2 plus lots of extras PH Evan 0408025381 \$70,000

3496 JABIRU SK2200



2.2litre solid lifter 85hp Jabiru Engine, upgraded heads and cooling ducts. Basic instrument panel Garmin GPS, IPAD bracket, lovingly upholstered by my wife (and MUM), very comfortable and capable 88knot cruiser. Hangared Boonah, Hangar available. Priced to sell, nothing to spend. Negotiable Warick 0412 115 377 \$33,000

3498 JAB LSA



New Engine - Bargain! Total Hours: 2030 Engine Hours: 17 Rego: 55-3705 Price: \$30,000 Factory built aircraft, new 2200 engine with only 17 hours on it, new control cables, new brakes (J120 units). Best value anywhere! Sweet aircraft to fly, cheap to operate. Always hangared, LAME maintained. Transponder mode C. Phone Dave 0434 082 023

3499 PELICAN PROJECT



Model PL, can be built as LSA. All parts and components included except engine & instruments. Horizontal and vertical tail feathers finished, tricycle or tailwheel options. Heavy duty windshield and prop also included. Kit valued at \$60k+, will accept \$30,000. Contact 0403 586 085.

3501 JABIRU J160C



Immaculate Condition! Factory built, NDH, 365hr AF&E Private use only, Always hangared, Standard instruments, Aera 500 Gps, Microair transponder, Fuel Flow meter, Strobe, Cabin heater, Air vents, Aircraft cover etc. All AD's Completed. Maintained to the highest standard by Cliff at Suncentre Ultralights. Suit new buyer. \$63,000 (Mildura) Phone 0427 256 481

3502 ESQUAL VM1 EUROPA



6 cyl Jabiru 3300 engine (125hp) - 178hrs only. Excellent Condition - Leather Interior, Always hangared, Garmin GPS, Rego 19.3839, \$90,000 (No GST) Contact Jim on 0407 768 701.

3504 JABIRU J 250



Rare US model with fatter wings and low stall speed. Great aircraft to fly with low approach speed but still will cruise all day at 110-115kts. Factory interior, David Clark NC headsets, 196Gps and other spares including wing and Fuselage coverings. Contact Anthony at catalpa2@wideband.net.au. Offers over \$70,000

3508 AEROCHUTE & TRAILER

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3509 AIRBORNE XT 912 TOURER



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3510 JABIRU J160-C 24-5111



Very good condition, always hangared at Bathurst. TT448 hours \$58,000 ono Ph 0402 497 671

3512 ROTAX ENGINES GEARBOXES PROP

Rotax 582 engine with etype gearbox engine has been disassembled for inspection and is in perfect condition, includes exhaust, carbies, radiator, logbooks will rebuild if required Rotax 503 70hrs with Btype gearbox, Brologa 3blade prop, logbooks etc, all perfect condition, (presently in use and can be test flown) Rolf 0428 240 192

3514 SONEX TD & HANGAR

Sonex TD with solid lifter Jabiru 2200 275 hours, Patroni prop, 10" wheels, Garmin 296, ELT, two spare canopies. Internally corrosion-proofed when built. Professional pilot owner has flown it to Tassie. \$32500. Also insulated hangar with concrete floor at Kilcoy \$36,000. Or make offer on both. 07 5445 7362 arvicola.amphibius@hotmail.com

3515 DOVA SKYLARK



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3516 WANTED AIRCRAFT TO CROSS

Hire Syndicate in Deniliquin looking to cross hire a 24 registered RAA aircraft. All tri undercarriage types we be considered. Aircraft will be kept in a hangar in Deniliquin. Members have 100+ hours on Jabiru and Tecnam aircraft. Contact Bruce 0418599341 bscott@deni.net.au

3519 WANTED PROP FOR ROTAX 503

Prop for rotax 503. must be tractor config. all offers considered, can refurb. ph wayne 0458118938.

3520 WINTON CRICKET

Winton Cricket highwing single seat 42 HP. Robin direct drive with parts for 2:1 reduction, and other

extras. Covered unlicensed trailer. Price - \$6,300. Located in Roleystone 30Kms from Perth. Contact Graham on 08 9397 5340 on Saturday & Wednesday's only.

3521 JABIRU ENGINE

3300 6 cylinder Jabiru motor - Feb 2011, Total 54 hours, Propeller and spinner included, Packaged in a Jabiru box, Reason for sale - changed out motor for another engine \$12,000 plus GST Contact Roger 0899430548

3523 JABIRU LSA



Jabiru LSA Factory built 1998; TT 765hrs; Recent paint; new windscreen; Big Wheels; Basic Panel; Garmin GPS Map 196; I-com VHF; UHF; Located Gladstone QLD; \$30,000 ono Phone 07 4975 6790 Mob 0400 317 085 Email rdgram86@yahoo.com.au

3524 STORM 300



Ultralight Storm 300 two seater Aluminium aircraft . 7 hour endurance, Rotax 100 hp engine. Wood Comp variable pitch constant speed prop. Engine recently gone through full 100 hourly maintenance as per RAA requirements. VHF i-com radio, Verticle speed & turn coordinator 2 cylinder head temps 2 exhaust temps. Phone Bill 0428 176 172 \$55,000

3525 BANTAM 24-3383



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3526 X-AIR



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3527 WANTED SADLER VAMPIRE

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3528 SUMMIT 11 + FULL TRAILER



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3529 JABIRU SP 500/6



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3531 JABIRU POWERED BOORABEE MK 2



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3532 SONEX



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3534 JABIRU 160 IN WA



2007, always hangered, no accidents, no

hard landings, vgc in/out, custom seats, LAME maintained, 890TT, 200TT on new thin finned engine, Dynon D10A EFIS, Garmin 296 GPS, Microair COM & TXP/C. Must sell due to new aircraft arriving. View and fly in Albany WA. \$55,000 incl GST. Ralph Burnett, 0427 200 673, burnett@comswest.net.au

3535 DEMONSTRATOR PIONEER 300 KITE



Aircraft with fixed undercarriage registered May 2013, Rotax 100HP ULS engine, 3 bladed ground adjustable DUC Prop, 112 litre fuel capacity, 115-120kts at 18 litres/hr, toe brakes, GA gauges, AvMap IV GPS, Garmin SL40 radio, Garmin GTX 327 Transponder, D10 EFIS system. Phone 0408 444 335

3536 JABIRU 2200 ENGINE

Solid lifter motor -250 hours still in plane -always run Amsoil synthetic oil-complete instalation kit (air box, cht egt -sweetapple 58d 48p propeller etc). This is a good motor, only selling to upgrade to larger motor. Phone John 0409 308 232 for more details. \$7000.00

3538 PIPER J3C-65 CUB



Built 1944, TTIS 4070 hrs, powered by a 65 hp Continental A65-8 engine. USAF designation L-4H, affectionately titled the 'Grasshopper'. Genuine warbird. It is in VGC, is a delight to fly and is inexpensive to operate. Suitable for converting to RAA registration. Located Victoria, ph Dave 0402 042 015

3539 WANTED HI-WING PROJECT FOR 503

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3540 CORBY STARLET



Total Hours: 346 Engine Hours: 346 Rego: 28-1976 Price: \$28,000 Posted: 21 Jul 2013 Mosler 1835 cc motor 65 H.P. with injector throttle body has ICOM VHF full maintenance log always hangered delight to fly located Serpentine W.A. contact Tony 0433 33 77 33 or tony.mitchell1943@bigpond.com

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3547 SKYFOX GAZELLE CA25N



Skyfox Gazelle CA25N Reg.24-3569, Lamey maintained, 80HP Rotax, 912A powered, Bolly 3 bladed prop fitted, folding wings, Factory fitted GPS, Total hours = 1919, Engine hours = 1350. All ADs up to date. Hangared at Tyabb Victoria. Priced to sell at \$33,000.00 Contact Roger 0419 891 431.

3548 JABIRU J160



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3551 JABIRU 230D



09 Factory, TTIS 360hrs. Reg 8/14, own hangar, immac as new, L2 LAME maint, Redleather, EFIS D100, AVMAP EKP IV GPS, 2axis AP, Microair VHF & Xponder, remote ext plug, MP3 music, full covers nose to tail, wing strobes, all updates, new prop, rotors & pads, MLG wheel bearings, many spares. \$98,000 incl GST, Phone 0419 555 726

3552 JABIRU J230-D 24-5490



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3553 JABIRU-400 IN WA



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3555 WANTED 2 PLACE TRAINING AIRCRAFT

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by Dale Huggard

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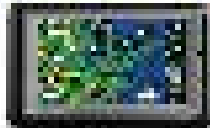
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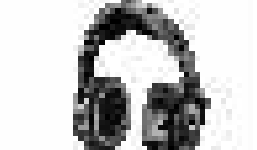
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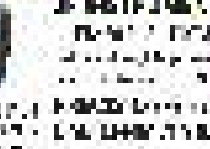


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