# RECREATIONAL AVIATION AUSTRALIA



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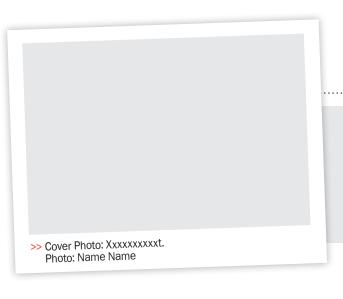
BOARD
ELECTIONS
CANDIDATE
STATEMENTS INSIDE

**ELECTRONIC FLIGHT BAGS AN 'APPY TALE** 

ISSN 1839-0501







CONTENTS

)9 15

#### Regulars

- 07 President's report
- 08 Calendar of events
- 11 Letters to the Editor
- 66 Happy landings

- 17 Tech talk
  Wayne Matthews
- 23 Editor's choice **Brian Bigg**
- 36 Instructor's forum Professor Avius
- 47 Learning to fly **Dr Gerry Considine**

#### News

- 14 Xxxxxx
- 14 Xxxxxxxx
- 14 15
- 15
- 15 51

<u> 24 29</u>

#### Readers' stories

- 24 XXXXXXXX Name Name
- 27 Xxxxxxxx Name Name
- 29 Xxxxxxxx Name Name
- 44 Xxxxxxxx Name Name

44

#### **Features**

- 18 Xxxxxxxx Name Name
- 38 Xxxxxxxx Name Name
- 40 Xxxxxxxx
- Name Name
- 43 Xxxxxxxx Name Name
- 48 Xxxxxxxx
  Name Name

# Please put a quote from the coverstory in here

# 43 48

#### Cover story

- 30 Xxxxxxxx Name Name
- 53 xxxxxx
- 54 xxxxxxx
- 56 Member's Market



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## **President's Report**

#### MICHAEL MONCK

## The Forsyth Report

As you will read in this edition of Sport Pilot, the Aviation Safety Regulation Review Panel has released its much anticipated review, colloquially known as the Forsyth Report.

The report is 170 pages long. It will cure some people of their insomnia but will cause nightmares for others.

I suspect most people will delve into the pages looking for snippets they can use against the regulator. These people will quote statements such as "the Panel recommends that CASA align its organisation with industry" or "due to the present adversarial relationship between industry and CASA, Australia lacks the degree of trust required to ... [collaborate] with industry to produce better safety outcomes".

These are all valid points and worth noting, however, we should also have a stocktake and examine our own organisation. We need to look for ways we can improve ourselves. (See Report Page 14)

#### Accident rates

The report has some detail on accident rates. It compares recreational flying with commercial operations in GA but, more tellingly, also looks at a more comparable bunch of aviators in the private and business sector of general aviation. (See Report Page 26)

The data used in the report covers the period 2008 - 2013. Our fatality rate over this period is pretty steady and some could argue that, aside from 2013, it is downward trending. This is somewhat reassuring and suggests that as pilots (and other participants in our sport) we are less likely to be killed today than we were some years back. To me this is a great result. Unfortunately our accident rate says something slightly different.

In pretty much every single year since 2008 (2009 being the exception) we have had more accidents than in the previous year. We went from an accident count in the mid-30s' for 2008 to having 50+ accidents in both 2012 and 2013. That's not comforting news.

If we normalise the data to account for increases in the number of hours flown we get a more statistically accurate picture. Our fatality rate is actually better than GA (private and business operations) as above but our accident rate is appalling.

We have never dropped below 200 accidents per million hours. Our nearest comparable sector has exceeded 150 accidents per million hours in only two years. In 2013 we exceeded 300 accidents per million hours while non-commercial GA was around 125. We had an accident rate of more than double that of GA! To make matters worse, this number has been steadily climbing for the past five years.

we should also have a stocktake and examine our own organisation

All of a sudden we don't look so clever.

I've written recently that we should all take a good long hard look at ourselves before we go flying and this report reinforces that opinion. We might be doing alright in terms of people dying in our sport, but there are still a lot of people crashing. There's only one person who can fix that – you. And your actions are the ones which affect everyone's ability to continue flying. Have a think about that next time you head to the airfield.

#### Time to improve

While stopping short of making a formal recommendation, the Panel formed a view that Recreational Aviation Administration Organisations (RAAO) should demonstrate three principles:

- stable, capable and active governance;
- · control over its membership;
- recognition the regulator retains ultimate

authority for safety oversight and regulation.

On the first of these we need to change. We have evolved from being an organisation which caters to a small group of aviators who want to fly their homebuilts in a farmer's paddock. We now need professional management. This professional management includes an overhaul of the board to ensure we have the skills and experience to guide us through our challenges. The way I see it, we don't have this.

Recent years have demonstrated that, as an organisation, we struggle to do what is required of us. Like it or not, we have agreed to perform certain tasks and maintain records, ensure compliance, etc. and we have failed to do so. When the board allowed this to happen, we didn't only fail in our obligations to CASA, we also failed in our obligations to members. We failed to protect your rights. We need change to ensure this doesn't happen again.

In the next 12 months we hope to present a new constitution which shifts us away from a board structure based on a popularity contest, to one based on a set of criteria which protects every member's rights. We have a membership which consists of a range of flyers - some travel hundreds of miles during cross country flights - others protect our heritage with the backyard designed and built rag and tube aircraft. Every one of these members, from the freshly minted plastic fantastic flyer to the grass roots pioneer, deserves nothing less than the most capable board and management team at the helm of their organisation. Your organisation.

The Forsyth review has come to the conclusion that we need change and I agree with it.

I urge you to take a look at our organisation and consider if we can do better in future. Read the full review (http://www.infrastructure.gov.au/aviation/asrr/files/ASRR\_Report\_May\_2014.pdf) and ponder how you could help the organisation improve.

After all, every time someone looks up at an RA-Aus aircraft, it isn't the organisation they're looking at, their one of us. Fly safe.



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# Calendar Of events



## **27** July

#### Glen Innes Aero Club Mid-Winter Fly-In

We are a small struggling club with a passion for flying and would love to see our little aerodrome filled with planes once more. Fly or drive in, come say "hi", grab a feed and have a yarn with other like minded aviation enthusiasts.

An ideal cross country stopover. Bacon and eggs, sausage sizzle, tea and coffee. big BBQ burning hot (brunch 9:00 – 14:00). Clear winter skies with minimal traffic. All landing fees waived for the day. Trial Introductory Flights. For more information Lara (02) 6733 5786 or jamesandlara@gmail.com.au

# 23-24 August Port Pirie Fly-In

Helicopter rides, food and craft stalls, live entertainment Saturday afternoon. An alcohol free event.

Supported by Lions, Rotary, RSL and Port Pirie Regional Council. For more information, 0402 274 214.

### 14<sub>September</sub>

#### **RVAC Dawn Patrol**

This year will be the 74th anniversary of the Battle of Britain and the 35th running of the Royal Victorian Aero Club's Dawn Patrol. At first light, 45 aircraft will depart Moorabbin Airport in stream formation at 30 second intervals.

The planned route takes the aircraft over the Shrine of Remembrance, Point Cook Aerodrome (the birthplace of the RAAF) and Avalon Airport, returning to Moorabbin Airport via Port Phillip Heads.

After the flight there'll be a cooked breakfast, where a World War II veteran will recount his war-time experiences and pay tribute to fallen comrades. For more information (03) 8586 7777 or flying@rvac.com.au



#### 31 August

#### Harley Ride and Fly Brown Ribbon Day

Golden Plains Aviation will turn Lethbridge Airport into a show piece for big bikes and beautiful aircraft to raise money for the EJ Whitten Foundation to help in its fight against prostate cancer. Harley rides, joy flights, a Harley parade on the new runway and a free BBQ lunch on site. For more information, Daphne Gibbs 0420 985 931.



#### **15** March 2015

#### Clifton Fly-In

Darling Downs Sport Aircraft Ass. Inc. Fly-In at Clifton Airfield (Bange's). This fly-in has become an iconic event in the region and is the premier attraction for all types of aviation in southern Queensland.

See various types, shapes, sizes and models of recreational, ultralight and homebuilt aircraft including sport, vintage, general aviation and any other flying machine.

Come late pm Saturday, 14th for BBQ, drinks. Fly or drive in, see ERSA. On field camping, bring your swag. Advise for catering.

For more information, Trevor Bange 0429 378 370 or (07) 4695 8541 Email: trevorbange@bigpond.com

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FK14 Le Mans

FK51 Mustang





# LETTERS THE EDITOR



I just got a renewal notice for my RA-Aus Pilot's Certificate. Included in the paperwork was a questionnaire about why I didn't attend NATFLY. One of the potential reasons for not going was labelled 'CASA ramp checks'. I put three ticks in that hox.

I am not at all afraid of being caught out. All my aircraft's papers are up to date, I have OZ Runways on my IPad and hard copies of ERSA, WAC charts and VNCs. I file flight plans and SARTIMES. I hold a Class 2 Medical and current PPL and RA-Aus Certificate, along with a US CPL.

I am a fugitive from GA, which wasn't fun anymore. CASA seems intent on clearing the skies of everything but the airlines. I guess it makes sense to a bureaucrat working in an organisation called 'Civil Aviation Safety Authority'. They won't advance up the bureaucratic ladder if there are any accidents on their watch. Their solution is to keep as many aircraft on the ground as possible. (Incidentally, it is interesting that CASA escaped the budget axe completely. All they have to do is bleat "Air Safety!" and the pollies run for cover.)

So, I really resent CASA and what they have done to aviation in this country. The last thing I need is to be hassled by CASA at an event which used to be a celebration of flying.

#### **Norman Sanders**

**From the Editor** – The board is still keen to hear from other pilots about why they didn't go to Temora this year. See the item in the NEWS section.

#### **Taildragger claims**

I have been involved in aircraft, in one way or another, over a period of several decades and while I never gained a licence, during the period I had gained some flying experience.

After spending the past six years building my own aircraft (a taildragger) I decided to bite the bullet and find a flying school where I could fly every day until I got my licence.

Eventually I was able to contact Allan Cameron at North Queensland Recreational Aviation Flying School at Bluewater, north of Townsville.

Allan is a quiet spoken guy, a top notch bloke and, in my opinion, a truly excellent instructor who does not make any big claims - he just gets on with it.

Which leads me to the real point of this letter. In my search for a school, I phoned several and spoke to the CFIs, explaining that as my aircraft was a taildragger I needed a school which could teach me in a taildragger, perhaps a Drifter or similar.

I will not name any of the schools but I will say that two of them told me "No mate, we don't have a taildragger, but what you can do is come here and get your licence in our nose wheelers. Then you can bring your plane here, run it up and down the strip until you get game enough to pull the stick back and we can give you your tailwheel endorsement."

Fortunately what little sense I have prevented me from being stupid enough to take their advice which, I believe would have almost certainly resulted in wrecking six years' worth of work and even possibly abruptly ending of my life

To those two CFIs I say that, while I will not name you publicly, I will most certainly privately do my best to dissuade anyone I meet from using your services.

To Allan at Bluewater I would like to say thank you for the best flying experience of my life and for helping me to gain my Pilot Certificate in your Drifter

**Rick Heinson** 

#### More transparency

Recently checking out the available aircraft for sale in the 'Members' Market' section of *Sport Pilot* and the RA-Aus website, I noticed that very few ads mentioned if the aircraft was registered or, if registered, when the expiry date of the registration would be.

In some cases, the registration number wasn't even mentioned and even looking closely at the pictures of the aircraft, often the rego number was only just visible. With the mistakes / incomplete corrections / updates which have be made by CASA, RA-Aus and aircraft owners in the past few years, I think members are entitled to this information being displayed on all ads.



As you all know there is a lot to consider when purchasing a new or replacement aircraft engine hours, prop hours, changes to aircraft in keeping eligible to that registration type, upgrades etc.

The time left on the registration also determines, to a small degree, the value of the asking price of the aircraft.

When recently speaking to RA-Aus Head Office, I was politely told that the status of the registration of an aircraft was a privacy concern and the person I was speaking to could not pass the registration details on to me or even tell me if the aircraft was registered.

This information should be available and transparent to all members. So how about putting in place a rule that registration details, good or bad, are made compulsory on all classifieds as a courtesy to intending buyers?

I would imagine this information would also make the task ahead easier for RA-Aus. If the seller was contactable at point of interest, a phone call to a very polite person in Fyshwick would not be necessary.

Comments please. Enjoy the mag-love the flying!

#### **Ray Davies**

**From the GM –** we will look into this suggestion.

#### **CAGIT Blues**

I'd like to collect the Come And Get It Trophy, but I have a dilemma. It is presently in WA I believe, and that is a long way from Clifton in South East Queensland.

What happens if I arrive at the holders' home or clubhouse to claim it, only to find someone snatched it the afternoon before. I'd be somewhat peeved, indeed!

I imagine there is some protocol in place to avoid this disaster, but I cannot recall seeing it published anywhere in the magazine.

Please help. Could you publish the procedures and the whereabouts of the trophy each month?

#### Kevin McGrath.

**From the Editor** – Kevin, we already publish the location of the CAGIT trophy each month (See page 41 in this edition).

That notice will always have the contact phone number or email address of the current holder. Usually that person is aware if someone is coming to get the trophy anytime soon and will tell you. Also there is a Facebook page https://www.facebook.com/CagitHunters which keeps up to date on any schemes to snatch the trophy.

#### For want of a hammer

I write with regards to Norm Sanders' article (Sport Pilot May 2014) on cockpit hammers.

While my story is not directly linked to Recreational Aviation, It still highlights the importance of being able to escape an overturned aircraft which has an upward lifting canopy.

In September last year, my father took off from Geraldton airport in his VH-registered two seat, low wing aircraft. Moments before take-off and too late to abort the take-off, the canopy opened. While maneuvering to make a landing, he undershot the runway, clipped the airport perimeter fence and came to a halt upside down with the aircraft on fire and tanks full of fuel.



Witnesses rushed to the scene and my dad was heard shouting for help to get out of the aircraft.

Despite having survived the initial crash, difficulties in getting him out of the aircraft resulted in severe burns to most of his body and he passed away two days later in hospital.

Would he have survived if he had some form of emergency crash axe to help him exit the aircraft? We'll never know for certain and, truth be told, in the times I'd flown with him in this aircraft, the thought had never even entered our minds. However, I know I'd rather have one and not need it, than need it and not have it.

#### James Ashurst

#### A pile of paperwork

I have read Looking Forward (Letter to the Editor Sport Pilot May 2014) and the Tech Manager's reply.

Having gone through the published accident and incident reports, I fail to see how poor maintenance is a big issue.

The published reports show there are a few engine failures and one type of engine stands out. When we see the same engine with the same type of failure several times, I draw the conclusion that there could well be a problem with that engine. Not a conclusion which makes me happy either, as I fly with that engine. There are numerous engine failures published with no details, so it would be hard to blame poor

maintenance, especially as the cause could well be something done by the pilot rather than the maintainer. The biggest cause of accidents seems to be poor piloting skill, distraction when landing, removing the nosewheel or just generally being stupid.

Stupidity and poor piloting skills are supposedly being addressed with human factors training, which I have done and thought was a waste of time. The Safety Manager is supposedly going to fix that problem, but there will have to be some improvement in communication. From what I read, if I identify a safety hazard, I have to submit an accident and incident report. I can see RA-Aus disappearing in a cloud of reports if we all do that. Just as an example, I went to fly yesterday and it was quite windy, so I assessed there was a possibility the wind could lift a wing when I taxied out or when I started the engine. I am always aware of such things and put the harness on as soon as I get into the plane. Of course, this brings up the problem that if I have an engine fire on start up, I will want to get out of the plane quickly. Should I really put the harness on before starting? I know the safety experts will spend hours talking about such problems, but I have lived and worked in unsafe places and will make my own decisions, without a pile of paperwork.

#### Ian Borg

#### **Snakes Alive!**



Not everything you find in a hangar is welcome. Here is the recently discarded skin of a snake measuring over three metres, found in my hangar at Heck Field, Jacobs Well. Discussion has followed as to whether it's a Taipan, King Brown or Python but one thing is for sure, now the weather is cooling down there are no mice or rats in my hangar!

**Michael Coates** 

#### Aw shucks

Just reading the latest *Sport Pilot* (May 2014) and to you a big fat TANX-YOU for your unique production of our sport flying magazine for Australia. Well done.



Every month you offer all RA-Aus members a great medium for communication with real newsagency shelf style professionalism – You just wanna go flying.

And it was a big surprise to see a centre spread of the Tanarg BioniX machine with vivid colour – wow! Again, thank you Brian for your artistry in media presentation.

#### **Chris Brandon Air Creation in Australia**

#### Low flying risks

Since the age of 10 I have been an aviation nut (something like a wing nut without the bigears). My dream was to fly fixed wing for the RAN. Sadly, this didn't eventuate but I kept my interest in aviation.

Living in North Queensland I have noticed a lot of smaller aircraft having wire strikes. Some are agricultural, but others are LSA.

I know of only two aircraft which have continued flying and landed successfully after a strike. Both were jets made of metal. Both had professional pilots, enough height to recover and enough speed to break the wire. They were an EA6B Prowler at Aviano, Italy and a F86 CAC Sabre in the Kooralbyn Valley in Queensland. The Sabre was at 400ft and is on view at the Amberley Aviation Museum.

They didn't have any dangly bits (like an undercarriage). They didn't have propellers to get tangled and weren't made of composites.

Light aircraft pilots put themselves at risk by negligence and plain bloody stupidity by flying over dams, up valleys, between sheds and houses, not checking with owners where wires are when landing at unfamiliar strips and landing in restricted visibility (such as last light /sunset etc.).

All of these are like playing with a loaded rifle and can kill just as quickly. We have no room in our Association for those who disregard rules put there for our safety.

**David Lackey** 

#### **LETTERS TO THE EDITOR**

#### **Saving money**

It occurred to me that RA-Aus could save money in printing, postage and associated costs by simply not sending out registration renewal windscreen cards/stickers. This happens here in Queensland for our cars and probably in other states as well, so why not our RA-Aus aircraft?

If there is a legitimate need to confirm registration currency, such as during an accident investigation, this would become evident to those with a legitimate need to know in due course. This would also relieve the office staff from having to perform another onerous 'red tape' task.

Cards stuck on windows don't improve safety. In fact, they reduce the viewing area, thus reducing safety. Every little bit helps.

#### **Mark Pearce**

From the Tech manager – I appreciate the intent behind Mark's letter, however Technical Bulletin TECH AWB 010310-1 provides the requirement for these cards. The intent is to provide an easy means for pilots to ensure the aircraft is registered prior to flight. The following link is provided for reference.

https://www.raa.asn.au/safety/airworthiness/

#### **Good recovery**

Most accidents are survivable if a Ballistic Recovery Chute is fitted and activated. Any means of reducing fatalities should be relentlessly pursued by our organisation.

I have never seen an article in *Sport Pilot* promoting their use and there is nothing on the RA-Aus website to encourage their fitment. It is time for our organisation to promote them.

The recent story on TV about a deployment where three lives were almost certainly saved by the parachute is further proof.

I was fortunate to purchase an LSA that has a BRS fitted. It was only when I started to look for information on its use that I became aware of the amazing performance of the device.

As part of my pre-flight instructions to my passengers, I demonstrate how to operate the BRS. I also explain that the deployment should result in them being able to walk away from any mechanical or structural failure.

There are experienced pilots and even instructors relying on hangar gossip instead of current statistics, who believe the use of a BRS can have detrimental consequences.

Seems strange to me that we have pilots who would spend more upgrading to a glass cockpit than would be required to fit a BRS. Any decision to choose a fancy panel over safety must be due to ignorance on the effectiveness of a correctly installed system.

The situation where deployment at just less than 900ft in an inverted situation resulted in no loss of life is further proof of their versatility. Even fire does not prevent their successful deployment.

I am sure my wife would not have accompanied me on my trip around Australia without the BRS in the CT. I have given her the responsibility of looking after the safety pin, as it is important the passenger is familiar with BRS operation and deployment in case of the incapacitation of the pilot. How else would a passenger with no flying training safely land an aircraft?

They are available for aircraft up to 820kg (1,800 lb) deployable to 150kts and manufacturers are currently testing larger units for light jets.

This is the link to the video which is a must see. http://www.youtube.com/watch?v=Pc6v-hWCSqc#action=share

I have no connection to any manufacturer, but great concern for the increasing fatalities in our sport.

#### John Reav

#### **Calendar girl**

It always lifts my day when I get home from work to see the shiny plastic wrapped copy of Sport Pilot sticking out of the letterbox, or better still, already on the kitchen bench. The December issue held even greater promise of a free 2014 calendar. My bubble of contentment was burst when I opened up to the August page of the calendar. I was startled to see an advertisement featuring an unclad young lady. As a high school science teacher, I do have the opportunity to share my passion for aviation with some of my students. I was proud of a student who I taught a few years ago who is studying aeronautical engineering. One thing I can do is hang the calendar up in my classroom. Sadly this 2014 calendar is not fit for my classroom wall. It is not even fit for the wall in my home.



There are several reasons why I found this image disappointing but for the sake of brevity I will expand on one point only.

As a teacher, I have seen time and time again the insecurity young girls face when constantly bombarded with images reminding how far their bodies fall short of ideal physical perfection which we know are unattainable for most. I try to create a safe place for these students in my classroom, as well as in the school as a whole.

They don't have to live up to these physical ideals as they have so much more to offer our world. I would like our world of recreational aviation to aim to be a safe place also for our young women. Our young women should feel just as happy to flip through our magazine as we males do. So I was, quite frankly, offended by the calendar image.

Those who fly, whatever they fly, have always shared a spirit of mutual respect and brotherhood. It is in this spirit that I ask my fellow airmen to extend this same respect to those sisters of ours who share our flying dreams. Careers of the likes of Nancy Bird Walton, Hanna Reitsch and Jacqueline Cochran (to name just a few) show us that aeroplanes have never discriminated between men and women. Please let us ensure that our magazine likewise seeks to be just as fair to the fairer sex.

#### **Nathan Carruthers**

**From the Editor** – Apologies, Nathan, for the delay in printing your letter. This was due to circumstances beyond my control.



tion is reflected in the Letters to the Editor columns. The more letters – the healthier the organisation. So don't just sit there – get involved. Your contributions are always welcome, even if no one else agrees with your opinion.

The Editor makes every effort to run all letters, even if the queue gets long at certain times of the year.

#### editor@sportpilot.net.au

(By the way – the Editor reserves the right to edit Letters to the Editor to shorten them to fit the space available, to improve the clarity of the letter or to prevent libel. The opinions and views expressed in the Letters to the Editor are those of the individual writer and neither RA-Aus or *Sport Pilot* magazine endorses or supports the views expressed within them).

#### REPORT: CASA TOLD TO LIFT ITS GAME

#### By Brian Bigg

CASA has been told it must change its culture of hard line regulation because it's not appropriate for an advanced aviation nation such as Australia.

That was one of a number of criticisms of the regulator contained in the Aviation Safety Regulation Review Panel report released in May.

The review, chaired by David Forsyth, investigated the structures, effectiveness and processes of agencies involved in aviation safety. the relationship and interaction of those agencies with each other and the suitability of Australia's aviation safety related regulations when benchmarked against comparable overseas iurisdictions

The review received 269 submissions - the sport and recreation sector accounted for the most responses regarding CASA's inflexible regulatory approach. The Panel made 37 recommendations, some of which apply to recreational aviation.

The Panel said despite Australia's good standing, the aviation industry was highly selfcritical and had a 'take no prisoners' approach to public discourse.

"While this critical introspection may contribute to its good record, it can at times be counter-productive to promoting rational public debate on aviation safety and to building a positive and collaborative national aviation safety culture."

The Panel said the relationship between industry and the regulator was a cause for concern.

"In recent years, the regulator has adopted an across the board hard-line philosophy. As a result, relationships between industry and CASA have, in many cases, become adver-

"Leading regulators across the world are moving to performance-based regulation, using a 'trust and verify' approach, collaborating with industry to produce better safety outcomes and ensuring the regulator stays in touch with rapidly advancing technology and safety practices.

"On occasions, individual operators may push the boundaries and require close regulatory oversight and a firm regulatory response. An effective risk-based regulator will judge when a hard line is necessary.

A hard-line regulator creates an environment in which regulated entities, be they air operators, maintenance providers, airports, or even air navigation service providers, may withhold information. Industry consultation has highlighted that many in the Australian aviation industry now actively avoid engagement with CASA unless absolutely necessary.'

The Panel also recommended CASA align its organisation with industry, re-establish small offices at major airports, adopt an industry exchange program, devolve medical renewals to DAMEs and publish service KPIs.

The effectiveness of RA-Aus was also questioned in the review.

"In the Panel's view, self-administering groups (such as RA-Aus) should demonstrate three basic principles on an ongoing basis to retain their authority:

- stable, capable and active governance;
- control over their membership;
- recognition the regulator retains ultimate athority for safety oversight and regulation.

Control over membership and registrations were identified as problems.

"There may be a number of aircraft that are not under the VH or RA-Aus registration oversight umbrella. The size of the problem is impossible to gauge as aircraft may have been retired or no longer in use; however, this ambiguity supports the argument that there may be aircraft flying without adequate oversight.

"The combined accident rate among GA (VH-registered) and recreational aviation (RA-Aus) is close to the global average; however the RA-Aus rate of fatal accidents has climbed for the past five years and needs enhanced monitoring."

It also recommended the ATSB investigate as many fatal accidents in the sport and recreational aviation sector as its resources will allow. (See Flying Safe Page 26-27).

The panel reported that recreational flying accounted for approximately 14 per cent of all aircraft hours flown in Australia, but almost 40 per cent of aircraft.

And in a foretelling of what is to come for RA-Aus, CASA acknowledged to the Panel that there was a need to increase staffing in this area and that it was increasing resources. The Panel was of the opinion that a further increase may be necessary to keep the sector under a 'suitable level of oversight'.

The Review's recommendations have been sent to the Deputy Prime Minister, Warren Truss, for consideration.

> TO READ THE FULL REPORT visit http://www.infrastructure.govau/aviation/ asrr/files/ASRR\_Report\_May\_2014.pdf



#### **ASIC** flaws

#### by Brian Bigg

ASIC cards came in for their fair share of criticism by the Aviation Safety Regulation Review.

"Many aviation security policies and regulations appear to have been adopted without due regard to the burden they impose on the aviation industry and that the same security outcomes could often be achieved with less impost".

The Panel said the current two-year renewal requirement for ASICs was excessive and inflexible and it recognised ASICs had a disproportionate impact on private pilots.

"While Australia has adopted a number of aviation security policies and regulations that differ from ICAO standards, Australia meets or exceeds all of those requirements. For example, all persons seeking unescorted access to the airside area of a security controlled airport must have undergone background checking, while ICAO standards only require background checking for access to Security Restricted Areas.

"There is scepticism from industry about the benefits for pilots, aircraft owners and operators of holding ASICs, particularly at smaller regional airports, where ASICs are not always checked for access control, with one submission noting 'nor should regional communities be restricted by regulation that assumes the worst possible scenario when the risk is low".

Comparisons were made to the more flexible approach applied to GA pilots in the US.

It was suggested that the pilot's licence be used as a valid form of identification in place of an ASIC.

"In the Panel's view, it is important that requirements for ASICs are appropriately tailored to achieve security outcomes, while minimising the impost on industry and mitigating realistic security risks responsibly.

"A range of such measures are available, however the Panel considers that simply the elimination of ASIC requirements for all airside areas, apart from the SRA, would eliminate much of the confusion, cost and inconvenience that irks industry about the current ASIC scheme."

#### **GENERAL MANAGER**

Members will by now be aware that RA-Aus General Manager, Mark Clayton, resigned effective June 13.

Below is an extract from Mark regarding his resignation:

"My reasons for not continuing in the role are, as follows:

i. The work - and workload - I found myself doing bore little resemblance to that described in the 2012 advertisement, which was the basis of my initial

ii. Despite my best efforts during the past year, I consider that I have been largely unable to effect any significant or enduring organisational improvements. These shortcomings are most evident - for me at least - in the all-important areas of structural reform; policy development and strategic planning. Rather than become another part of the problem, I felt it would be best that I step aside and allow someone else to have a tilt". The one area in which I can claim to have had some notable success is in relation to the recruitment of new senior staff who have already proven themselves to be highly competent. I leave with a sense of pride, and confidence, that the Association's operations remain in very capable hands. And to all the Head Office staff - and volunteers - I extend my deep felt gratitude for your labours, your commitment and for your loyalty throughout this difficult period".

Jill Bailey has been acting in the position in the interim and RA-Aus hopes by the time this article reaches members a replacement has been interviewed, selected and possibly already started work.

The role of General Manager has many facets including management of a small but motivated staff (14 in total), responsibility for ensuring the certification of almost 10,000 Pilot Certificates, along with the registration of more than 3,200 aircraft and the administration of ASICs. Our aircraft represent a quarter of Australia's entire GA fleet.

The organisation has responsibilities as an incorporated not-for-profit organisation, obligations to government departments including CASA, ATSB, AMSA, DOTARS and liaison with 13 elected Board members.

We provide a website, monthly magazine, reports to various organisations and representation to government, along with nine other Recreational Aviation Administration Organisations.

The GM role is demanding and requires the ability to juggle many issues on a daily basis. The GM is expected to respond promptly to member queries and concerns, Board requirements, staff management, media contacts, government demands or requirements and more.

More than 30 applications for the role have been received and, once all resumes were read, the candidates were ranked according to their suitability to the criteria. A short list of four or five candidates was selected for interview.

The interview panel will consist of the President, Michael Monck, Jill Bailey and someone from the industry to provide an outside perspective.

Members should keep an eye on the website and the next edition of Sport Pilot for announcements regarding the appointment.

#### **Big China deal for** Quicksilver

Quicksilver Aeronautics has announced it has signed a distribution agreement with a Chinese company, JH Nanning Group, resulting in an order for 77 aircraft.

The first two aircraft are being manufactured in Quicksilver's California factory and will be shipped to China for final assembly, testing and training of Chinese

As part of the agreement, JH Nanning Group has become the exclusive distributor of Quicksilver in China. The first phase of the agreement involves the establishment of distributors and sub-distributors in China to satisfy the needs of the growing market.

Quicksilver will produce kits for shipment to China where they will be reassembled and test flown. Quicksilver has delivered more than 15,000 kits around the world.

The expansion in China marks a major success for Quicksilver, just one month after the company won FAA acceptance to produce its Sport S2SE model as a fully-built Light-Sport Aircraft.







This is the first of a new regular section featuring stories supplied by RA-Aus members which contain lessons for every pilot.

## Dry and not so high

I'm a 60 year old male with about 100 GA hours and 50 RA-Aus hours. I recently bought a neat SK2200 Jabiru with 425 hours on the clock.

My plan was to fly to NATFLY at Temora from my home base in South East Queensland. In preparation, I conducted six cross-country sorties ranging in duration from one to four hours.

On the sixth flight I planned a triangular route from home to Maryborough, to Tin Can Bay and home-a total of 235nm- not above 4,500ft with an estimated flight time of 2.9 hours. Fuel consumption was calculated at 15 litres per hour giving 43 litres plus a 10% (4 litre) variable reserve and a 30 minute (8 litre) fixed reserve making a total of 55 litres. Before leaving I noted the fuel tank visual level was at least 55 litres out of useable maximum of 63 litres.

Until the final stage, the flight was uneventful with a brief stop in Maryborough. There I checked the fuel level and engine time elapsed. I noted 37 litres remained after 1.5 hours which was 0.2 hours longer than estimated, but fuel consumption was within planned parameters. On the 30nm leg to Tin Can Bay, the headwind was much higher than forecast, but I didn't change the regular cruise power setting of 2,850 rpm and accepted a groundspeed penalty which added 12 minutes. On the way from Tin Can Bay to home, I made a small diversion to avoid a patch of rain which added 5-6 minutes.

Around 20 minutes from home, I asked my passenger to make a visual check of the fuel tank located behind the seats. She said she couldn't clearly make out the level, but thought fuel was visible. I thought little of it until a few minutes later when the engine made noises which were unmistakably fuel starvation. I switched on the booster pump and reduced power to 2,000rpm which gave me another two minutes of power and time to look for a suitable landing spot.

The engine cut out at 2,200ft AGL and fortunately there was a nice cow paddock within easy gliding range. I conducted a three-leg circuit and landed with full flap into the wind on a relatively smooth surface with a 200m ground roll and no apparent damage.

I had broadcast a Mayday on the area frequency, but some of the transmission was lost as we neared the ground, out of line-of-sight with the nearest station. On the ground there were no VHF communications, so I called Triple-0 on my mobile and asked the police to contact Brisbane Centre to let them know we were down safely.

Within a few minutes the police, AMSA and the RA-Aus Ops Manager had all called me to check things were OK. Their response and concern was impressive.

Next, I ambled over to the nearest house and said "G'day" to the farmer who was having a BBQ with some friends. He was mildly surprised to see the addition to his cow paddock. He commented that a lot of planes conducted simulated engine failures over his farm, but I was the first to actually drop in. He obliged with a jerry can of fuel and helpfully pointed out some power lines at the bottom of the paddock.

My passenger and I walked the intended take off path, clearing away rocks and sticks. I explained to the farmer that I would do a short field take-off to avoid bumps and the power lines. After refueling, I applied full power and released the brakes, but the Jab didn't move the left hand tyre was firmly stuck in a big, wet cowpat. The farmer helped us get unstuck then we took off and arrived home after a short hop, only about an hour later than planned.

#### So what happened?

I checked for any obvious fuel leaks and found none.

The next thing I noticed was that the total engine time was 3.5 hours, compared to my planned 2.9 hours - a difference of 36 minutes or 9 litres at 15 litres per hour. The headwind and diversion had accounted for an extra 18 minutes, an unexpected long backtrack at Maryborough about 6 minutes and run-ups and pretake off checks another 6 minutes. The remaining 18 minutes was the extra take-off and trip home after my farm stay.

Next I considered fuel consumption. All 55 litres were consumed in 3.3 hours, giving an average of 17 litres per hour. Both the technical manual and previous owner assured me 15 litres per hour using 95UL RON MOGAS on a cruise setting of 2,850rpm was reliable for cross-country planning. This figure had proven to be accurate on the five previous sorties.

## I believe there are three significant things to note in relation to fuel

1. This aircraft has no electric fuel gauge or fuel flow meter. The translucent fibreglass tank is visually graduated in 5 litre increments. 95UL RON MOGAS is straw coloured and is less easy to judge once the level falls below about 15 litres. 98UL RON MOGAS (red) and 100LL AVGAS (green) provide more contrast and this makes judgment easier and more accurate at lower levels.

2. While 95UL RON MOGAS is an approved fuel for the SK2200 Jabiru, consumption will be lower using 98UL RON MOGAS or 100LL AVGAS.

3. The aircraft technical manual and previous owner's experience should only be used as a guide because an engine with 450 hours TTIS may not return the same fuel burn as a newer one.

#### What I learned

- 1. My time calculations were wrong. Planned groundspeed of 90kts was too high and I didn't allow enough time for run-ups, taxying, head winds and diversions.
- 2. I relied on a fuel burn estimate which was overly optimistic.
- 3. Fixed and variable reserves are OK as concepts, but not much use if your planning is flawed from the outset.
- 4. I should use 98UL RON MOGAS or 100LL AVGAS because these not only give better fuel economy, but in this particular aircraft allow more accurate visual reading of the level in the tank
- 5. I was slack, because just by filling the tank (an extra eight litres) I would have just got home".

Do you have a story about a near miss or an accident which gave you grey hair but taught you something about flying? The RA-Aus Safety team wants to hear about it. Every story printed in *Sport Pilot* will earn its author a range of RA-Aus merchandise. Email editor@sportpilot.net.au and clearly label your email "Flying taught me this today".

# Shows Stridge Memorial Airfield All-In Fly-In

#### Watts Bridge Memorial Airfield All-In Fly-In

**By Richard Faint** 

The aim

to celebrate

and promote

recreational

regardless of

aircraft type.

aviation.

of the fly-in is

he weather started out fairly benign on the day in May planned for the Watts Bridge All-In Fly—In at Toogoolawah in South East Queensland.

Early in the morning there was just a little fog hovering over the Brisbane River with minimal cloud. But there was also a 'red sky in the morning' and we all know how that one goes.

Sure enough, the weather eventually took a turn for the worse and intermittent showers skittered across the airfield. But it did not dampen the spirits of the big crowd which turned up.

Watts Bridge is the home base for the Queensland Vintage Aeroplane Group, the Brisbane Valley Sport Aviation Club and the Queensland Chapter of the Australian Aerobatics Club. That guarantees the fly-in will always have a great diversity of aircraft types. This year was no exception.

Among the rare birds on display were a Grumman

G-73 Mallard, a de Havilland Dove, a US Air Force T-34A Mentor, a fine example of the Mignet HM290 Flying Flea and the amazing scale Grumman F9F Panther jet, which is always a show stopper.

The aim of the fly-in is to celebrate and promote recreational aviation, regardless of aircraft type. And throughout the day we saw gyroplanes, aerobatics specialists, warbirds, homebuilts, trikes, recreational, classics and vintage aircraft, as well as a large contingent of GA types. All in all more than 90 aircraft attended with many more people electing to stay below the weather by driving in.

A local community group, 'Beyond Limits – Supporting Youth through Education', did a fantastic job with the on-field catering.

The runways and associated infrastructure of Watts Bridge airfield were built in 1942 as part of the Australian World War II defence program. In the early 1980s a small group of dedicated recreational pilots re-discovered the



# ger

field. The runways were overgrown and the site was being used to graze cattle. The original management committee had a wide ranging vision to promote and develop the airfield as a centre for all forms of recreational aviation in South East Queensland.

After a lot of hard work two grass runways were restored to excellent, fully operational condition. Now, many years later, Watts Bridge features an airpark style development with air chalets, private and commercial hangars, along with AVGAS and maintenance services.

By any measure the fly-in was a great success. It was obvious everyone who made the effort to come had a good fun day out. All things being equal the All-In Fly-In should be a 'must do' highlight of next year's calendar of events.





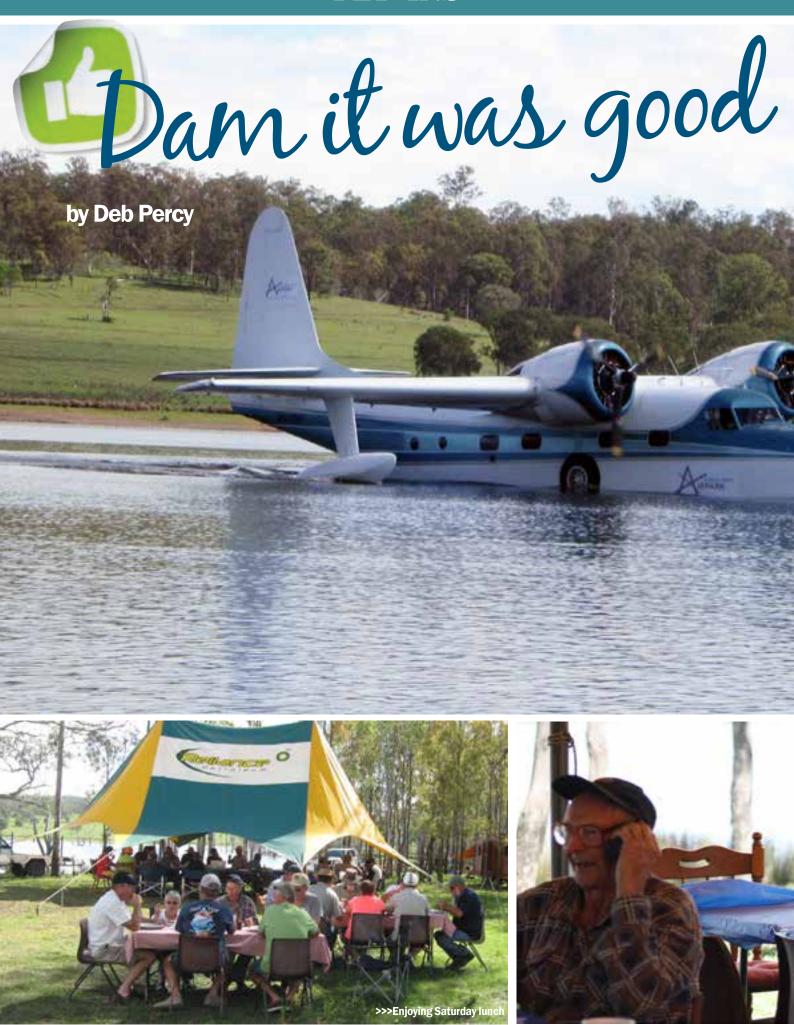








#### **FLY-INS**







#### The ANZAC weekend at Lake Barambah (Bjelke Petersen Dam) was exciting.

Several amphibious aircraft splashed down gently on the lake and dozens of land aircraft flew in to attend the Burnett Flyers' first annual weekend fly-in.

Aircraft from all over south east Queensland and northern NSW landed at a private strip on the edge of Lake Barambah in perfect weather so pilots and aviation enthusiasts could enjoy the club's famous country cooking.

Burnett Flyers members were kept busy serving lunch and a juicy camp oven meal on Saturday night. Live entertainment was provided by Karen Thomsen, of Gympie, accompanied at times by club President, Ralph Percy, on his musical saw.

It was a huge effort by members to build a mobile kitchen and facilities for this event.

Burnett Flyers member, Paul Markwell, the owner of the property, should be proud of how well it turned out. He put in a huge effort himself, including a financial commitment and we are grateful he allowed the club the use of his property.

Member and flying instructor, Bill Grieve, gave pilots an aeronautical and trivia quiz to fill out

which was a lot of fun and memory jolting for some of us. Yes, we can learn and have fun at the same time!

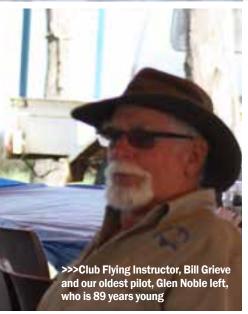
A highlight was the attendance of a 1948 Grumman Mallard amphibious aircraft powered by two 600HP radial engines. The Mallard presented a beautiful sight as it lay at anchor for the weekend. It is the only Mallard in Australia in its original condition.

Many recreational, as well as general aviation, aircraft came to the event including a single seat Thruster, piloted by club member and ex-Royal Flying Doctor pilot, Glen Noble, who is 89 years young. Glen is awaiting the arrival of his second aircraft, a Flying Flea from France, which has fold up wings for easy storage. The Flying Fleas are based in Gympie and the importer is a member of the club too.

#### (See our story on the Flying Flea page 30 -Ed).

Funds raised by the fly-in will go into the upkeep and maintenance of the community airfield (Angelfield) at Murgon. The club also holds a fly in breakfast once a month on the second Saturday.

Because the Dam fly-in went so well, the club plans to do it again next year on the Anzac weekend.





# Hospitable





>>> Phil Sims' Savannah

#### by Ross Millard

Ten aircraft flew into Ian and Julie Wells' 'Heathrow' strip, just South of Proserpine in North Queensland at the start of June.

Aircraft parking on the grass beside the runway was at a premium. Three amphibians were present, including lan's 503 Drifter on the Full Lotus floats he fitted recently.

There was also a Super Petrel from nearby Shute Harbour and a very nice SeaRey, recently purchased from Victoria by a local flyer. There was also floatplane action on the nearby river only a short distance from Heathrow, which kept all the non-flying visitors, pilots and locals entertained. Ian gave the floats a good workout on the Drifter by doing numerous take offs and splash downs.

Two visiting aircraft came in for the first time from Moranbah in central Queensland. Rob Gray in his J120 Jab was the first ever Jabiru to take on the different and challenging main strip at Heathrow.

Phil Sims arrived in his Savannah after making a precautionary landing at nearby Lakeside Airpark when the Savannah experienced some inflight engine unhappiness. With the problems rectified, Phil still managed to get to Heathrow for his share of the BBQ lunch.

Well done to all and a big thanks to Julie and Ian once again for having us all over for a relaxing Sunday BBQ. The food was once again just as good as the hospitality.









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**By Mark Peters** 

SRFC has had a long tradition of attending NATFLY, both at Temora and at Narromine



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**EMBERS of the Sydney Recre**ational Flying Club made the annual pilgrimage to NATFLY again this year.

Club members flew there in a variety of aircraft, including our two Foxbats, a scratch built aircraft (Nova) and a C172. A number of other members made the trek by car. In all there were 15 club members in Temora over the weekend.

The SRFC is a not-for-profit RA-Aus flying club run by volunteers. It was formed in 1985 as the Sydney Ultralight Flying Club, based at The Oaks airfield (near Camden). The club currently operates two Foxbats and two LightWings.

SRFC has had a long tradition of attending NATFLY, both at Temora and at Narromine.

The club prides itself on offering activities such as this to promote the social side of flying, so the club is more than just a place to hire an aircraft. Other events we have run or participated in over the past 12 months include a fly-out to AUSFLY at Narromine, the Blue Mountains Fly-over, a navigation theory course and a competition day.

At NATFLY, each day began with club pilots attending the morning briefing operated by Jill Bailey.

During the day the club ran Trial Instructional Flights for those new to recreational flying and familiarisation flights for pilots new to the Foxbat.

A couple of RA-Aus head office staff members were among our passengers on these flights.







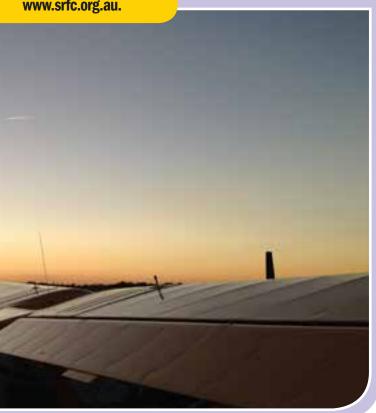
In addition, club members took the opportunity to get some experience away from home base, either by doing circuits at Temora or conducting Navex's to airports in the region including Cootamundra, Young and West Wyalong.

A number of club members also volunteered for duty on gates and the UNICOM. The days all ended with dinner together at the Temora Ex-Serviceman's club or a BBQ at the club camp site.

Club members weren't selected for ramp checks this time around but we were well prepared for the eventuality. This was in the spirit encouraged by our CFI, Greg Davies, who recently participated in filming of a CASA You Tube video on the subject. The message was that ramp checks are nothing to fear if you are prepared. See it at: www.youtube.com/watch?v=EhJm\_xQI8Wo

There was discussion about low crowd numbers at NATFLY, but SRFC members appreciated the opportunity to get away together and felt the weekend was a success in terms of hours flown, number of TIFs conducted and the fact that members got the opportunity simply to get together and do some flying away from home base. One member, Wally Szajwohna, also picked up the award for the most innovative aircraft – for his scratch designed and built Nova. Well done Wally.

For more information about SRFC visit www.srfc.org.au.





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"It's nice being able to fly home in the summer," says pilot Terry Ryan of rural Victoria. Australia (upgraded Jabiru 3300 engine featured below). "Before liquid cooling, the Jabiru engine had all sorts of heat related problems."

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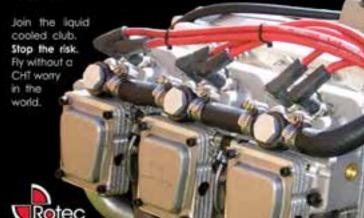
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# **JUR SAFETY**

The Aviation Safety Regulation Review report released in May (See News section this edition) had a number of disturbing things to say about recreational flying safety.

"The RA-Aus rate of fatal accidents has climbed for the past five years and needs enhanced monitoring.

"To gain an understanding of the differing accident rates between general aviation (GA), both commercial and private, and recreational aviation, the Review Panel sought the assistance of the ATSB. The ATSB undertook a comparison of accident rates (both fatal and non-fatal accidents) between commercial GA, private GA and recreational aviation:

Commercial GA includes VH-registered flying training and aerial work (agriculture, mustering, fire control, aeromedical, survey and photography), and includes only aeroplanes and helicopters (excludes balloons);

- Private GA includes VH-registered private, business, and sport operations, and includes only aeroplanes and helicopters (excludes gliders and balloons);
- Recreational aviation includes only Recreational Aviation Australia (RA-Aus) registered aircraft. Only aeroplanes and ultralights were included (excludes weight-shifting aircraft and gyrocopters).

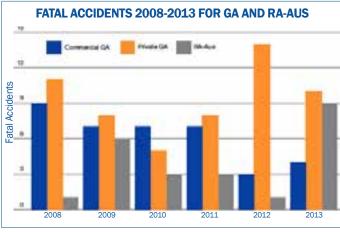
"Accident data was obtained from the ATSB occurrence database, which is populated by reporting from industry.

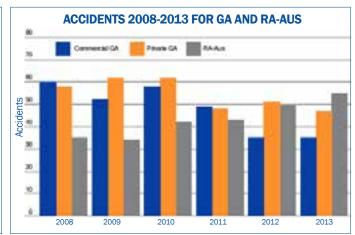
The 'ATSB does not have reliable accident data for recreational aircraft before 2008, so a comparison was made for the period 2008-2013. Incidents were not included because incident reporting by both GA and recreational aviation is limited, highly variable and unreliable.

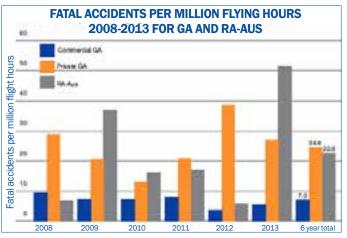
#### **TOTAL ACCIDENTS 2008-13 FOR GENERAL AVIATION AND RA-AUS**

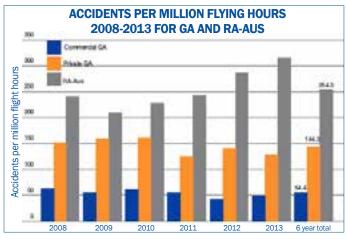
Table A9-1 Total accidents 2008-13 for General Aviation and RA-Aus

	Commercial GA	Private GA	RA-Aus
Fatal accidents	37	56	23
All accidents	289	328	259









## The RA-Aus rate of fatal accidents has climbed for the past five years and needs enhanced monitoring.

#### **NUMBER OF ACCIDENTS**

Across the six years 2008 to 2013, there were twice the number of fatal accidents in private GA compared to RA-Aus recreational aviation and about 1.5 times the fatal accidents in commercial GA compared to RA-Aus.

For all accidents, GA had only slightly more accidents than RA-Aus aircraft, with private GA having 1.3 times, and commercial GA having 1.1 times, more accidents.

#### **ACCIDENT RATE PER MILLION FLYING HOURS**

For the six year period 2008-2013 the fatal accident rate (per million flight hours) was similar between RA-Aus (22.6) and private GA (24.6), which were both about three times higher than commercial GA (7.0).

The total accident rate for RA-Aus (254.3) was 1.7 times higher than for private GA (144.3) and 4.7 times higher than commercial GA (54.4).

#### NOTES ON ASRR REPORT

**By Michael Monck** 

The ASRR report draws attention to the safety record of RA-Aus and it should be said that we are always working to improve safety in our sport. That aside, it must be noted that some statements appear to be contradictory to the underlying data.

The report states that "the RA-Aus rate of fatal accidents has climbed for the past five years" but the graphs tell a different story. It's hard to decipher these graphs without the underlying data but nonetheless it is clear that fatal accidents per million was under 10 in 2008 and then rose to somewhere in the mid to high 30s in 2009. Since this peak, the numbers have fallen to the mid-teens in 2010 and 2011 to somewhere around five in 2012. 2013 presents another awful year, with the number rising to the low 50s.

Using estimates of the underlying data, we can determine that applying a statistical trend to the numbers is of limited use. In statistical terms a simple trend line only explains about 14% of the story - meaning it is not a very good statistical fit at all. In other words, such cursory analysis should be treated with extreme caution at best.

As an organisation we must always strive to improve our record but at the same time we should not allow others to misrepresent us. For this reason, I think it is extremely important to note that, while we have a long way to go, it is also unfair to make blanket statements based on crude analysis which would not stand up to rigorous statistical scrutiny.



# DAVE DANIEL

#### Aerofoil Selection

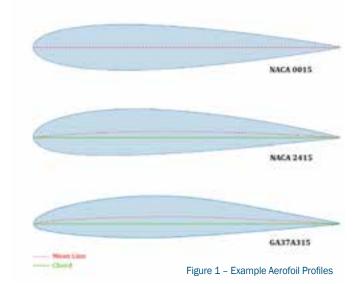
HERE are few areas of aircraft design more shrouded in mystery and misunderstanding than aerofoil selection. This is not really a surprise when you consider that even after more than a century of powered flight many, if not most, people still don't have a correct understanding of how an aerofoil actually creates lift. I'm not going to take on the challenge of dispelling any 'lift myths' here, but I will implore everyone to visit http://www.av8n.com/how/ and read Chapter 3. Or even better the whole online book. It's a superb resource; not only does it have an excellent explanation of lift, but understanding its content will undoubtedly make you a better pilot.

These days aviation has moved away from selecting aerofoils from catalogues, preferring to use computer modelling to design custom profiles for each project, followed by testing the result in a wind tunnel to verify the model. For us mere mortals, high-end software and wind tunnel testing are out of reach, so sticking with tried and tested aerofoils for which data is already available is the usual way to go. You could design your own aerofoil, but without wind tunnel testing it's a high-risk proposition and do you really want to reinvent the wheel?

#### What To Look For

Before selecting an aerofoil you need to know what you want it to do; so here's my wish list:

- High maximum lift For a lower stall speed or a smaller wing;
- •Low drag So I can fly and climb faster or with less power;
- ·Low pitching moment Minimises trim drag and allows for a smaller tail:
- •Benign stall behaviour Most people prefer gentle mushing to surprise aerobatics.



There are, of course, other non-aerodynamic considerations such as providing the section thickness to minimise the structural weight and providing enough storage for fuel, undercarriage etc. Or more subtle considerations such as the effect of aerofoil selection on control forces, but meeting the above criteria is a good start.

#### How Do I Get What I Want?

Let's start with maximum lift and minimum drag - If you really want a wing which successfully meets both of these requirements, the best thing you can do is add flaps or other high-lift devices, but for the sake of this discussion that would be cheating. So how do we get more lift? The simple answer is to choose an aerofoil profile with some curvature, or camber.

The top part of Figure 1 shows two aerofoils which were tested by NACA in the 1920s. The first, NACA 0015, is a symmetrical aerofoil which by definition has no camber. The second, NACA 2415, has exactly the same thickness distribution, but has camber added as indicated by the curved Mean Line. Adding camber to an aerofoil results in a couple of effects as illustrated by the lift vs angle-of-attack and lift vs drag graphs in Figures 2 & 3. With camber the CL delivered by the aerofoil is increased across the whole angle-of-attack range, including an increase in the maximum value. The increase also moves the zero lift angle-of-attack to a negative value, meaning that a cambered aerofoil produces positive lift even at small negative angles-of-attack.

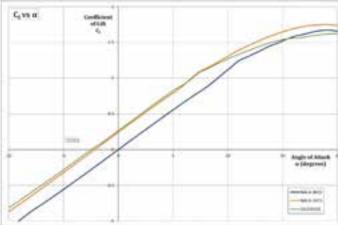


Figure 2 - Lift Coefficient vs Angle-of-Attack

In Figure 3 it can be seen that the minimum drag of the NACA 2415 aerofoil is not noticeably higher than the NACA 0015, but it now occurs when the aerofoil is generating significant lift. This is important for design, as an aerofoil can be selected with a camber that gives minimal drag at the cruising CL.

Camber not only affects lift, but the distribution of the camber is also critical for our next consideration -

#### Before selecting an aerofoil you need to know what you want it to do

#### Pitching Moment

Pitching Moment is the tendency for a cambered aerofoil to want to rotate nose down when it is creating lift; the strength of the pitching moment being dependent on the distribution of the camber.

A conventional aeroplane balances the main wing pitching moment with a down-force provided at the horizontal tail. Unfortunately this causes trim drag, so there is some apparent benefit in using a low pitching moment aerofoil for the main wing.

Theoretically a zero pitching moment would be optimal, but the reality is these aerofoils have higher drag, cancelling out much of their benefit and making them useful only for niche applications which require zero pitching moment such as flying wings or helicopter rotor blades.

Unless you like aerobatics, a sharp stall is probably not on your dream aeroplane wish-list and given the large number of stall-spincrash accidents which continue to occur I'd suggest a benign stall should be a design requirement for every ultralight (especially as aerobatics are not allowed!). There are many ways to achieve good stall behaviour across a wing, but a good start is to select an aerofoil like the three in Figure 2 with nice rounded peaks to their lift vs angle-ofattack graphs, which gives good stall behaviour to begin with.

A sharp peak translates to a sudden loss of lift at stall which is much more demanding to deal with. Even worse, some aerofoils can exhibit 'hysteresis' where, following a stall, the angle-of-attack has to be reduced to several degrees below the original stalling angle-of-attack before the airflow will re-attach and the wing will start flying again -

this can be the difference between a crash and a close-call. For my project I've opted for a GA37A315 aerofoil, which is a low drag laminar profile specifically developed for light aircraft. Sadly there's no space left for an in-depth discussion, but I've included it in the figures for comparison.

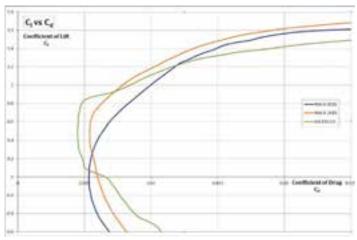
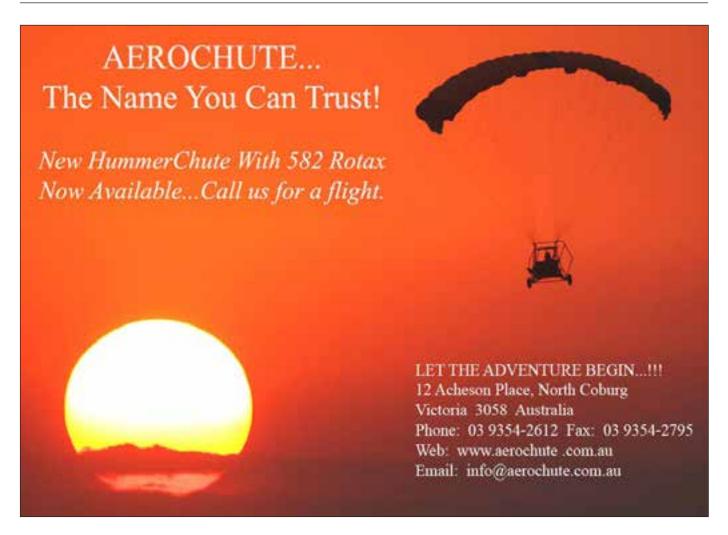


Figure 3 - Lift Coefficient vs Drag Coefficient

**Next Month:** Drag. 🐌





by Arthur Marcel

**Sentially** the Flying Flea is built of wood and fabric

ccording to Wikipedia, the Flying Flea (Pou du Ciel literally 'Louse of the Sky') is a large family of light homebuilt aircraft first flown in 1933.

Its odd name comes from the French nickname for the Ford Model T automobile, 'Pou de la Route' (Louse of the Road).

Henri Mignet dreamed of creating a Model T of the air, an aeroplane for the common man, hence 'Pou du Ciel'.

The first HM.14 was powered by a 17hp motorcycle The first HM.14 was powered by a 17hp motorcycle engine. A year after the first flight, Mignet published plans and building instructions. In 1935, these were translated into English in the UK and serialised in Practical Mechanics in the US, prompting hundreds of people to build their own Fleas.

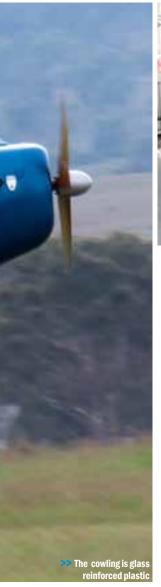
Tragically, the original HM.14 had design flaws which often led to fatal dives under certain conditions. Once identified, these flaws were quickly corrected, but the bad publicity continues to be associated with the Flea, despite the basic configuration having proven to be safe in hundreds of homebuilt and factory built aircraft since.

Essentially a highly staggered biplane, the Flying Flea is built of wood and fabric. It has two-axis flying controls with a standard control stick. Fore-and-aft movement controls the front wing's angle of attack, increasing and decreasing the lift of the wing. Side-to-side movement of the stick controls the large rudder, producing a rolling motion through yaw-roll coupling.

Many examples of the Flying Flea were built; in France alone there were at least 500 aircraft completed. Modern Flea enthusiasts usually vary the original HM.14 design considerably, adapting the airfoil and rigging of later models, such as the HM.360, to the fuselage of the HM.14, to create a safe and reliable aircraft with the retro look of the original.

I met Patrick Martin quite by accident at the recent Watts Bridge Fly-in. I immediately recognised him as a kindred spirit because he was wearing a Facet Opal T-shirt. The story of how Patrick came to be involved with his Flying Flea is a long one. It began at the age of 10, when he was taken to an air museum outside of Paris. It was there he first saw a HM.14 Flying Flea of 'as per the book' construction. He remembers being instantly hooked. Being a boy, he felt it was the right size for him, and because it was a simple construction, Patrick imagined he could easily build one in his bedroom. He has spent the rest of his life so far studying, researching, reading, buying books and travelling the world to see examples of the Flea, including two subsequent trips to Paris to see the actual plane which captured his heart.

In the early 90s, Patrick read a short article about a locally built Flea, which he deduced was an HM.290/3. He wanted to find the plane but had no leads to go on. Ten years later, he heard about Fred Byron's Flying Flea at Watts Bridge and realised it was same plane.







Fred Byron had built the plane in Lismore. It first flew in August 1994. When Patrick caught up with it, it was RA-Aus registered and had been thoroughly tested - with none of the original Flea faults evident.

It had been built using Henri Mignet's original single sheet plan from 1946, which Fred had redrawn as he went using his considerable knowledge of building Piel Emeraudes, as well as his wartime experience on Avro Ansons.

When the plane came up for sale again, Patrick was quick to make it his own. Basically, this Flea differs from the original only in that the cowling is glass reinforced plastic; the full flying rudder has been replaced with a fin and rudder and Howell spoilers and Cossandey flaps have been added (neither of which are used in normal operations).

The only other subtle changes are the addition of rudder pedals (which steer the tail wheel only) and after initial testing, the rear wing area was increased to that of the modern HM.293 (Patrick still has the original wing panels).

Patrick's Flea has folding wings, making it very small in the hangar. It also has the original pivoting front wing for pitch control and rudder on the stick for roll/yaw control. To turn, the stick is pushed either way with appropriate back pressure to maintain altitude. The stick has to be held over to maintain the turn or the Flea will return to straight and level. Pitch is managed in the usual way and the stall is non-existent. Apart from making sure his feet are centred prior to landing, Patrick says the Flea flies like most other planes. The differences are subtle, but Patrick says you have to be aware of them. He thinks pilots of conventional aircraft may have some misgivings at first, but with proper counselling, training and time, they would find it a fun way to fly.

Cruise is a respectable 60-65kts indicated and a two hour endurance make the little plane perfect for local flying. If you have plans to go to Perth, the helpful folk at Qantas would be a better choice.

Patrick's Flea is powered by a Rotax 503, giving it considerably more horsepower than the original plan called for. Being part of this Flea's life is a dream come true for Patrick and he feels honoured his name now appears in its log book.

If anyone is interested in building a Flea, plans can be downloaded from: http://www.flyingflea.com.ar/home/traditional-fforg-menu-1/pou-renew.





yet it often comes in bursts which can be, frankly, a little overwhelming.

I've recently embarked on a journey which has comprehensively changed the way I fly: I've become paperless.

I learned to fly at a very traditional school - with a firm focus on dead reckoning. The VNC was considered cheating and all nav-exs were planned on the WAC. I am overly acquainted with paper planning. So much so, I have a custom-built table at home for flight planning and a special storage space (nicknamed Captain Cabinet) for my maps, pencils, rulers, ERSAs, AIP, whiz wheel and protractors. For years, I wore two pencils in my hair and believed that carrying my flight bag a healthy form

So the journey towards a paperless cockpit wasn't fast for me. The paper was comforting; it didn't run out of batteries, it didn't freeze up at the worst possible moment and, if I made a mistake, I could rub it out and start again. Although I wasn't wrong about any of those things, I came to realise those were only the reasons why I shouldn't convert to an EFB and none of the reasons why I should.

Soon, the should reasons became very clear.

First, I trialled a pocket flight planner on my iPhone: CoPilot (www. ljd-tech.com/copilot/) is a multi-leg flight planning program for general aviation pilots which performs detailed time, distance, heading, fuel and weight & balance calculations. CoPilot was a great place for a newbie to start, with its easy-to-use interface and basic flight planner. CoPilot has no inbuilt maps and isn't a CASA Approved Paper Replacement (see side panel) but I found its greatest use to be in cross-checking my paper flight plan, my weight and balance calculations and my wind corrections. Rather like Sporty's E6B (http://www.sportys.com/PilotShop/ product/14849).

Then I purchased an iPad. And as luck would have it, a friend of mine knew a bloke who was developing a new flight planning app for the iPad and arranged for me to use it on a trip to Bundaberg for the 2011 air show. That app was AvPlan (www.avsoft.com.au), now in its fourth version.

Market leaders, AvPlan and OzRunways (www.ozrunways.com), both of which launched in 2010, have permanently changed the way we all fly. Both are approved by CASA under CAR 233 (1) (h) (see side panel) and are certified replacements for paper maps, ERSA, AIP and DAPs. They both offer VFR and IFR packages.

AvPlan has recently launched an Android version, as well as AvPlan Lite, a basic easy-to-use version for those who want to keep things simple. OzRunways now offers The Pilot Touring Guide as an extra subscription and both have the AOPA Airfield Directory option.

In addition to these two leading apps, there is a myriad of choice in the non-CASA approved category. PocketFMS (www.pocketfms.com) has an Android tablet version, as well as a companion app called Easy-VFR, which is popular with the sport aviators. The ever-popular desktop planner, Champagne PC Services (www.champagnepcserices) now offers an iPad version, as does SkyDemon (www.skydemon.aero).

The advantages of the iPad based EFB became at once obvious to me - time, money and a reduction in clutter, with everything I needed for planning and navigation neatly hidden inside the one small device (and they're getting smaller!)



#### FEATURE





#### What About the Law?

CASA has published CAAP 233-1(1), which sets out guidance for legal compliance, which every active pilot should read. The burning question is whether your flights are subject to an Air Operator's Certificate or are purely

The financial saving (on charts and ERSA alone) was enough to subscribe to either of the two leading apps and have money left over for a smaller flight bag. Flight planning for me has been reduced from an hour to around 15 minutes and because I fly the same aircraft almost every time, that data remains the same, meaning I only have to enter the aircraft information once and forevermore the app will remember its TAS, W&B data, fuel burn and hire costs.

My favourite feature (which I've nicknamed 'goodbye whiz wheel') is the wind column, which works out wind directions and speeds for me. AvPlan also has a 'runway centreline' feature, which draws the centreline out to five miles on the map (just like I used to) and even highlights the into wind runway in green.

The improvements to flight planning were most obvious in the time I saved in completing a complex flight plan. The identification of waypoints, navaids and airspace takes a fraction of the time it would have taken using paper maps.

Modifying the plan is simple, with a simple swipe if I want to change the leg. Legs can be added at various stages, the flight plan can be upended or reversed and the whole operation becomes a dynamic process rather than a static one.

The weather overlays allow a real-time look at the weather for my route, with troughs and sub-divisions illustrated on the map I'm using. And, if I need to make a hasty inflight change, the 'direct to' button does all the hard work for me.

To learn how to use my app of choice efficiently, I attended a seminar at my local aero club. Here I discovered I had been really only using around 50% of the features and I had overlooked some pretty funky shortcuts which have since made my planning even faster.

Both AvPlan and OzRunways offer free seminars in how to use their apps. Details can be found on their websites.

So one day, after a few years of flying with paper maps, an on-board GPS, iPad and iPhone, I decided to make the shift completely.

I now use the iPad as my primary flight plan and preferred supplementary navigation tool.

While the regs don't insist on a back-up for private ops, a sensible pilot would never fly without a Plan B and I use a second iPad with a second charger. My previous flight bag (known as Flight Bag Village due to its size), has been donated to a student pilot (who's still toting the ten tonnes of paper). Captain Cabinet, instead of housing whiz wheels and protractors, maps and ERSAs, is now home to a much more visibly aesthetic collection: my vintage flying caps.

If you fly your own aircraft, you'll know this already, but if you fly a rented or borrowed aircraft, including from a flying school or aero club, check with them about the status of their AOC, the contents of any Operations Manual and whether and how it applies to you.

If you are not subject to an AOC, it is up to you to determine what EFB to use, how you will manage it and what form your backup will take. But whether you have an AOC, or not, you must still comply with CAR 233(1)(h), which says you must carry "the latest editions of the aeronautical maps, charts and other aeronautical information and instructions, published in AIP or by a person approved in writing".

Note that while CAAP 233-1(1) sets out standards for screen size, electro-magnetic testing, power and database and software revision management, these are advisory and not mandatory for purely private operations.

Other requirements detailed in the CAAP, including for mounting and stowage of the EFB, and connections to other equipment, apply to all aircraft and operations. We should all expect these issues to arise during ramp checks, so make sure you can prove to a CASA inspector you have this documentation on your EFB and that you have a satisfactory backup.

#### Does the Supplier Need to be Approved?

If your operations are subject to an AOC, check with your company, school or club. However, even purely private operations are governed by the CAR 233(1)(h) requirement for the use of approved data. This means the supplier of an EFB app to be used in-flight must have approval from CASA for the procedures it uses to handle information, usually sourced from Airservices Australia, and make it available to you.

Currently the only relevant EFB suppliers to recreational aviation with these approvals, for the full range of documentation, are AvPlan, Jeppesen and OzRunways. Flight planning software used only on the ground is not subject to these requirements, but it would be foolish to purchase a product which did not have an ongoing update service.

#### Can You Still Do it the Old Way?

If you choose to go down the EFB path, think about your ongoing ability to operate safely and efficiently without it. Depending on the status of your training and testing, you might find examiners and instructors, especially those beyond a certain age, won't accept your iPad as the primary source of operational documentation in-flight. Prudent private pilots discuss this (and other relevant questions) with prospective instructors before training or testing begins to avoid any misunderstandings and he or she should be prepared to vote with their feet if they don't like the answer they get.

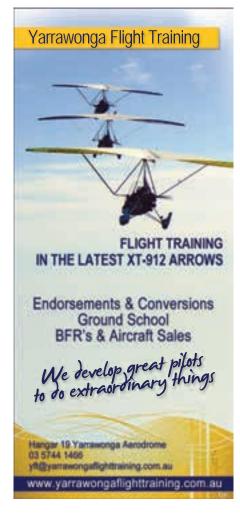








**Kreisha Ballantyne is the Customer Engagement Manager for AvPlan EFB.** In addition to flying paperless, she loves all forms of travel. talking and fine food. And collecting vintage flying caps.









# PILOT TALK

#### The Ops team

#### Home and A.W.A.Y

Operations was given the opportunity at NATFLY 2014 to shadow CASA SASAO officers as they went about doing ramp checks.

The intention was to give us insight into CASA processes, which are intended to improve safety and compliance by pilots when flight planning.

This was not the first time we have been associated with these exercises, as many who attended Monto in 2012 will remember.

It has been proposed RA-Aus be given the opportunity to develop and deliver our own compliance checking of RA-Aus pilots (without

replacing the role of the regulatory body). It represents a great opportunity for our organisation to provide assurance to CASA that we are able to self-regulate and ensure compliance.

To assist pilots, Operations has developed a simple checklist which will soon be introduced on the back of your membership

card. The simple checklist represents the items you should consider, not just for cross country, but for all flights – A.W.A.Y.

#### A - AIRCRAFT

Airworthy, registration current, service, maintenance, placards, manuals, PLB/ELB, tools, tie downs.

#### W - WEIGHT & BALANCE

MTOW calculated and confirmed, stowage of luggage.

#### A - ADMINISTRATION

Manual, copy of CoA/ compliance statement, flight record sheet, flight planning docs, fuel requirements and locations, current charts, ERSA, SAR/ flight note, NOTAMS, location briefs, weather.

#### Y - YOURSELF

Pilot Certificate, logbook, glasses (as required), IMSAFE, BFR currency.

The introduction of this simple prompt has been designed as a checklist and as an educational tool to live close to you on every flight. Your Flight Training Facility and Instructors can explore the areas in more detail.

The information is intended to form part of all future navigation endorsement training within our organisation.

Further card changes you will notice when you receive yours will include moving the RA-

Aus logo graphic to make the membership name and number easier to read (We can hear the sighs of relief already!) and the inclusion of your BFR date on the front of the card.

#### A TABLET FOR EVERYTHING?

Kreisha Ballantyne's story about Electronic Flight Bags in this edition is an entertaining and informative article in her usual inimitable style. But as the proverb says - buyer beware - as should all pilots using EFBs, and other electronic devices, to plan and navigate.

Operations recently attended a CASA AvS-



afety seminar on this subject. Attendance at these seminars is free and, by prior registration, members can take the opportunity to enhance their understanding on a range of aviation related subjects.

Firstly, it must be noted the CAR233 1(h) authorisation of commercially available navigation programs and associated software only relates to the use of the documents as current and legal reproductions of CASA and Airservices maps and information. The legislation came about as a result of the Electronic Transactions Act 1999 which permitted the use of digital media to display documents. In other words, as very helpful document readers. Any associated navigation planning or GPS functionality and guidance software can only be used to enhance situational awareness. It cannot replace VFR dead reckoning practices in relation to flight planning and management (AIP ENR 1.1).

It should also be noted that positional accuracy displayed on EFBs is not to a recognised CASA technical standard. Devices can derive their positional fixing in a number of ways and these may not be consistent with recognised airspace boundary limits or the appropriate aerodrome or navigation reference points. Typically this is being done in the background by network 3G or 4G assimilation. It means the little aeroplane displayed on your device may not, in fact, be an accurate indication of where you are.

This has come to light in recent airspace

violations where the convenience of the tablet application took precedence over navigating via known geographical references.

A further point about the use of EFBs and the requirement for a backup source of information. The tablet application is the back up! Power sources and redundancy for these units are not required for private operations, but pilots venturing in the wild blue with nothing more than a tablet and a power socket would not be considered to be taking seriously the appropriate risk mitigation which should be part of normal airmanship and flight planning.

Operations was recently asked to provide

an opinion about if an EFB could be used for planning and navigation for a Pilot Certificate BFR. While EFB use is not precluded, the RA-Aus syllabus calls for the pilot to be able to demonstrate the required competency in flight planning and dead reckoning using traditional methods, a point that all RA-Aus Examiners should remain

aware of when assessing any pilot for continued minimum piloting standards.

Finally, like all electronic equipment - and humans - these applications, associated hardware and network interactions are not infallible. In the same way your instructor taught you to reference an attitude for a given airspeed and use the ASI as the secondary reference, the philosophy also applies to the mighty tablet. Screen freezing, screen blackout from heat, power loss, light reflections, interrupting software updates and even general cockpit based distraction by any device, are all inhibitors to safe command of the aircraft. Finding a safe and appropriate place for the device to reside in during flight is also another challenge.

As with prescription tablets, pilots are advised not to become dependent upon electronic ones. App addiction needs to be resisted. Established and proven navigation practices must be the primary source in your flight planning, execution and management.

We live in an ever-changing and brave new world of EFBs and applications. RA-Aus is committed to constantly review such changes, however they must never be allowed to compromise flight safety or replace proper flight planning.

#### **REFERENCES**

#### AVIATION INSURANCE

experienced aviation insurance specialists Insurance Brokers Pty. Ltd. AFS Licence Number 206675

Stewart & Gladys Smith would like to assist with your RA-Aus or GA aircraft insurance, or hangarkeepers public liability policy needs. The only insurance we handle is aviation, we do it well, and we are both friendly and economical to deal with!

We cover the market for you, obtaining multiple competitive quotes from all appropriate insurers, and then help you pick the best cover/price.

We welcome clients in all parts of Australia, and if you can't catch us at the office on 1300 308 700, we are often available after hours on 0433 278 700.

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**Facilitated by the aviation guru Professor Avius** 



The question asked by the instructor to the student was:

If you flew for 120 nm and the wind blew you off course by

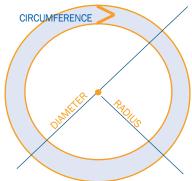
5 degrees – would you be able to see the airport?

The answer to the question could depend upon the student's knowledge of the 1 in 60 Rule.

If you've never heard of the 1 in 60 Rule your life has been too sheltered.

Start with a circle. It is made up of 360 degrees.

- Each degree along the circumference (circle's edge) could relate to 1nm;
- An arc distance of x number of nm sweeps through x number of degrees (around the circle);
- High school maths tells us the circumference of the circle is 2πr:
- Therefore to find the radius divide 360 by 2π. The answer is 57.3(nm). So 60 is close enough.



So, if you are 60 miles from a point (eg. from the centre of the circle to the edge – radius) and you are 1nm off track then you are approximately 1 degree off track; 3nm = 3 degrees off track; 4nm = 4 degrees off track and so on.

#### It is a Formula of Proportions:

For the purposes of navigation the main point to be gained is that

Distance off track	Degree off track 60 nm flown	Degree off track 30 nm flown	Degree off track 20nm flown	Degree off track 15nm flown
1nm	1 degree (TE)	2 degree (TE)	3 degree (TE)	4 degree (TE)
2nm	2 degree (TE)	4 degree (TE)	6 degree (TE)	8 degree (TE)
3nm	3 degree (TE)	6 degree (TE)	9 degree (TE)	12 degree (TE)
4nm	4 degree (TE)	8 degree (TE)	12 degree (TE)	16 degree (TE)

For every 1 degree change in 60 nm  $\rightarrow$  1 nm off course

## Distance off Track divided by Distance Flown = degrees off track divided by 60

Relating this back to our instructor's original question:

## Distance (off track) (unknown) divided by 120nm (distance flown) = 5 degrees (off track) divided by 60.

- $\rightarrow$  Distance off track = 5 degrees (off track) /60 x 120 nm (distance flown)
- $\rightarrow$  5/60 x 120 = 10 nm (distance off track)

To which the student who was asked the question would have to wonder if he would be able to see the airport.

Recognising the formula and its application will allow you to

- calculate the number of degrees off course you may be -Track Error (TE);
- · Apply TE to heading to parallel track;
- Calculate a Closing Angle (CA); apply CA to heading in intercept track;
- Remove CA when track is regained.

The knowledge and use of the 1 in 60 Rule will enable an off course problem to be identified and rectified before it becomes a major concern (or a situation where you become completely lost/ or not find the destination airport).

It is better to get back on track after a short distance has been flown (for example 10 or 20nm) rather than plod along off track for the entire journey.

Over the years the 1 in 60 Rule has been used in aviation context of  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ 

- · Determining drift correction;
- Working out time and distance to a point or station;
- And determining cloud height.

#### REFERENCES AND FURTHER READING:

Meteorology and Navigation Trevor Thom Aviation Theory Centre www.selkirkaviationcollege.com www.pilotsweb.com www.wikipedia.org/wiki/1in60rule







# EARNO TO FEV SHANNON LEGUSE

# Where it began

hristmas has always been an exciting time of year in our family. Last year's as usual, was most exciting at present opening time.

I got to watch my brother and father open little envelopes which contained gift certificates for trial flights in an aeroplane.

I was envious of them as they excitedly discussed how they would go up in an aeroplane with the promise they would actually get to control it themselves for some of the time. Then it was my turn and I got a small envelope too. I was so excited it wasn't even funny.

Being Christmas, the three of us were busy at work and couldn't manage to find a day where we all had time off at the same time. So we ended up having to wait a few weeks before we could book a time for our flight. Then we did. On January 20, 2013 we booked in, all three of us, for our trial flight at 9:30 in the morning.

We arrived at the Jaspers Brush airfield 15 minutes early and were greeted by two of the three pilots who were going to take us flying. We had to wait for the third pilot, Liz, to get back from a lesson. So we wandered around, asked a whole heap of questions and tried to contain our excitement, which was difficult.

Finally Liz returned and it was all hands on deck. The team at Jaspers managed to get two Pipersport aircraft down from Wollongong, so along with the Brumby, the three of us could fly at the same time. As advertised, we each got to help with the pre-flight inspection and learn about the aircraft and all its control surfaces. Then it was time to get in and get going. Dad climbed into one of the Pipersports with Andrew. Brother, Keiran, got into the Brumby

with Alex. I jumped into the other Pipersport with Liz, making sure I stepped where I was told to step and sit where I was told to sit.

Inside the plane, Liz showed me where everything was. She told me what I could touch, what I shouldn't touch and when I could touch it - which was good because I was so excited I wanted to have a go at everything. Then, after the run up checks were done, all three aircraft were good to go.

We taxied down runway 06, lined up with the centreline, Liz applied full power and we were off. I tried to make sure I was the first to go, and I was. Sucked in Keiran and dad.

I would be lying to you if I said I didn't get

We each got to help with pre-flight inspections and learn about the aircraft and its control surfaces

lost. Everything looked so different from the air. The only time I wasn't lost was when Liz pointed out the landmarks.

Once we were clear of the circuit, Liz let me take over. That first time I flew an aeroplane was one of the best and most memorable moments of my life (only outweighed by the first time I flew a plane by myself). I was flying around having a great time when Liz asked me where I wanted to go. I hadn't even thought about going anywhere, I was just excited to fly the thing. So we had a chat to the other two

aircraft, asked them where they were going and followed them.

Liz pointed me in the right direction, making sure I didn't raise the nose too much, which I had a tendency to do. Somehow we ended up over Jervis Bay - thank God for Liz's sense of direction because I didn't have a clue how we got there. Flying over Callala Bay, I tried to spot our house, but it was easier said than done. Then we turned around and headed somewhere else.

Over what I now know to be the Worrigee training area, Liz showed me some cool things the aircraft could do. She managed to demolish my pre-held opinion that if the prop stopped spinning the plane would fall straight down. It turns out aircraft glide very well. We also did a sneaky steep turn, which was so perfect we flew through our own wake turbulence.

After 45 minutes of joy, which only felt like five minutes of joy, we headed back to Jaspers Brush. Under Liz's careful eye, I helped her join the circuit and land the plane, making sure to do exactly what I was told, which was difficult because of how excited I was.

Back on the ground we thanked the team and headed home, each of us buzzing and full of the stories of what we had done.

In the months ahead I couldn't get it out of my head. I wondered if it was even possible to get my licence but kept dismissing the idea. Then, on a commercial flight from Queensland one day, I turned to mum and dad and told them "I'm going to do it".

The next weekend I was booked for my first flying lesson at Jaspers.



# Celebrating Selection Celebrating Selection Celebrating Selection Selection Celebrating Selection Sele













# HELP THE OPAL FLY AGAIN

Will one of the classic Australian ultralight designs take to the air once more? Will it complete its mission?

Dean Winton's answer to both these questions is a firm yes. After the story about how Dean was trying to resurrect his father, Scott Winton's, Opal design (Sport Pilot June 2014), there has been a surge of support from RAAUS members.

Dean now has a small group around him which wants to see the Opal fly again. Not only are there plans afoot to restore the Opal, but it will be further developed. This plane is not bound for a museum, at least not yet. The eventual goal is a transcontinental one, non-stop east to west. The plane's original mission is not yet complete. There is one more record left to break. Your support is sought.

Firstly, a lock up working area in the southern Newcastle area is required. This needs to be low rent (preferably no rent). It is possible that a *Sport Pilot* reader has such an area not being used or knows of one. Please investigate for us. Find the Opal a home.

Secondly, the project needs funding. Former RA-Aus Treasurer, Don Ramsay, has agreed to



become the group's Treasurer. As a former finance executive with BHP and Rio Tinto, Don's professional accounting and auditing credentials are well established. His integrity is beyond dispute. As a Newcastle resident, Don is perfectly situated to monitor the project's finances. Don has established a dedicated Opal account with Westpac.

> The Opal Bank: Westpac BSB: 732501 Account No.: 609627

Donations should be electronically transferred, tagged with member name and number. The list of supporters will be publicly acknowledged, along with the amount each contributes. If you prefer to be an anonymous supporter, just tag your donation 'anon'.

No donation is too small. This will be an all-volunteer, cost-efficient enterprise. All money raised will be used to meet materials, fabrication and equipment costs.

Progress reports and photos will be in Sport Pilot.



#### Wind indicator

The wind indicator is a smaller version of a normal windsock. It is 300mm long with a 75mm opening. Made with highly durable, lightweight, SOLAR MAX material it's perfect for those

smaller tasks, including indicating wind direction for chemical spraying and farming applications. It has a life expectancy up to two years.

It's available in standard yellow or white. Evelets surround the mouth of the indicator to ensure stability.

**Price AUD \$88** 

Web www.skyshop.com.au

#### Zulu PFX headset

With Zulu PFX, Lightspeed Aviation claims it has leveraged cutting edge technology, world-class engineers and superior customer knowledge to leapfrog the competition and produce the world's quietest premium ANR headset for aviators.

Lightspeed says its proprietary PFX technology creates a uniquely personal flying experience by actively conforming to your ears, your environment and your preferences.

Dynamic ANR continuously adapts to your environment, extending the amount, consistency and frequency range of noise cancellation.

Acoustic response mapping measures your unique auditory landscape, adapting the audio response to your ear shape and size for maximum noise attenuation, voice clarity, and music fidelity.

**Price** USD \$1 100

Web www.lightspeedaviation.com





One comment often heard about the Garmin GPS is that it can be difficult to see on an angle. This is especially noticeable when the GPS is mounted on the opposite side of the panel from the pilot. Introducing the solution: the Angle Adapter. It keeps the GPS at a fixed angle of 15 degrees, providing a more convenient viewing angle.

This adapter fits in the same panel cutout as the Air Gizmos Panel Dock, so if you already have a Panel Dock you can attach this adapter without having to modify the installation. You can mount the Angle Adapter in either direction, in case you fly from the right seat.

In addition, this adapter lets you surface-mount the Panel Dock on any instrument panel.

Once the Panel Dock is installed in the aircraft, the GPS can be inserted and removed in a matter of seconds.

**Price AUD \$60** 

Web www.ozpilot.com.au



Royal Aero Club, **Western Australia JANDAKOT** \$32 30.505 E115 49.957 S32 05.764 E115 51.763

**Holder: James Murphy** Email: murphyjuk@hotmail.com

Occurrences reported to ATSB in 2012 which involved GA aircraft doing private flying or training. Source: ATSB

### 86,000

Number of members of the US Experimental Aircraft Association

Source: EAA

Vne of a Brumby 600

www.brumbyaircraft.com.au



CAGIT on Facebook https://www.facebook.com/CagitHunters

#### **ANNUAL GENERAL MEETING**

The 2014 Annual General Meeting has been called in accordance with Rule 21 of the Constitution & Rules of Recreational Aviation Australia Incorporated.

In accordance also with Rule 24 and By-Law 2, notice of this meeting is being published in Sport Pilot, Volume 36 (7).

Time: 2pm

Date: Saturday 18th October, 2014

Venue: Lethbridge Airpark

3429 Midland Highway, Lethbridge VIC 3332

#### **Agenda**

- 1. Opening of the meeting, receipt of apologies and proxies
- 2. Declaration of the result of the Board Elections
- 3. Minutes of the last Annual General Meeting
- 4. Business arising out of the Minutes of the last Annual General Meeting
- 5. Presentation of Annual Reports by the President, Secretary and Treasurer
- 6. Business arising from Annual Reports
- 7. Any Motions on Notice
- 8. Questions from the floor
- 9. Close of the Annual General Meeting

There will be a BBQ at the end of the meeting to provide members with an opportunity to meet with the Board and staff in a less formal setting.

#### **RA-AUS ELECTION NOTICE**

The following members have been nominated for the upcoming Board Election:

#### NSW (2 Board positions available)

- · Andrew Saywell
- Barry Wrenford
- Michael Apps
- Colin Jones
- · Greg Doyle

#### TASMANIA (1 Board positions available)

- Eugene Reid
- · Frederick Benn
- Andrew Gyeng

#### VICTORIA (1 Board positions available)

Rodney Birrell

#### NORTH QUEENSLAND (1 Board positions available)

- · Ross Millard
- · Alan Middleton

#### **SOUTH QUEENSLAND (1 Board positions available)**

· Mike Smith

#### NORTHERN TERRITORY (1 Board positions available)

· Mark Christie

In accordance with RA-Aus By-Law 1 and Rule 13 of the RA-Aus Constitution, members currently registered in the above regions are entitled to vote for nominees (please note there are 2 NSW positions to fill) using the 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.

\*Please note that the regions with only one nominee will not require an election.

Completed ballot forms must be received by head office before 4 p.m. (E.S.T) on Tuesday, August 12, 2014.

Tony King Secretary

Recreational Aviation Australia Inc.

# Greg Doyle

I put forward my name respectfully as a potential NSW Board Member for RA-Aus, continuing to believe that RA-Aus is, in fact, a significant business.

It therefore needs to be adminis-

tered by a Board with a high level of business experience and importantly, communication and relationship management skills.

My management career includes Board membership of Bosch Aust. I believe that if we are to be as successful as we deserve, we need to unite members behind clearly stated and agreed objectives for our own aviation business and be part of a drive to eventually unify approaches to CASA with the other Self Administrating Sport

Aviation Organisations (SASAOs). While Board business discussions are correctly maintained as confidential, they must be conducted professionally with a clear vision of the members' views and with their interests as the primary driver.

And very importantly, communication to and from the Board needs to be clear and timely. I would strive continuously for better communication and financial reporting to the members.

I have been involved in aircraft distribution for over 10 years and I see that as important and broad aviation experience. Most importantly, I know that the relationship and negotiation skills I have acquired over my whole 50 year business career, would significantly help RA-Aus in its relationship with CASA senior management and in improving communication with other SASAOs to unify objectives in approaches to CASA.

I declare my involvement with Silent Wings Aviation as an Australian distributor of aircraft.



# Rod Birrell VIC

I am privileged to be one of the founding members of the AUF/RA-Aus and previously served as its President and as one of the first AUF/RA-Aus Operations Managers. I believe I bring a degree of experience to the Board that will be of value to RA-Aus.

I have worked as one of the two RA-Aus Board Members representing Victoria during the most recent Board term. For those new to our sport, the RA-Aus Board is the policy making body of our organisation. RA-Aus Board member positions are not paid positions.

RA-Aus is yet again at a turning point in its development. In the process of trying to meet ever more complicated administrative demands from CASA, we are spending our administrative time, and our financial reserves on compliance issues rather than safety issues. Financially, if remedial action is not taken now we will become unviable. It seems likely we will suffer an expected loss for this financial year of around \$430,000.

RA-Aus has a very passionate, outspoken and independent Board of 13 members. It is a challenge to progress reform proposals, however as policies for the future, I will endeavour to:

- Push to make RA-Aus economically viable, clearly spending all our limited reserves at our current rate is unsustainable. If we are to show any sort of corporate governance we must move TOWARDS HAVING A BALANCED BUDGET - STARTING NOW;
- Get the right policy decisions accepted by the Board. As an example, we do not need a Recreational Pilots Licence operated by CASA when we already have a Recreational Pilots Certificate managed by RA-Aus;
- Support the policy move to increase the maximum take-off weight to allow slightly heavier sport aircraft to fly with RA-Aus and also work to preserve the rights of our founding group of

ultralight pilots (95.10);

- Support electoral reform within our organisation. RA-Aus has not had an electoral redistribution for many years. This has left Victorian RA-Aus pilots lacking a fair representation;
- Introduce a sport aviation hangar program where RA-Aus uses some of its reserve funds to build hangars around Australia for the use of RA-Aus pilots. Once established, these hangars could be sold or leased to our pilots/aircraft owners and the returned funds use to build more hangars in other locations:
- Work towards a better communication with other sport aviation organisations;
- Further upgrade the RA-Aus website;

I work as a Senior Instructor and Pilot Examiner at AirSports Flying School, located at Sunbury Airfield (North/West of Melbourne). My flying background includes flying ultralight, sport and general aviation aircraft. I also have airline experience and hold an ATPL.

In terms of corporate governance, I have participated in the RA-Aus Board, risk management and safety management programs. In addition I have many years' experience running small businesses. RA-Aus is, after all, a small business with only 14 staff. I have put forward a proposed strategic plan to the Board for the future development of RA-Aus as well as a recommendation to the Board on restructuring.

Over the years, I have built a number of aircraft, including the SOL, Icarus II, Fledgling, a Pterodactyl and a Cobra. I currently teach in our flying school's Storch, Texan and Topaz sport aircraft. My interest remains working for the RA-Aus to represent you by continuing to fight for sound reform and good policies. I ask for your support at this election.

Statement Under By Law 4

I currently work as CFI at AirSports Flying School, at Sunbury Airport, a flying school that I manage and own. Airsports Flying School imports, distributes and flies the Topaz light sport aircraft. When not flight training I work at AeroShop.com.au, a business I part own which sells pilot supplies.

My contact is at mail@goflying.com.au if you would like to write to me about any of the issues I have raised.



# **Andrew Gyenge TAS**

My name is Andrew Gyenge (pronounced: Jenga) and I am a long time member of our organisation, joining the then AUF in 1986. I have held positions of office with a sister organisation prior to joining the AUF.

I believe I have considerable experience in most areas of operations within our organisation and have personally witnessed it evolve into a world class entity in both representation and administration.

The number one priority has always been to keep things as simple as practical at the lowest possible cost to our membership.

I believe this objective has been achieved consistently over the years and our members should feel satisfied that every effort has been made to fulfil that aim.

I believe our current freedoms and privileges that we, as pilots and school operators, enjoy today is the result of the dedication and tireless efforts of not only our elected board members (some of whom have served for many, many years) but also many non-elected members.

My aim is to work very hard to maintain our privileges and freedoms that we enjoy at present. While not having previous experience as a board member with the RA-Aus, I believe I have enough experience in general, in policy and strategy development, implementation and review, to be of value to the members.

I wish also to implement some innovative ideas that will greatly benefit the members who I will represent.

I have over 20 years' experience in owning and operating small businesses, aviation and non-aviation. Presently I am the owner operator of Midlands Flying School at Tunbridge in Tasmania as Chief Flying Instructor, Pilot Examiner and Level 2. My satellite flight training facility is at St. Helens, also in Tasmania.



# **Eugene Ried**

Recreational aviation has been my life since 1982 when I purchased the first single seat Thruster ultralight aircraft to roll off the assembly

I taught myself to fly as flying schools used to be illegal and aircraft were not allowed to be flown more than 300ft above ground level, nor were they allowed to cross over highways. Unlike many pilots in previous years who became statistics, I had previous experience with my father as he bought Tiger Moth biplanes at the end of the Second World War and I had been flying in Tigers since I was in nappies.

Shortly after starting to fly ultralight aircraft, I represented Tasmania at the first board meeting of the Australian Ultralight Federation (AUF) in Canberra. How things have changed. We were sleeping three to a room - the accommodation wasn't glamorous, but the ideas that came up during the meeting were quite amazing and most of the ideas and dreams from those days have now come true.

The biggest change we didn't even dream of back then, was the type of aircraft we have now. We were flying around at 40kts in single seaters, made of alloy tubing, sail cloth, marine fittings and powered by stationary engines. We couldn't even imagine the alloy or plastic fantastics of today with speeds of 150kts.

It has been a privilege to have been on the board since the early times and being involved in all the changes along the way. I have been the longest serving board member including eight years as President. I have played a major part in originally obtaining the right to fly above 5,000ft because of Tasmania's tiger country and crossing Bass Strait.

During my first term as President, I enjoyed working with our Operations Manager and CEO, Paul Middleton - these were times of major growth and many changes.

I was involved in employing our first political lobbyist to fight the issue of all ultralight flying schools having to have AOCs (Air Operators Certificates).

I also employed Lee Ungermann as the Operations Manager. He was promoted to CEO and is now head of the Sports Aviation section of CASA. I was also involved in the name change to Recreational Aviation Australia

During my second term as President, I and the board were overseeing an office full of committed staff and managers and working with CASA towards an RA-Aus with better governance and safety management systems. I was directly involved with approval of direct crossings of Bass Strait, including legally flying via King Island, access through military zones for holders of both GA licences and RA-Aus certificates, 600kg weight limits for 95-55 aircraft and access to fly up to 10,000ft.

These are just a few accomplishments. However there are many more items which need to be addressed such as additional aircraft weight to allow many of our approved aircraft to be flown more safely and up to their maximum approved weight, allowing a few more aircraft into our category that just miss out under current regulations and RA-Aus operations in controlled airspace. On September 1 this year CASA will bring out the new Recreational Pilot's Licence and I am committed to ensuring the privileges and safety available on that Licence will be available to you as an RA-Aus pilot. We also need to speed up the registration renewal process so that you, as an aircraft owner, can fly your aircraft during all the time that you are paying for. We have to preserve the rights and freedoms we have now and continue with the building block approach. This includes appropriate education and training for the type and category of aircraft and airspace you wish to fly in.

I have been running flying schools since 1986, with my company, Freedom Flight Pty Ltd. I am talking to many pilots on a daily basis due to my flying schools and telephone access at all times. If you need representation on any problem that the RA-Aus can help you with, or any ideas for more improvements and freedoms, please contact me at any time.

Ultralight and recreational aircraft have been my life since the AUF started and I look forward to representing Tasmanian and Australian recreational aviation for another term and helping all members to fly 'higher'.



#### **Ross Millard Nth QLD**

Due to the structure of our organisation's constitution, I once again have the pleasure of requesting your support and vote as Board member for North Queensland.

During the short period that I have served in this position (as a result

of the previous office holder's resignation) I have already had a great deal of valuable exposure and insight to the day-to-day operations and workings of our successful organisation.

I attended NATFLY at Easter after flying over 3000nm in my own aircraft. There I sat as a Board member at the publicly attended Annual General Meeting and the following day represented your interests at the RA-Aus Board meeting. I integrated well with all other Board members and became part of the team which made many crucial decisions on areas of concern facing our organisation at this time. I also took time to conduct two separate maintenance forums for members, which were both well attended.

As a working board member this year, I have also been part of the decision making team which saw Jill Baily appointed as Operations Manager, Darren Barnfield as Tech Manager, Michael Monck as President and the remaining members of the Executive appointed as Treasurer and Secretary.

Additionally, we also created the position of National Safety Manager and appointed Katie Jenkins to that position. Without exception all these positions have been highly productive, plus have gone a long way toward satisfying the continuing requirements of the regulator.

The current board is working well together and the President, Michael Monck, has covered much ground in a short time. With our encouragement and support he has been successful in meeting one-on-one' with the Minister for Transport, Warren Truss, on two separate occasions representing RA-Aus. This was a better alternative and more fruitful for us than proceeding with less productive meetings with the CASA equivalents. The board fully supported this direction.

There still is much to do at board level and many challenges ahead for all of us during the current period of development within our sport. We still have financial challenges to get on top of for a better year ahead. In my local region I have established a network to communicate periodically with local members and keep them informed. I have also attended the Callide Dawson inaugural Fly-in at Thangool and supported the Ayr Flying group's similar event.

I remain personally committed to supporting our freedoms and privileges as members and pilots, in keeping regulation to a minimum and to keeping our flying fun and inexpensive.

Please be sure to exercise your right and privilege as a member and cast your vote for our future. My financial interests in aviation remain as a contracted aircraft maintenance engineer in GA, plus an additional small income derived from my L2 maintenance activities.

Thanking you all, Ross Millard RAA 010233. NQ board member.



#### Mike Smith SE OLD

G'day to all members in South Queensland. I have put my name forward for a second term as a board member.

There is a lot of work to be done in keeping the Association heading in the right direction and from what I have learned in my first term, I feel

I am in a position to continue to make a contribution to that goal. We have certainly had a few rough patches over the past couple of years, but I can see a definite brightness for the future.

Although I don't hold any specific qualifications, I try to represent an average member's point of view in a logical and practical fashion.

We have an extremely good Tech Manager in the Association, a very capable and knowledgable Ops Manager and a board executive that is cohesive, has a good rapport with CASA and is keen to steady the ship. I feel I can work well with that team and make a positive contribution towards steering RA-Aus to calmer waters.

My aviation background started with GA in the seventies. I then converted to Thrusters in 1996. In 2000 I built the first six cylinder Jabiru taildragger kit. That aircraft took me to many parts of the country. Finally in 2011 I built my current aircraft, a Jab J230. In this aircraft I hope to visit more parts of our country, and continue to meet more like minded flyers. I have no financial interest in any aviation activity and I ask for your vote in the coming election.



#### **Michael Apps NSW**

Who am I? My name is Michael Apps and I have been involved in aviation since I was a schoolboy at the end of WWII.

I joined the Fleet Air Arm in the UK and served for 25 years; resigned

in 1973 and worked with industry and the UK government until I came to Australia to help with an RAN Project in 1977.

I married my wife, Elisabeth, in 1984 and we have both been involved in work with government departments in administrative and financial management roles, then running five successful businesses including owning and running Polo Flat airfield and the Snowy Aviation Academy flying school up to the present time. I was elected to the Recreational Aviation Board in September 2012 and have just completed my two years stint as a representative for New South Wales.

#### My aviation background.

I have just over 15,300 hours in military and civilian flying, gliding and most recently for nearly 30 years in recreational flying.

#### I have

- Commanded three squadrons in the RN and was 2 I/C of the UK/US HMS Jufair Naval Base in Bahrain and was an RN instructor from 1951-1954 and 1970-973:
- Owned 24 aircraft including warbirds, GA aircraft, gliders and have three Jabirus at present;
- Flown as a member of Warbirds Australia, organising and taking part in air displays around Australia until 2002;
- Been President and CFI of numerous flying /gliding clubs; and
- Flown parachute aircraft for Parachute Federation operations;
- Flown gliders since my schooldays at RAF Detling in 1944 and competed in gliding championships in the UK and Australia;
- Been a gliding instructor (including motor gliders) from 1952 until early 2000 and was the RTO (Operations) NSW for the Gliding Federation Australia for five years in the early 1980s;
- Flown nine types of glider towing aircraft and taught and examined pilots in glider towing;
- Been an AUF/Recreational Aviation Australian instructor since the mid

- Spent the past 16 years owning and running Polo Flat Airfield and Snowy Aviation Academy (as CFI) since 2003;
- Served as the Sport Aviation representative on CASA's Flying Training Panel for the past two and a half years.

#### Why do I wish to offer myself again for election to the Board?

I am a firm believer in the old adage of get in and learn the business, work hard and contribute and then get out. Whether you join a board, committee or a management group, it takes a year or two to learn the ropes before you can contribute effectively and when you think you've done your best, get out and let fresh blood and enthusiasm take your

I think that I have now got a good grasp of RA-Aus business and board procedure and have made many useful contacts. So I would like to ask you to elect me for one more term of Board duty because I feel I can now really help the organisation to continue to prosper and grow.

I joined the board in 2012 because I was disappointed in the direction our organisation was being taken, particularly the lack of information and increasing costs. Despite a solid and increasing membership and a growing fleet, the fees were going up and CASA appeared to have become more intrusive. I considered regulation and red-tape were restricting our 'recreational fun' and taking us down the path to the General Aviation culture of 'no you can't', rather than the more familiar RA-Aus attitude of 'let's see if we can make it possible.'

In the past few months, and particularly since the beginning of this year, there has been a distinct and very encouraging change in the air. The Board is now functioning as a more cohesive unit and the information flow to and from the board, the staff and members is providing a great sense of transparency and general improvement. I offer myself for re-election in the hope that I can be part of building the future of an organisation, which is transparent and progressive and combines positive encouragement with absolute adherence to safe flying standards.

#### What can I offer Recreational Aviation Australia?

- Nearly 70 years' experience in aviation including flying in small aircraft;
- About 32 years of managerial and financial experience in government and private enterprise, and many years of work on boards of aviation clubs;
- Sixteen years running Polo Flat airfield.

In the course of this work I have had to deal with the politics of boards, committees, government departments, vested interests and people who talk a lot and do very little. I am sure that Recreational Aviation is the future of flying in Australia and I would like to continue to contribute a lifetime of aviation and business experience to making this happen as smoothly as possible.

#### By-Law 4 declaration:

My wife and I own and run Polo Flat Airfield and the Snowy Aviation Academy which is up for sale and has been subsidised entirely by my wife and I over 16 years. I have no other declarable aviation related interests.



# **Andrew Saywell**

I have been involved with aircraft for my entire adult life. I joined the RAAF and worked on F1-11 and P3C Orion aircraft radio, radar and electronic systems for 11 years.

Before leaving to work for a defence contractor for the next 18 years, moving into corporate IT.

About six years ago, I moved from Adelaide back home to Coffs Harbour in NSW. In that time I have flown GA, trikes and ultralight three-axis aircraft. My work within the defence contractor was at a senior level and, as such, I was constantly exposed to the concepts of how a successful business ran and how important governance and formalised control is to achieving that successful outcome and how chaos theory would seem to immediately apply when the required constant focus waivered.

It is my view that RA-Aus has in the past, and still is to a significant extent, in need of business grade governance and control and we need people within the board who can bring appropriate medium-tolarge business experience which can be applied to RA-Aus.

It is appropriate we have some polished flying skill within the board, however the reality is that if RA-Aus was to founder it won't be because the board didn't understand flying, but rather was unable to identify, manage and mitigate risk, or was unable to upwards manage our government stakeholders. Events of recent years show that we have had insufficient board experience in these two areas, among others, though I concede that in very recent history there seems to be improvements in both areas.

I was involved in arranging for the calling of the February Extraordinary General Meeting last year and the constitutional changes in vears previous which cleared the path for such a meeting to actually be called. It's my view that at the February meeting the RA-Aus entrails were examined in enough detail that many members were able to see, or at least consider, if our incorporated association was entirely healthy.

I hope from that it can be seen that my concern with RA-Aus health is not a transient thing but rather something I have been seriously considering for many years. So, with all that said, what can I offer RA-Aus and the membership?

I managed significant elements of a 210 person IT department including commercials and procurement activities in recent years from Coffs and prior to that established and managed an \$18m p.a IT budget. I believe I can assist with bringing appropriate governance to RA-Aus. I would also work towards improving transparency of board decisions.

The most recent decisions at the Temora board meeting were published to the members on the RA-Aus member portal, however I don't believe that the day to day final decisions within the board communications software are currently similarly published.

Where it does not harm RA-Aus, member's privacy or member's rights to natural justice I can see no reason why the publishing within the member's portal approach is not extended to the majority of the board decisions. How can we, as normal members, elect the most appropriate representatives if we know little to nothing about what they do collectively for us once elected?

Above all else I want to contribute to ensuring that RA-Aus remains relevant and that members can continue to fly their own aircraft with no degradation of the freedoms we have today and within a cost structure that, given that current financial realities, doesn't become unaffordable.

For clarity, I earn nothing from recreational flying other than the pure joy once we are wheels up that we all share.



#### **Barry Wrenford NSW**

Financial predictions from the last general meeting at Temora say that without change we have maybe three years before we become unfinancial and cease to exist.

Three things are bringing this about. One is our outdated, cumbersome, costly and ineffective board management structure. Second is CASA with its draconian regulatory regime which we cannot afford to comply with. And thirdly is the result of unfair litigation laws which we can't change. I propose to address the first two items.

My aim is to urgently pursue conversion of RA-Aus to a more efficient professional and centralised organisation.

This means appointing professional paid directors, reducing their numbers to an efficient and less costly maximum of seven.

It would involve a paper change, adopting a new constitution and making us probably an Incorporated Association and transfer our assets. We would maintain continuity of operations, our location and our staff.

I have been told that maintaining the current decentralised board in operation costs us some \$100,000 per year. There is no reason why initial appointments of directors should not be from existing board or RA-Aus members, providing that they meet the professional qualifications necessary.

My second aim is to foster relations with CASA with the aim of changing the role of RA-Aus to be more self administrative and less regulated, under a more benign and supportive guidance from CASA. This is how it used to be once. Then, the previous versions of CASA were supportive, very respected and welcomed everywhere by the flying community.

The complete reverse is now the case and is costing us dearly in all respects. Signs of change are occurring within CASA and I wish to promote this.

#### **Business experience:**

- 1954 to 1977 Worked in a private rapidly growing surface coatings company, which passed through many cycles of growth pain, such as RA-Aus is now experiencing. Trainee to Chief Chemist to Technical Director on the board. Much marketing/business training and designing of automated production lines with overseas travel and customer contact.
- 1977 to 1980 Acted as consultant to the company while starting the family owned Alpine Soaring at Jindabyne as a high altitude gliding centre.
- 1980 to 1990 Operated Alpine Soaring, with many club visits, without accidents or incidents, and flights up to 32,000ft. Also a large format professional photography business recording every aspect of the Snowies.
- 1990 to 2000 Pioneered and operated a family computer based desktop publishing/marketing business before this existed elsewhere. Board member and secretary of Tourism Snowy Mountains.
- 2000 to present Fully retired having built four kit aircraft.

#### Flying Background:

- 59 years of accident free leisure and sport flying and gliding, 10,000 landings in some 100 types of aircraft.
- 1955 to 1964 Trained in Tiger Moths with Royal Aero Club of NSW. Flew every single engined aircraft.
- 1964 to 1977 Converted to gliders and flew tug aircraft. Tugmaster, club secretary, instructor, CFI, National Gliding School instructor. Competition gliding.
- 1977 to 1990 CFI operating high altitude soaring centre in the Snowy Mountains. Operated tugs, gliders and powered sailplanes and fully maintained the latter. Detailed study of wave, inversion wave and rotor, passed on to the power and gliding community.
- 1993 to 1997 Paragliding.
- 1997 to present Built four aircraft. Helicopter flying. Technical Councillor and Authorised Person for SAAA. Senior instructor with RA-Aus. Level 2 maintenance with previous maintenance/ repair authorisations for gliders and motor gliders and now thinking of building something else.

I am retired and have no income derived from, or any association with, aviation related interests.



#### Alan Middleton Nth QLD

Recreational Aviation Australia is a grass-roots and special interest organisation which has grown rapidly to now become a not-for-profit SME with over 10,000 members and a revenue base of about \$2.5 Mil and which has a legislative reason to exist.

Our operations are entirely sustainable, but our lack of reform and strategic focus at the Board level over the years has caught up with us to result in expensive emergency fixes and organisational instability.

Our financial outcomes are such that we will make a loss of around \$440k for 2013/2014. Our previous recent years have also incurred losses in the vicinity of \$220k to \$260k. Nonetheless, our working capital remains very healthy at about \$1.5 Mil and our auditor has (last year) expressed the opinion that our organisation remains in a very healthy financial position.

Our organisation must continue to implement the changes currently underway and I will stand to support our President, Michael Monck, in his reform agenda.

The current core number of Board members is thirteen. I will support changes to the Constitution to reduce the core number of Board members to a much smaller number than present. The present size is unwieldy, unproductive and prone to excessive factionalism. In addition, and only when the number of permanent Board members has been substantially reduced, I would like to add the option of allowing us to temporarily increase the number of Board members (by no more than three) to allow us to bring in non-executive expertise as required at any point in time.

I will also support reform to increase the separation of the Board from the day-to-day management of the organisation.

Our Board needs to include more of the professional business skills such as policy, accounting and law in order to focus on the development of strategic objectives that will prepare our organisation for the near and medium future.

Our organisation is experiencing unprecedented levels of scrutiny and oversight from CASA and other relevant stakeholders and we must soon negotiate and finalise a new Deed of Agreement with CASA. High standards of corporate governance are required and can be delivered over the next two years. In order to achieve this, our Board and our Executive must have a solid grounding in a variety of professional skills and remain dedicated to resolve our most pressing issues.

I have strong experience in corporate management and organisational research and change. I am the Chairperson of Directors at Bluewater Airport in Townsville and an active RA-Aus flying instructor. I have been the 'voice in the tower' at NATFLY on several occasions and I currently serve as the President of the Townsville Flyers Inc. I am an active General Aviation pilot and I own and fly a 1959 Auster Beagle Airedale and a KR2 'Mini Mustang'.

I provide my RA-Aus flying instruction and other services to the Townsville Flyers Inc. on a volunteer basis so do not earn an income from these activities. I do earn an income from my involvement at Bluewater Airport. My professional qualifications include a Master of Laws, Bachelor of Commerce and post graduate training in Information Technology and Association Management. I am a Fellow of CPA Australia and have strong experience as an investigative accountant and Major Fraud Squad detective.

As a long standing member of the AUF and RA-Aus, I have known, and flown, with many of the current and recent past members of the Board. I know they all understand the need for change in challenging times.

Together we will work tirelessly and collaboratively to achieve what is needed over the next two years. I will need your vote in order to begin this work.

Phone 0407 356 948 email: Alan@AlanMiddleton.com



# **Colin Jones**

Aviation Employment Statement. I hold no positions in any aviation related organisation which pays an income, remuneration or honorarium.

#### Relevant experience:

- RA-Aus Certificate, flying out of The Oaks, near Sydney;
- Retired Professional Engineer and IT Manager Telstra & OTC;
- Retired National Treasurer (honorary) of APESMA, a major member based advocacy not-for-profit (income exceeding \$20Mil - over 80
- Retired NSW Branch President of APESMA;
- Board Member, Schofields Flying Club;
- Committee member of a number of small local social, sporting and youth organisations;
- Ashfield (NSW) Citizen of the Year 2010;
- Australian Defence Medal (RAAF Reserve).

My involvement with recreational aviation is relatively recent, however I have a lifelong family association with aviation where my father and uncles were commercial pilots and my brother a LAME.

An early decision to go to University limited my choices to flying or eating and later having a family had the same effect.

Having the kids off my hands meant I could once again indulge, now in RA-Aus and it is bringing much enjoyment.

I am offering myself for election as I believe I have qualifications and a range of experiences that will be useful to the board and of benefit to the members. I understand there are issues of transparency and representation which are causing some debate, as well as how the organisation is travelling financially and as the representative body of the members and as the delegate of CASA.

As the board of a member based organisation, the RA-Aus board must face these challenges which are unlike those of a public company where you can sell your shares and just walk away.

As a Professional Engineer and IT Manager I have had significant experience in turning needs into solutions using technology. This required making the business case, determining standards, issuing and selecting tenders, employing staff and ensuring the solutions were implemented in accordance with needs, met requirements of timeliness, costs and utility.

As the Treasurer of APESMA, being part of the executive team, I had oversight of the organisation which was operated by a CEO. The function of the executive was to represent the members, setting the targets, budgets and fees and monitoring the operations.

With changes to the legislative basis of existence there was regular need to review the rules of the organisation to ensure compliance and, as we changed through a range of mergers, to ensure equity and fairness of outcomes as well as representation and governance.

It is my intention to fly around and see a lot more of NSW from upstairs. I hope to meet more rec flyers. If I am elected, I hope to exchange views and gather the opinions of members, particularly those who can't get to NATFLY, the AGM or other RA-Aus sponsored events.

Recreational aviation is fun, deserves to be sponsored to the rest of Australia and needs better access to more airstrips, without that access being undermined or compromised by CASA, government or local councils.

I can be contacted on 0439 979 950 or Colin.N.Jones@GMail.com



# **Mark Christie**

I have nominated to stand for the board position representing the Northern Territory. I have served on the board previously, having been elected twice.

I derive no financial gain from aviation in any form. I believe I

represent recreational aviators, ultralight pilots of an era long overtaken by a mantra of faster, bigger, heavier, and bureaucratic and my only real favourite out of these changes - safety. To clarify what I mean, if safety requires the other elements of the mantra, then I support it. If it doesn't, I question it.

I am not an advocate for returning to a 95.10 only world of weed hopping, especially after visiting Oshkosh last year. I witnessed its splendour but looked on in shock at the ultralight section which looked more like a swap meet and had very few rag and tube aircraft actually flying compared to the rest of the event.

The US is not Australia, but our organisation needs to be aware that our organisation's governing body, CASA draws a lot of its direction from developments overseas, as well as locally, as evidenced by the introduction of the Recreational Pilots Licence which, in part, will redefine RA-Aus' direction.

Will Australia, or rather recreational aviation in Australia, follow EAA's model of welcoming all under one roof, be they warbird, homebuilt or ultralight? I hope so, because without a combined voice, regardless if we are the largest organisation in Australia, our efforts will not represent the wishes of all aviators. There is definitely a place for RA-Aus now and into the future and I believe CASA would prefer to be dealing with a single entity representing all recreational aviators in Australia.

Finally, I strongly believe training should be our key value proposition to members - without diminishing the value of the other services provided by our organisation.

I have flown Drifters on and off since 1984. I have served on the board of both a private company in Singapore and a public company in Australia and currently work for the Northern Territory Government in the education

I believe my commitment at a local level to my club, the Top End Flying Club and MKT Airfield over the past dozen years, combined with my previous board experience, has prepared me for a role which traditionally attracts more brickbats than bouquets.

I seek board membership to contribute without being contentious, to represent both NT and national aviators in the realm of recreational aviation and fulfil the duties as described in the board member duty statement.

Thank you.



#### Jim Benn TAS

Though known to all and sundry as Jim Benn, my mother called me Frederick James Benn when I first saw the light of day way back in October, 1953.

Taking after family tradition I became a school teacher and plied my trade in Australia, Canada and the US for over 30 years. For all but the first two of those years I was head of my department, (Manual Arts, then Resource Teaching, Guidance and finally Special Education), which in effect meant I was responsible for the development, implementation and assessment of education programs. For the last 13 years of my teaching career I was Head of Special Education Services.

Once I was old enough to realise life wasn't practice, I started to develop other interests apart from teaching. With a builder mate of mine I began to use my holidays more productively and, concurrent with my teaching, I built or renovated houses. By the end of that time I had my own Builder's

My brother, John, owned a Piper Warrior and, with him, we did quite a lot of flying together. Family finances prevented me from pursuing my own aviation dreams until our children finished their schooling, but in 2003, when they had finally flown the nest, I decided to talk to a local RA-Aus CFI about learning to fly.

It only took me a TIF to become hooked and in February, 2004 I was fully legal and looking around for my own little bird. I soon had my name on a tired 503 WB Drifter. Then the fun began with a major fit out of everything except the numbers. Who said boats were a hole in the ocean into which you threw money? Whoever it was had obviously never owned an aeroplane.

The unflappable CFI recognised a tragic when he saw one. He smartly recruited me as a trainee instructor, and began hammering in rules, regulations and navigation exercises. I sat the various tests, endured aerobatics and finally passed scrutiny as a junior instructor in 2006. Since then, I have been very active in promoting new members, particularly younger ones, to our sport.

I have been involved in the development of curriculum, delivery and assessment of junior student pilots at local high schools. I am both humbled and proud to have been associated with such an aviation youth advancement program.

In 2006, I first saw the amazing Savannah ADV and was hooked. When it came up for sale in July 2007, I swapped the trusty Drifter for the ADV and it now resides with us at our farm on glorious King Island, Tasmania. The reliable little Rotax has been hauling us from Tasmania to and from the mainland (as far as central and western Queensland) on a regular basis now for over seven years.

My wife, Sharon, and I run an accommodation business on King Island. As well, we operate a school bus contract for Transport Tasmania. I am also still in the building business, but on a smaller scale. I am currently President of a number of local organisations including a local group opposed to wind towers and our church board. I am the current President of King Island Tourism Inc. I am a member of the school counsel and of the local aero club. I am a past President of the local Lions Club and past Secretary of the aero club. Over the years, I have held many other executive positions in community organisations and fully understand the need for good governance and communication.

I want to see RA-Aus develop and prosper. This can only occur when Board members are committed to the common good of the organisation as a whole, something that has clearly not always been the case in the past, though I will admit there seems to have been significant improvement since the Special General Meeting in Queanbeyan in February last year. It is clear to me that a better future will not be realised if some people are simply returned unopposed. This is why I am running. I urge you to use your vote to ensure your Board member has management and communication skills proven over many years.

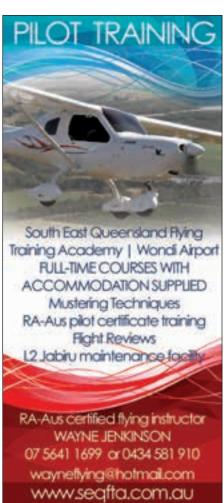
We need better services for members, especially the grass roots, but we also need to tackle big issues such as the CASA Recreational Pilots Licence, L1 and L2 training, aircraft registrations, improved record keeping and organisational restructuring. RA-Aus must also be seen as a Recognised Training Organisation with good safety management protocols.

We need to upgrade our Constitution, and reduce the size of (and limit the tenure on) the Board. We need to introduce innovative membership benefits. Most of all, however, we need open and honest governance utilising intelligent, collaborative management skills.

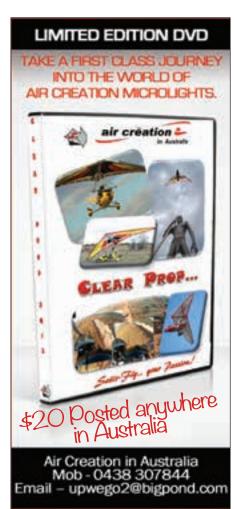
I have never earned any income, remuneration or honoraria from flying in any form and can't see how that situation will change in future. I hereby submit myself as a nominee for the Tasmanian position on the Board of Recreational Aviation Australia. Now is a time for change in Tasmania. You can make the difference by supporting me. Contact me on 0429 709 864, or email: jimbenn53@hotmail.com.









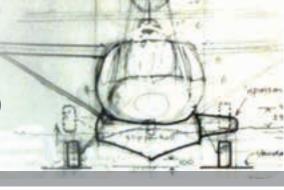






# **PILOTNOTES**

For a listing of all 2014 accident and incident summaries see www.raa.asn/safety/accident-incident-summaries-2014



#### **Thruster T300**

Engine: Rotax 582, 311hrs ttis

The engine lost power while on cruise and after transmitting a Mayday call the pilot landed in a paddock without mishap. After replacing the main fuse he relayed a message to ATC through a Qantaslink flight, cancelling the Mayday.

The aircraft had recently been fitted with a new VHF radio, directional gyro, transponder and strobe but the fuse was not upgraded at the time. No problems have appeared since an upgraded fuse was installed.

#### Fly Synthesis Texan Club 550

Airframe: 873hrs ttis

Shortly after application of power on the take-off run, a locating pin in the nose gear assembly sheared, causing the nose wheel to jam in the full left position. The pilot immediately shut the engine down and applied brakes but the aircraft ran off the runway and struck an earth bank.

The aircraft sustained damage to the nose gear assembly, propeller, radiator and cowl.

#### Jabiru LSA

Engine: Jabiru 2200, 293hrs ttis

The aircraft was climbing out after a normal engine run up and take-off. At approximately 150ft AGL the engine ran roughly for a few seconds before failing completely. An uneventful landing was carried out on the remaining runway where it was found a through bolt had broken, allowing the cylinder to move away from the crank case.

#### **AAK Wasp GT**

The pilot was departing a friend's strip and the aircraft had just become airborne when the canopy opened. The aircraft pitched nose down causing the nose wheel to contact the ground, breaking it off. The aircraft skidded on the ground for a short distance before coming to rest with major damage to the engine, propeller and fuselage. The pilot, who was uninjured, suspects he may not have secured the canopy properly after being distracted by a dog running around the aircraft as he did his pre take-off checks.

#### Jabiru J230 D

Pilot experience: 20hrs on type

The pilot was on short final when he was distracted by an aircraft above him and to his right which had made no radio calls. As his aircraft touched down, a gust lifted the right wing and the tail, causing it to veer sharply off the runway. The propeller struck the T-VASIS installation and the aircraft flipped onto its back, resulting substantial damage to the nose wheel, fuselage and port wing. The pilot was not injured.

#### Pioneer 300

Pilot experience: 765hrs, 432 on type
As the pilot began to taxi, he noticed a temporary fence across the strip was in place. He applied the brakes, set the throttle to idle and exited the aircraft, intending to move the fence. The aircraft began to move forward, so the pilot attempted to enter the cabin and stop it, but was unable to do so because the canopy was closed. The aircraft then began to move faster and the pilot attempted to hold on to the tail, but eventually had to let go. The aircraft then ran off the top of the strip and down an embankment, finally coming to rest against a tree and a piece of farm machinery, sustaining major damage in the process.

#### Zenith CH 750

Pilot experience: 240hrs, 190 on type
While taxying the aircraft the pilot allowed himself
to become distracted and the aircraft wingtip struck
an obstacle. The leading edge of the wing and slat
sustained damage and were subsequently replaced.

#### **DEFECTS**

#### Flight Design CTMC

Airframe: 300hrs ttis

During a scheduled inspection a nut on one of the bolts attaching the vertical fin was found to be loose and without a washer. The washer was subsequently found on the floor of the fuselage tail section. The bolts had also been installed back to front, according to the manufacturer's manual.

#### Skyfox CA25 Gazelle

Engine: Rotax 912A, 20hrs since overhaul

After terminating a flight due to poor engine
performance, an inspection revealed that the metering
needle circlip in one carburettor had failed allowing the
needle to drop into the carburettor main jet.

#### Jabiru J120

Engine: Jabiru 2200B, 827hrs ttis

While investigating the source of oil streaks along the engine cowling, a significant amount of oil was found in the engine bay. Further inspection revealed a failed engine through bolt.

#### Fly Synthesis Texan

Airframe: 1,255hrs ttis

After an hour of circuits for a conversion exercise, the aircraft was being taxied back to the hangar when directional control was lost. Subsequent investigation revealed the weld on the nose strut upper steering input actuator bracket had failed.



# members' market

#### 2671 SP 500/6 19-3717



Well maintained hangared. 449.5 hrs. 123kts @19ltrs hr. Sweetapple cruise prop, custom extractors, 10 ply mains, 85ltr tank. STD gauges electric turn coordinator, volt meter, fuel flow meter. XCom VHF & headsets, + UHF & 2xGPS. Grim voltage regulator, Anderson jump start plug. Deliver anywhere. \$48,000.08 9921

#### 3028 FLIGHTSTAR 11 SC



Brand new 2 seater. Protective covering still on doors and windscreen. Airframe 0 hours. Engine O 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.\$38.000 complete or if desired,\$28.000 minus engine and prop. Phone 0419 439 976. Email formefitness@bigpond.com

#### 3238 AIRBORNE WINDSPORTS



2007 XT 912 CRUZE wing, TT 190 hrs, helmets & headsets, Micro-air radio. Roll around trolley system for easy movement - wing UP or Down. ALWAYS hangared! - never dismantled. All in excellent condition. Price \$39,500 Ph 0416 041 007 for more details. Near Taree NSW

#### 3270 AIRBORNE XT 912 TRIKE



Airborne Microlight XT tourer trike, Rotax 912, 4 stroke engine, Streak 3 wing, Microair M760 dual comms radio, large windscreen, log book, manuals, registered RA-Aus till

27/9/2013, always hangared, privately owned, excellent condition, lots of extras. \$35,000 Ph 0429 619 987. flblainey@gmail.com

#### 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 and never had an accident. Ideal aircraft for low hours pilot. Always hangered. \$45,000 Situated at Mandurah, contact Garth at garth.lb@bigpond. com or 0409 599 845.

#### **3398 THRUSTER T500**



Thruster T500 always hangered. Rotax 582, 230 hrs since overhaul. UHF and VHF radio with intercom and 2 headsets. Heavy duty undercarriage and large fuel tank, Very reliable, Reduced to sell at \$12,500. Phone Paul 0427 622 176

#### 3403 AIRBORNE ROTAX 503/WIZARD II WING

Original Edge base about 360 hours; wizard wing bought 2002 done 131 hours; full covers, radio coms helmets, trailer with wing holder and jerry can holders, new battery, Based in WA.Photos available on request must sell, gone overseas. Hangar could be available based at Bindoon WA Email. kathylittle8@gmail. com \$8.000

#### 3416 JABIAU SP500 - 3300



TT 250hrs. This beautiful one owner aircraft has had no expense spared. Excellent GA Panel, Quallity Radio + Icom with headsets. Artificial Horizion. Garmin 296. 2 Pac Paint Leather Trim, Quick realease wings, Lame 2 Serviced Price Reduced \$40.000 Phone 0418 573 212

#### **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. \$80,0000 Phone 0411 123 669

#### 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. \$88k 0411 123 669 I'm also interested in share holders the aircraft is located at northam wa min two share holders \$25k.

#### **3432 JABIRU LSA55**



For Sale Jabiru LSA55/3J. One owner, always hangered 1400 hours TT . 2.2 solid lifter engine. Garmin 195 Micro Air radio & transponder, fuel flow, landing lights, 85 litres fuel, cruise 105 kts 13 litres . \$31000 Contact Steve Lenne Phone 0428 732 267

#### 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 dissapoint. Located near Gatton Qld. \$25,000 Phone Ian 0418 880 257

#### 3485 JABIRU J160C FACTORY BUILT



J160C factory built 2006. Option 2 Panel with Dynon EFIS, Garmin 296 GPS, Micro Radio & Transponder. Recent top end engine overhaul & upgrade. Always hangered, beautiful to fly. \$49,500. Call Alan 0427 763 375 or more info at www.jabcor.com

#### 3487 JABIRU SPT-6 TAILDRAGGGER



New Jabiru SPT-6 Taildragger, TT 25 hrs. New 3.3 engine, 85 litre tank, STD Jabiru dash, Gloss white ready for your decals. One of only four Jab 6cyl taildraggers. Goes like a rocket, Solo ROC 1800'/min, 125 kts @ 2700 RPM. YBNS airport. \$54000. Phone Martin 0412 617 110

#### 3489 JABIRU SP6 19-3845



Regd 27/6/14; TTIS A/F 453 Hrs engine 22 Hrs (3300/120HP) Hydraulic lifter. Garmin 126/8GPS, Icoma 200 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 Phone Ray on 0411 956 734 or 03 5155 5181 Email rjwheels@gmail.com Asking \$39000, ono

#### 3490 JABIRU 170C



08-2008 factory built. 430 hours TTIS Option 1 panel plus Microair transponder, FC-10 fuel computer, garmin 196 GPS. 10ply front and mains. Always hangared. All AD's complied with. \$65500 Phone Kevin 0417 131 816

#### 3504 JABIRU J 250



Jabiru J 250 Reluctant sale. Good as new with only 80 hours TTIS. 10/10 inside and out, comes with spares and David Clark NC Headsets, GPS and many extras, needs to go to a good home, \$65k or best offer. Phone Anthony on 0407 804 503

#### 3509 AIRBORNE 912 TOURER



Airborne XT 912 Tourer 2007 model 578 hrs streak 3 wing excellent condition Microair 760 VHF radio, helmets with Lynx Headsets/ Intercom, Punkinhead covers, full service history RA-Aus reg exp April 2014 \$34,000

kenj@jelfor.com.au 0412 512 457

#### 3510 JABIRU J160-C



Jabiru J160-C 24-5111 factory built in very good condition, always hangared at Bathurst. TT448 hours \$52,000 negotaible Ph 0402 497 671 airsurv@bigpond.com

#### 3512 ROTAX GEARBOX & STARTER

Rotax E type Gearbox includes drive coupling and starter motor excellent condition has approx 300 hrs 3.47:1 ratio \$1000 plus freight ph 0428 240 192

#### 3526 X-AIR STANDARD 19-3322



Rotax 618. Brolga prop. Doors. Luggage cpmt. Full inst, X-com radio with intercom & two headsets. Spats not fitted but included. 255 hours TT airframe & engine. Full maintainance log. New Battery. Always hangered & covered. Excellent condition. Peter 0402 599 306 or Rod 0448 470 390. Reduced to \$18.500

#### 3540 CORBY STARLET



Corby Starlet Total Hours: 346 Engine Hours: 346 Rego: 28-1976 Price: Make me an offer Posted: 21 Jul 2013 Mosler 1835 cc motor 65 H.P. injector throttle body has ICOM VHF maintenance log always hangared delight to fly located Serpentine W.A. Phone Tony 0433 337 733 or tony.mitchell1943@bigpond.com

#### **3548 JABIRU J160**

Hanger ed in Adels Grove new motor installed recently, has 2 x Icom radio's 1 com system Garmin transponder Efis Altimeter Airspeed VSI (vertical speed idicator) Tacho Oil pressure Oil temp CHT (cylinder head temp) Volt Cargo door call Rod 0747485502 price dropped to sell \$40,000. Great buy.

#### 3551 JABIRU 230D



Jabiru 230D, '09, Factory, TTIS 360hrs. Reg 8/14, own hangar, immac as new, L2 LAME maint, Redleather, EFISD100, AVMAP EKP IV GPS, 2axis AP, MicroairVHF & Xponder, remote ext plug, MP3 music, full covers nose to tail, wing strobes, all updates, new prop, rotors & pads, MLG wheel bearings, many spares. \$90,000 incl GST, Phone 0419 555 726

#### 3552 JABIRU J230-D 24-5490



Factory built 2008, Airframe & engine 94hrs, Maintained every 25hrs, Nil accidents, Analogue instruments, Icom IC-200 radio, Garmin GTZ-320a transponder, Booster seats, Sensenich prop, Garmin 295 GPS. Always hangared & runs great. Contact Kevin: 02 4283 2671 or 0408 427 458 Email: kaybee@exemail. com.au \$85,000

#### 3554 THATCHER CX4

Single place, completed May 2012. Second of type to fly in Aus, 1915CC VW engine, starter, alt. magneto & secondary secondary ignition,

#### MEMBERS' MARKET



sweetapple prop, tinted sliding canopy, disc brakes, strobe, strong undercarriage, full castoring tailwheel, great plane to fly, \$26K call Kevin 0448 856 983 Brisbane. No text please.

#### 3579 CARBON CUB SS 180H



Carbon Cub SS by Cubcrafters Inc, 200 hours, ready to fly away. 180 hp, optioned up, you will never get one at this price again. Tough, Safe, Powerful, and most off all FUN. Come and fly the most exciting cub ever, Tyabb Victoria. Call 0414 444 971 WWW.cubaircraftaustralia.com.au \$230,000

#### 3596 TYRO MK 2



Tyro Mk2 fun flying machine, fully refurbished with stits polyfibre, painted in twopack aerothane. As new VW 1600 twin port aero engine swinging a new Ark tech propeller, plus spare. The usual flight instruments and more. This is as good as new! 4 months rego.\$8,500 Phone Mick 0409 091 495.

#### 3603 AIRBORNE XT TUNDRA 912 S3



2008, 199 hrs Always hangered Excellent condition Skydat GX2 Two helmets/headsets Microair transceiver Tall windscreen Maintenance log Reg. 26/03/14 Extras incl: Custom heavy duty trailer

Heavy duty overs All cross-country bags Training bars \$40,000. Test flight avail. w/qualified instructor. Contact Geoff 0409 913 858.

#### **3606 SONERI PROJECT**



Complete set of plans & photos, compass, altimeter, ASI, Garmin GPS, Icom radio with VOR, Gas Colator, Flight timer, balance ball, Fuselage constructed comes with fabric, glue to complete plane. Aeropower 80hp engine, two props & spinners . all bolts, nuts, and rivets. all that's required is assembly Ph Barry on 0418 659 900 or baajrowell@gmail.com or Price: \$12500.00

#### 3627 PRIVATE AIRFIELD



600m private airstrip, Murrumbateman area, 20 mins Canberra, highway access, 12 x 12m hangar, OCTA. House 5 bed, 3 bath, tennis court, 4 car garaging, established gardens. 40ac income producing property, currently running 70 prime lamb ewes. Shearing, machinery, hay, workshop sheds, large cool room, 2 stables. \$1.3m. Phone 0402 413 126.

#### 3631 CTSW FOR SALE



Simply the BEST CTsw available with many extras (e-mail for details) 120 kt cruise Amazing Visibility 7+hours endurance, Auto Pilot, Transponder and BRS just serviced to 2019 Completed its MAJOR 500 hrly inspection with LED Nav Lights being replaced so no real expenses looming-they've all been covered. Contact peter@simplyspecs.com.au Phone 61 416 144 884 Price: \$90,000

#### 3637 KR2S



Certified Aeropower VW with dual ignition and Sweetapple Prop. Engine/airframe TT 370. Built 2005 and UL registered. Very economical 120kts at 12 L/hr (50L tank). Good condition, always hangared. Airmap 1000 GPS. Bellyboard (flap) fitted. Can't fit the family so must go. Located WA. \$29,000 ono. 0447 180 958.

#### **3639 ERCO ERCOUPE 415C**

Offers invited 1946 Ercoupe 415C project. Ex N2465H, serial No 3090. Corrosion free Coupe with most AD's completed. New glass, suspension donuts, cable loom and much more. C85-12 engine. All log books supplied. Well

advanced. Can register RAA or VH. Inspection welcome. Phone Brian. 03 9459 1779 or 0400 166 762 or Email bjgarrett@optusnet.com.au

#### 3660 JABIRU J160-C



Immaculate condition factory built october 2006, 560 TT engine and airframe. Well equipped Dynon D10A, Microair transponder and radio, PCAS, Trio autopilot, Garmin 3, cabin covers and more Always hangared, regular maintenance and nil accidents. One owner Jabiru and never used for training. S.A. \$50,000 + GST. theo@graftedvines.com.au 0418 805204.

#### 3662 CLASSIC SAVANNAH KIT

Classic Savannah VG Airframe Kit, New, complete and still in box - has not been unpacked. \$25,000. Call 0419 215 514

#### 3686 CESSNA 120



Cessna 120, 24-8085, 2 seat, Cont 100hp, engine to run approx. 1300hrs, dual coms, transponder, VFR instruments, always hangared, cruise 95kt @ 20lph, Avgas/Mogas, 45kg luggage, 4 point harness, 100 hourly due 07/14, int/ext very good. Suitable for training, Located East Gippsland, \$40000. ono Phone David 0419 503 157

#### 3691 RPL? CESSNA 150M



Certified, proven GA aircraft, 1976, VFR, TT4630, Cont.0-200 ETR1700, 21lt/hr, McCauley PTR1500, fresh 100hr, all AD's, 2PTT/intercom, Garmin 296 in panel, KT76aTxp, MX300 Nav/Com, VOR, strobes, never damaged, always hangared, priv use only, Int & Ext 9/10, flys beaut, great recreational aircraft for RPL, \$49,000 ono, Phone: 0418 719 318

#### 3704 CORBY STARLE



Corby Starlet TT140Hrs. Built Nov 2010. Jabiru 2200. Mantained by L2.

Always hangared at Lethbridge. \$25,000 ono. 03 5275 5372 or 0451 517 910

#### **3709 NEW HOUSE AND HANGAR**



Temora NSW. Council maintained airpark, 3 runways, taxiway to hangar. 18.5m x 13m hangar, power, lighting. New brick veneer home fully serviced set in beautiful park surroundings. Four bedrooms, ensuite, modern kitchen with separate butler's pantry. Ducted heating/ cooling. Great community, wonderful life style, don't wait. \$580,000 inc GST phone 0419 389 311

#### **3713 ALPI PIONEER 200 SPARROW**



Factory Built. Blue / White. Rotax 912 - 100hp Engine. Electric Variable Pitch Propeller. Dual Controls. Hydraulic Brakes. Long Range Fuel Tanks. AvMap Mark IV GPS. Full GA Instruments. Excellent Short Field Capacity and Climb. Cruise 110 Knots. Excellent Condition. Regretful Sale. Only 280 hours. Ph Andrew 0428 442 155. toolangatta@gmail.com \$67,500

#### **3727 DECEASED ESTATE. WA**

Almost completed Taylor Monoplane including new VW engine (cost \$6,500.00). Plus instruments, propeller and most equipment to finish building. \$12,000.00 ono. Phone: 08 9419 3408 Email: chittychittybang@bigpond.com

#### 3735 NORTHERN RIVERS NSW

Property 228 acres. 700m airstrip. Hangar, workshop, all usual farm facilities. Runs 50 breeders. Suit retiree, club, group ownership etc. Dual river frontage. Asking \$640,000. For further details, photos etc 0427 115 225 or didja@skymesh.com.au

#### **3736 DELIVERY PILOT**

Do you need your RAA or GA aircraft delivered anywhere in Australia? 18000 hr retired professional pilot and RAA aircraft owner, available, best rate going, just need to keep busy. Recent deliveries to NT, QLD, Tasmania, Northern NSW, and WA. Ring Gus on 0414 934 750

#### **3737 NYNJA AIRCRAFT KIT WITH 912ULS**



Brisbane Area --1/5th Completed Kit - Nynja Aircraft. Comes with Brand New Engine. Complete and Full Instrument Set, Radio, Transponder, Fuel Tank, plus all parts that have been purchased. Build Log at

10/2012 at www.markjamesallen.com \$48,000. Email marka@markjamesallen.com.

#### **3739 HANGAR FOR RENT**

Goolwa, South Australia 18m+18m with all services 3 phase power, water, toilet etc Easy access to runways and facilities. Phone John 0420 884 022

#### 3770 JABIRU SP500 SIX 120BHP



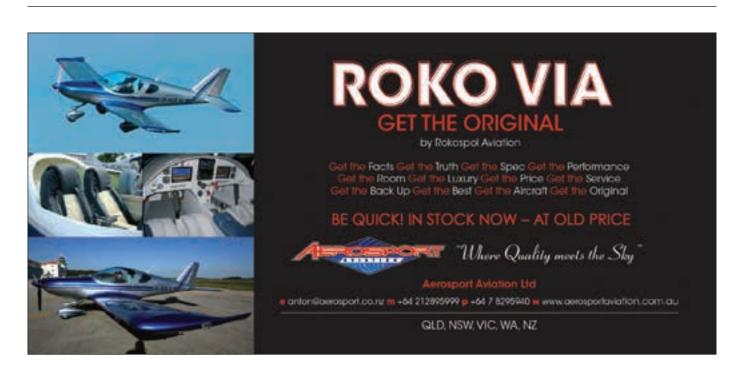
\$39,900 Reg.19-3435 has a new 120 bhp 187 hour engine. This comfortable good looking pocket rocket has superb 2 pack paint finish. Five hour safe 135litre wing tanks + five litre header tank. Cruise 115 kts @ 21lph. Fly's hands off, full panel with A/H .Condition report completed. Photo's available. Phone:0423 377 771 or Email jondevine01@gmail.com Perth.

#### **3776 SAPPHIRE**



Sapphire 19 3594. 385 hours, 447 Rotex, 3 stage flaps, spats, Microair radio, new paint job, enclosed cockpit, 9 LPH, cruse 80 knots, 60 litre wing tanks.

Always hangered,; currently hangered at Bendigo Victoria. \$16.000. Phone Ron 0414 594 022.



# **BERT FLOOD IMPORTS**







# STRONGER, FASTER, HIGHER.

The new Rotax 912 iS Sport aircraft engine is a further improvement of the 912 iS and offers oustanding performance with low fuel consumption.
Pilots will appreciate the improved take off
performance which results in a better climb rate a shorter take off run and a higher cruise speed.

# 914 F/UL | 115hp

The turbo charged Rotax 914 series offers more performance at high altitudes while keeping weight at a low level.

# 912 S/ULS | 100hp

In comparison to the 80 hp version of the Rotax 912 series the 100 hp product line offers more power while keeping the weight.







582 MOD. 99 | 65hp

912 A/F/UL | 80hp

#### ENGINES YOU CAN RELY ON

More than 170,000 units of Rotax aircraft engines have been sold in total. Since 1989 BRP-Powertrain has manufactured more than 40,000 units of the Rotax 912/914 engines family

Distributed in Australia, New Zealand, South East Asia and Taiwan by: Bert Flood Imports Pty Ltd 17 - 18 Chris Drive Lilydale Victoria 3140 Australia Email: gary@bertfloodimports.com.au Visit us at: www.bertfloodimports.com.au

Tel: 03 9735 5655 Fax: 03 9735 5699

#### MEMBERS' MARKET

## **Enquiries**

Ph: (02) 6280 4700 E-mail: admin@raa.asn.au

#### 3782 X-AIR 602T



Rotax 582 blue head motor. 3 blade brolga prop. 50 ltr fuel tank. Xcom radio/intercom, 2 head sets. Built 2006, registered until 13.11.14. 215 hours TT. Hangared in Colac, Victoria on private 300m strip. Excellent short field performance, easy to fly. \$19,000. Contact Rod. 0417 573 048.

#### **3787 TERRIER 100**



Terrier 100 19-3509 480 hours on 100 hp Subaru EA81 engine and airframe, Standard instruments, Garman 196 GPS, Microair radio/ intercom and always hangered. Good condition and is hangered at Woodstock near Townsville QLD. \$40,000 Ph. John 0410 857 103.

#### **3788 JABIRU J160D**



Always hangared, exterior decals, strobe, dual caliper brakes, landing light, adjustable rudder pedals, D10A EFIS, Avmap GPS, 2 x ASI, ALT, VSI, VHF Radio, Transponder. A1 condition. All AD's and Service Bulletins complete. Nil accidents. With Annual inspection. As new condition. \$67,500 Contact Lorraine 0419 307 768 or Email edgeaviation@yahoo.com

#### 3789 JABIRU 230D



Exceptional condition. One owner. Private use only. Factory built. Meticulously maintained by owner, LAME and Level 3. Always hangared. Nil accidents or incidents. TT400 hours engine and airframe. Option 2 panel. VHF, Transponder, Garmin 296. Located Townsville area. \$75,000. Phone John 0414 947 530.

#### 3796 JABIRU J120



Factory built March 2011, TT 80 hrs, always hangered (Caloundra). Immaculate presentation, standard instruments, elec flaps, Garmin 500, PLB 406 GME, Headsets inc. Pilot 6' 2" -95kg - easy fit. \$49,000.Phone Simon Brown -0411 833 804.

#### 3807 SPIRIT KIT



WAC Spirit E-LSA Ouick Build Kit, All metal work completed by factory. Requires engine/prop. wiring, upholstery and instruments. Has engine mount for Rotax 912/914. Adjustable seats, Twin stick, Electric Flaps. Stall 31Kts Cruise 100Kts. Design weight 750Kg. 135L fuel. Get flying soon. \$42,000. Ph. 0418157044 More pictures online.

#### 3811 SONERAL 2L



Sonerai 2L 28-3043. 128.1 hours on air frame, 74.1 hours on engine and prop, neat and tidy plane, always hangered, Rotec carby, 4 into 1 exhaust, rv7 tail wheel 80hp Great Plains engine, eye catching paint work. 130kt cruise @ 15Lph \$35.000 John 0422 285 404

#### 3815 SAVANNAH VG MODEL



3815 Savannah VG Model Category: 3 Axis (UL) Build Year: 2005 Total Hours: 480 Engine Hrs 480 Rego: 194405 Price: \$48000 Posted: 27 Jan 2014 STOL, always hangered and now at Cessnock, kool prop, 100hp rotax 912, tundra tyres, observer doors, 8 hours fuel, landing light, gps, radio, intercom, 0419 414 031

#### 3817 WAC SPIRIT



New all metal WAC Spirit ELSA 100Hp Rotax, Bolly Prop, Adjustable Leather Seats, 10in Dynon Sky View, with 2 axis Auto Pilot, Vertical Power Electronic C/B's. STOL Performance with 100Kt Cruise. 750Kg Structural MTOW. Large cabin and luggage area, great visibility. Lovely to fly. Price \$115,000. Ph 0418 157 044.

#### **3822 HOUSE AIRSTRIP AND HANGAR**

Enjoy a relaxed, peaceful lifestyle at Charlton Gully approximately 20kms north-west of Port Lincoln SA. The 14.21 ha (38 acres) property includes a 3 bedroom brick home, arable/grazing land, bushland, a 400m airstrip, 18m x 12m workshop/hangar and much more. \$355,000. For more info and photos Phone 0437 429 052.

#### **3824 LIGHTWING G A 55.**



Lightwing G A 55 Aeropower. T T 522hrs Engine & Airframe. Fresh 500hrly completed. ( as per RAA requirements ). Always hangared. Nil accidents. Registered until July 2014. . Perfect presentation. Located Serpentine WA. \$25,000 Phone John 0418 841 932 or 08 9593 9828. Regretful sale.

#### 3826 JABIRU FOR SALE



JABIRU J230C 2006, White. Factory TT 327 hrs, good condition. Garmen GPS, transponder & VHF \$60,000 Hanger - Insulated 12m X 12m at Gawler SA, \$35, 000

#### **3836 THRUSTER T300**



#### MEMBERS' MARKET

Thruster T300 24 -0779 "Tony Hayes" pod and Airfoil struts, 60 kn. Rotax 582. Great entry ultralight. In vgc. Registration current. TTIS 726.2. TT Engine 146. Hangared at Bange's field Clifton, Qld. Level 2 maintained. Included single axle light aircraft trailer. \$12800. PH. Mark 0412649615 or mark\_teach@yahoo.com

#### 3857 JABIRU J160 19-4265

Airframe 1042hrs, Engine 1254hrs, 252hrs since full Top Overhaul. Standard panel plus electric T&B, VSI, fuel guage, 85Ltr Tank, 2 Head Sets, Gamin 12 GPS. Been all over Australia never let us down, Always hangared no prangs. Medical reasons for Sale. Asking \$37500. Mildura. Phone Geoff 0488241181

#### 3865 JABIRU J200



Airframe TT520 hours, Factory rebuilt Solid Lifter Engine 102 Hours. Recent Jabiru Repaint, Factory Service. GA Panel, Analog instruments, Microair Radio, 2xGPS's, Total Fuel 140Litres. Strobe Lights, external power, Cold Start Adaptor, spare Prop. Lovely plane, cruise at 118kts at 21Litres, Heated Cabin. Dubbo, \$72,000,00 contact Jeff, 0418 843 954

#### 3875 J430 JABIRU



Jabiru J430. t/t 540 hrs top end a/h 40 hrs ago 2006 and flies like new.3blade, fuel flow meter, UHF, can deregister to raa, vert compass. Lot of extras, \$68,000 phone 0428 826 551 or Email arrandale2@bigpond.com

#### **3880 AIRBORNE MICROLIGHT**



Suit New Trike Buyer 2011 XT912 Tundra TT105 hours.Ballistic Chute fitted.Streak3 wing never been folded always been hangared. Microair 760 Radio. Two headsets Lynx intercom and helmets. Garmin 196 GPS Punkin Head full

covers and stone guard. Log books RAA Registered. Genuine reason for selling. Inspection Invited. \$55000. O.N.O. Ph 0428456728

#### 3882 WANTED 80HP ROTAX ENGINE-

Wanted 80 hp Rotax 912 engine with less than 1000 total hours must have log book please email details including asking price to robertfraser11@bigpond.com

#### **3887 HANGAR 15MX11M**



Near new Hangar for sale/rent at Kilcoy. 15m wide, 11m deep. Best location on the field faces straight down the taxiway. Insulated roof, weatherproofing, water supply, sealed floor, full width doors, side door, concrete apron. \$79,500 or \$330 per month. Contact Charles on 0409 629 152 or Email dcc.doyle@optusnet.com.au

## **Members' Market ads** can now also be placed online. www.raa.asn. au/market

#### 3888 MX QUICKSILVER

Single seat. Dismantled. 377 Rotax & Prop. Motor needs some work. Complete set of new skins & wire brace kit supplied \$1950 ono. Located Tasmania. Phone Bob 03 6492 1338 or 0419 104 439 or Email cradleview@gmail.com

#### 3890 GR12 LIGHT WING



Hangared all its life, beautiful plane to fly comes with 2 head sets, garmin GPS, 80 hp Rotax, tail dragger. 238 hours. Price \$50,000 phone Ken 0418 700 360

#### 3891 HANGAR FOR SALE OR LEASE



Hangar for Lease or Sale at Colac airfield. Excellent condition. 9.25m X 12.3M (approx.) High clearance, Skylights, Easy slide doors, Power and overhead lights, Painted concrete floor, suit 2 ultralights or 1 large GA Aircraft. Protect and enjoy your investment. This is the last hangar available Contact: Peter 0419 386 340

#### **3893 AIRBORNE EDGE 582**



Airborne Edge 582, 745hrs, 245hrs since overhaul, Electric Start, Tundra Tires, Strobe, Landing Light, Full Travel Covers, VHF Radio, GPS, Helmets and Intercom, Full Instuments, Hangerd at Mt Beauty. see flying footage at http://www.youtube.com watch?v=so2ERpoSDs \$7800.00 ono Phone 0418 554 872

#### 3894 AIRBORNE XT912 TUNDRA



XT912 Tundra with Cruze wing, 430 hrs, wing est 200 hrs. Complete package, 3 helmets, 3 suits, trike&wing covers, training bars, heavy duty custom trailer inc wing carrier, fantastic condition. Melbourne area. Price \$40,000-Phone Brett Harrington 0419 610 041.

#### 3900 912 XT TUNDRA



XT 912 Tundra Arrow Wing. 3 helmets, 2 headsets, Training bars, Dust covers, Engine cover Always hangared, never trailered. Crisp handling compared to

streak or SST. Set up for 75-80 kt cruise, 225 hrs, Nil accident. Converted to Arrow Oct 2013. Asking \$47,500 . Bunbury WA. ibawden@ bigpond.net.au or phone 0408 610 604

#### 3901 HUMMEL BIRD

95% built. Wide body version. All aluminium with spare stock, plans, building notes, building video discs, painted "training yellow" with enough to complete airframe. Complete body includes Global engine, undercarriage, wheels, brakes, altimeter, tachometer, airspeed indicator, slip turn indicator. \$9500 Email: ernbev@gmail.com or Phone Ernie 03 5743 3393

#### 3904 ACROLITE 1B



This Acrolite seen at <acrolite.org> but using Jabiru 2200cc engine, I600x6 wheels, cruises 110 mph, stall 45.

Expert test pilots to 12.2 hours, 13 needed for full licence. As no medical, I can't fly, so asking \$22,000. Aircraft at Lilydale Airport. VIC.Reg: 19-7099. Robin, 0435 338 656 or 03 9730 1106

#### 3909 ZENITH CH 300



Zenith Tri-Z 2+2, Light Sport Aircraft Cruise 110 kts, range 900nm. LYC 0-320, All aluminium aircraft. T/T 32 hrs. All Olio undercarriage, all instruments, GPS, radio, Txpdr-Mode-C, stalls 48 kts, with fresh 100 hrly. \$38,000 ono Phone: Bob, 02 6495 9251 or

#### 3912 JABIRU 200

Email: boboshkosh@yahoo.com



J200 solid lifter 350 hrs 3 blade prop power flaps Matco brakes garmin gps and much more. Great cross country aircraft. Best offer Phone 02 4948 6788.

Email Bobbaza@hotmail.com.

#### 3913 FLY SYTHESIS STORCH S



2007 model TTIS: 350hrs Rotax 912ul 80hp, cruise 100kts, stall 35kts. Fitted with electric flaps, UHF, VHF and can fly with doors off. \$60000 or swap for taildragger. Contact Lyle Phone: 0428 589 516

#### 3914 JABIRU J 400



First flew: March 2005 TT: 450 hours basic Jabiru instruments with turn co-ordinator radio, transponder, Garmin 295 GPS through bolts done at 442 hours. new piston rings, valves and springs fitted by Jabiru flywheel mod done Price: \$50,000 If interested, please contact Rory on 5155 1392 or 0448 551 392.

#### **3920 SAVAGE CRUISER CUB**



Savage Cruiser Cub Very well maintained and always hangared, a delight to fly and an easy tail wheel aircraft to operate. Recently had rotax 5 yearly hose and rubber replacement. GME PLB, Icom VHF, Garmin Transponder Located Yarra Valley Victoria Damien 0419 179 058 \$68500

#### 3921 JABIRU 160



Reg19-4398, 2200, TT700hrs Engine240hrs, Built 2005, Sensenich prop, cargo door, spare wheel, wing tanks, fin strobe, low oil press low fuel warning lights, Anderson plug and lead, Garmin96c, one owner, always hangered, nil accident, excellent condition, L2 maintained, \$45,000 ono, located Bundaberg, contact Roger (07)41 524 076, mob: 0423 121 733 or Email: rjl2000@hotmail.com

#### 3926 MAGNIFICENT REVO 912 100HP



Recognised as the most technically advanced trike in the world, this Revo 912 has every conceivable extra. Only 81 hrs always hangared and LAME serviced at Moruya airport. At

\$80,000 save \$15k on replacement cost. Also custom built aluminium trailer 7 metre internal \$22,000 mobile 0411 550 280 Email: gary@ eldering.net.au

#### **3933 TYPHOON TOURER**



Reluctant Sale, Must go, new project already underway. This little plane is easy to fly and capable of 90kts cruise. 62 hours on engine and airframe. Reliable 100hp VW engine reduction drive. New Bolly prop. Microair radio, good instruments plus more \$39,500 ono Ph Peter 0412 595 252

#### 3934 KESTREL AND TRAILER



Lee Kestrel registration 10-1364 with new skins, Sweetapple prop, wheels, U/C springs, instrument panel and wiring. Electric start Rotax 503 with 549 hours plus VHF radio and headset. Enclosed trailer with current registration includes a winch. Asking \$11,000 or reasonable offer. Location Sydney. Email zodiacsolar@gmail.com. Phone or SMS Tony 0412 285 828

#### 3935 WRECKING SKYFOX GAZELLE

Fully reconditioned engine, full life, aeropower 1800cc engine, Hear running in airframe, Mode C transponder. Bendix King Flip Flop Radio Instruments, All parts available. Contact O Walker 02 6286 2479 or 0413 785 265

#### 3937 JABIRU TAILDRAGGER



Six cylinder solid lifter engine with fine finned heads. Fitted with basic instruments, Garmin 196, Card Compass, Microair M720 radio, TruTrak auto pilot, Garmin GTX327 Transponder. 85Litre tank and three bladed ground adjustable propeller. Inspect at West Sale Aerodrome (YWSL) \$45K, offers considered. Contact Daryl Phone: 0466 925 474 or Email: dghooke@ gmail.com

#### MEMBERS' MARKET

#### **3940 NIEUPORT N.17**



Nieuport 11, Good order, VW1900cc motor complete with smoke generator. Mock machine gun cowling mounted. Popular air show participant in SE QLD. \$12,000. Phone 0428 662 528 for further details.

#### 3941 HANGAR FOR SALE

Gawler/SA Lockable, easy access to runways and facilities. Insulated 12m X 12m Row C.11 \$35,000. Robert Rose 0408 831 888 rebecca@rosechiro.com.au

#### 3942 VP1A VOLKSPLANE



VP1A Volksplane. Total hours only 1143, 21 hours since engine rebuild. Registration number 19-0484, Full flying tail, enclosed cockpit. Only using around 10 litres per hour, ICOM radio and GPS fitted in cockpit. Thompson Propeller. Well maintained overall and ready to fly. Only \$8500 o.n.o. Call Harry 0412 426581 for details

#### 3944 ROTOWAY HELICOPTER KIT

Rotorway F162 Helicopter Kit Complete. 2 Seat Ultralight Rota-blade Aircraft Selling due to other commitments. Cost New \$113,000.00 Sell \$45000.00 will consider swap for fixed wind aircraft. Minor works started. This kit is a 51 percent kit very complete with step by step manuals plus videos. Phone 0407851963 Email kymnicholson@westnet.com.au

#### 3945 AIRBORNE EDGEX 582 BLEU HEAD



Bleuhead 582 Streak Wing, full Bert Flood rebuild 125 hrs ago, Brolga prop, Streak Wing, logbooks, manuals, radio and helmets. Everything ready, just travelled Perth to Brisbane. luggage bag, jerry-can harness, full travel

covers. Registered trailer with jerry-can holders, toolbox, oils, spares, winch, ramps \$14,500 ono Wim 0417 066 123 voortman.seasia@bigpond. com

#### 3946 SAVANNAH



Rotax 912s 100hp TTIS 390hrs. New 3 blade warpdrive prop. Tundra undercarriage.Long range tanks 7 hours endurancee. 560kg MTOW. L2Maintained. Steam gauges + electric turn & bank. Garmin GPS 196.Xcom radio intercom & headsets.Nil accidents.Always hangered. All books & manuals. Excellent condition. Euroa Victoria. Ph Joe 0427 941 072 \$50.000.

#### 3947 HKS POWERED BOORABEE



Reliable and easy to fly, 70 knts cruise using 11 ltrs/hr. 90 ltrs fuel in wings. Is 2 seater but rear

seat only for small person. Very reliable and economical HKS 700E 4 stroke. Registered till Dec.2014. Asking \$20000 ono Phone: 0407 502 782

#### 3948 WANTED DEAD OR ALIVE

Wanted sadler vampire in any condition with or without trailer willing to neg on price Phone: 0421 376 512

#### 3950 GAZELLE CA25N



Bought new 1997, always hangared, brand new Rotax 912-A2, gearbox, prop and workshop manual. Bright yellow condition, maintained by LAME/L2. Pleasure to fly, affordable fun flying. Good for 20 knot Xwind. Can be flown into CTA with appropriate pilot qualifications. View 24-3505 at YBTH \$45,750 Call/sms Mike Faine 0427 406 521

#### 3952 RANS S-7S COURIER



Twice Natfly Concours & Best Fabric; Rotax 912ULS, Airmaster C/S 3 blade prop; LAME built: corrosion inhibited frame: acrylic windscreen; "Aerothane" finish; wingtip strobe nav lights; dual controls (removable); ferry fuel system; Garmin SL40 VHF (ICS); Garmin GTX 327 transponder; Garmin 296 colour GPS; electric trim; builders log (www.mykitlog.com). \$85,000 Phone Ken Edwards 0438 178 869 Email: kenedwardsqld@gmail.com

#### HORSHAM AVIATION SERVICES ABN: 65 007 339 451

Now Importing THE EUROFOX AIRCRAFT:

- Quality Factory Built
- Quick folding wing design
- Glider Tow certified to 750Kg
- Short take-off & landing

#### And Dynon Avionics Products:

- Now with Autopilot capability
- Solid state sensors
- Checklists
- · Audible alarm capability

PH: 03 5381 1727

Email: info@horshamaviation.com.au





#### 3953 SONEX 3300



Sonex taildragger, Jabiru 3300. For sale by builder 145hrs TT airframe and engine, First flight 2010. Performance with economy, Cruises 130kts @ 2700rpm 19lph. Easily removable 32 litre aux fuel tank which increases range to 550nm with reserve. Microair radio. Excellent condition and build quality. Always hangered. Located NSW 0434 727 152

#### 3955 AIRBORNE EDGE MICROLIGHT



Airborne Edge Executive Microlight Rotax 582 Registered HGFA # T2-2792, Total Time (TT) 370 hr. There have been no incidents or accidents and the microlight was not used for training. Lots of extras. Trailer Included! Can take over hangerspace at Tvabb Airport, \$13,500 ono. Contact Anton 0439 915 001

#### 3956 RANS COYOTE II S6ES



246 airframe and 86 engine (Rotax 582) hours. L2 maintained with all recent history. Annual airworthy in March 2014. Registered to March 2015. ICA 210 radio and King transponder fitted. ZEON MRX PCAS. Portable Garmin GPS loaded with Worldmap. Original construction manual. Registered trailer, extras. Phone: Jeff 0405 569 205 or Email: govo49@hotmail.com

#### **3957 JABIRU LSA**



Solid Lifter 2200 engine. IC-A200 radio and Aerocom III Intercom. J120 brakes, New prop, Avcomm headsets, Big foot main wheels new tyres. MGL Infinity TC-1 gauge 4 x CHT thermocouples. Vertical card compass, standard instruments.

Strobe and Landing lights. Wheel spats available. Currently hangared YWBN. Jason 0404032027 or flyjason78@gmail.com

#### **3958 A GREAT PLAINS 1835 VW**

Have for sale: A Great plains 1835 VW conversion with reduction, and a ground adjust propeller T.T 70 hours Asking \$3000.the lot Also a Rotax 582 no gearbox. Grey head model, electric start.dual cabs dual ignition.T.T 250 hrs.good engine but no further use. Asking \$2500. evenings only Andre 07 5482 6805 after 19.30

#### 3959 SKYFOX TAIL DRAGGER



Skyfox ca 21 tail dragger, totally rebuilt aeropower less than 75 hrs ago, duel ig, sweetApple prop, 635 hrs total, stitts fabric, good paint, registered, all ads current, \$22000, \$ 24500 with 3 yr old multy purpose tandem trailer for plane. Phone: 0455 596 199 Email: christamarmc@gmail.com

#### **3964 VANS RV12 KIT**

Vans RV 12 kit. Ready to assemble. Includes all kit components except for engine and avionics

Includes interior trim and wheel fairing kits Located within 1 hours drive of Melbourne. Price is negotiable. Don't wait 6 months for delivery, start now. Phone: 0427 053 941

#### 3965 TIGER MOTH DH82A 1941



Charter Cat Australian Made Beauty As at 23rd March 2014 Airframe 2949.7 TT 1,097 TR on motor,100hrly carried out Feb 2014 Recovered 2005 by Antique Aircraft Restorations Major inspection 2011/12 Beautiful Condition \$93,000 inc GST Serious offers may be considered Phone Richard 0425 896 992 or Email: richard@firststepresources.com

#### **3967 JODEL D9**



Airframe 495hrs Jabiru 2.2 184 hrs. Aircraft totally rebuilt 18hrs since. New Roomier fuselage all fabric paint, wheels tyres disc brakes, starlet canopy nose bowl delcom icom radios.

Garmin GPS III long range tank lively performer top value owned 17yrs \$15,000 keith 07 3294

#### 3968 LIGHTWING GR 582 FOR SALE



Lightwing GR 582 \$26,000 Factory built so can be used for training. Grand champion 95-25 class at Natfly in 2006. Excellent condition - always kept in a hangar. Only had two owners. Many extras. Will deliver, Phone Bob Burns more details 0412 041 701

#### 3969 JODEL D18 PARTLY BUILT



Most of the wood work done, includes some sheets of ply and some other timber. Full plans mounted on hard sheets. Small amount of transport damage.Located in Bathurst NSW 61 2 6332 4355

#### **3973 582 EDGE X TRIKE**

This is a golden oldie, still goes well with streak wing ,\$8000 also have 25hr eng to go with it at \$3000. you can,t go wrong fly away today with spare engine. All prices neg 0401 006 506

#### 3976 SKYRANGER V-MAX



\$43,000 ONO 149 hours engine/airframe. Rotax 912 ULS 100 HP. Glass and analogue gauges. Electric Carby Heat. Bolly IFA prop. BRS parachute installed 2012. Zaon Air-Traffic

#### MEMBERS' MARKET

Avoidance system. Alpha Systems AOA meter. Recent 100hour12month service and under-carriage overhaul. SkyRanger engine mounting upgrade. 90L fuel-tank. Swift wings. Always hangared. Phone David 0414 496 522.

#### **3977 FLOAT TRIKE**



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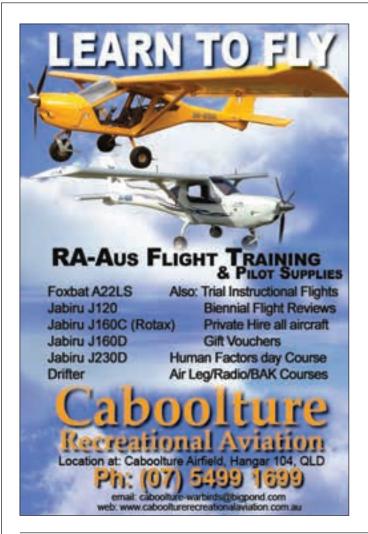
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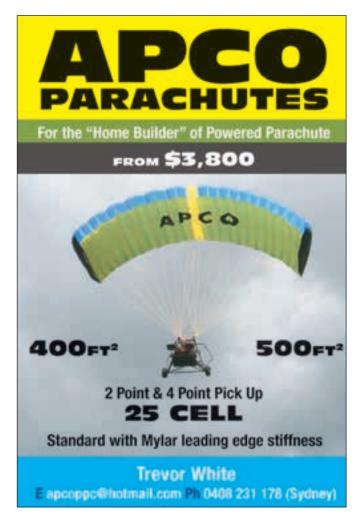
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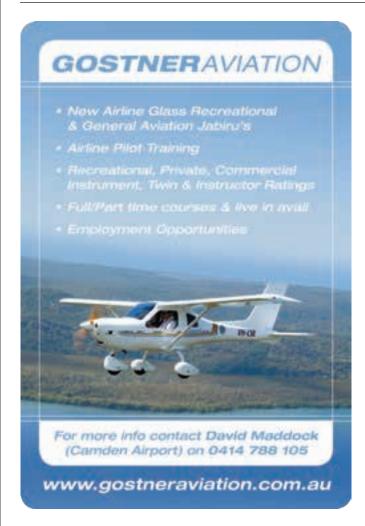
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