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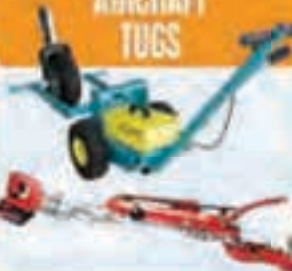
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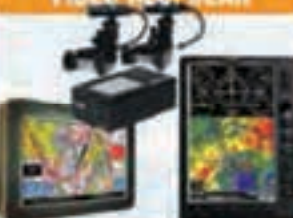
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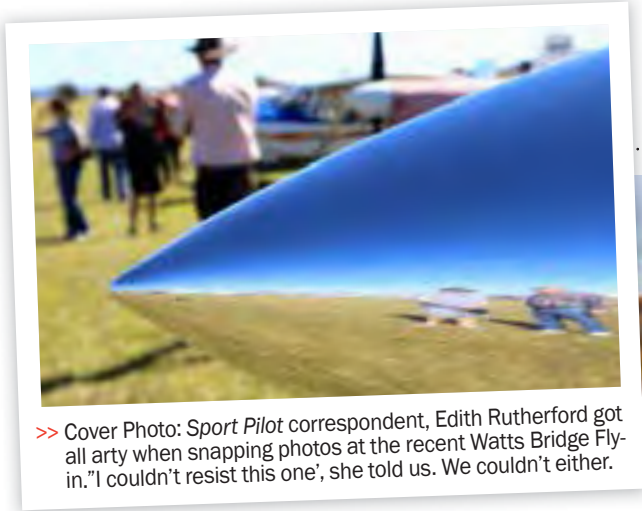


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>> Cover Photo: Sport Pilot correspondent, Edith Rutherford got all arty when snapping photos at the recent Watts Bridge Fly-in. "I couldn't resist this one", she told us. We couldn't either.



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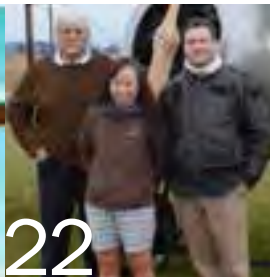
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It's an idyllic spot with spectacular views

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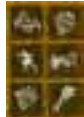
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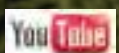
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POSITION REPORT

MARK CLAYTON



Playing as a team

IN late June the Technical Manager, [then] President and I took leave of the trenches to attend the 2013 Sport Aviation Forum in Sydney, an annual gathering attended by some forty representatives from - mostly - SASAO (Self Administering Sport Aviation Organisations) and the nine RAAOs (Recreational Aviation Administrative Organisations). Newcomers this year, other than myself, included the President and Secretary of the Model Aircraft Association of Australia, who reminded attendees that their 160kg pilotless aircraft are comparable - in terms of weight and performance - to some of our own early 95.10 machines.

It's important the Association participate in these events, not only to introduce ourselves (the three of us being newbies), but to also learn, communicate and collaborate. As a comparatively naive newcomer, I'd wondered often why, especially in this connected era, there wasn't already an established informal dialogue - or meeting of RAAOs? And so you can imagine my surprise and delight when in the first hour, on the Forum's first day, the nine organisations resolved that this should occur without any further delay (the initial gathering scheduled for August 8 in Sydney). Since our interests, business practices, and our challenges are substantially the same, it follows there is potential here for knowledge, information and resource sharing (e.g. accident investigation), efficiency gains and combined advocacy initiatives. Just imagine the effort which could be saved - not to mention the potential premium reductions - if insurances could be negotiated through the one broker, on behalf of several RAAOs.

In his opening address to the Forum, Dr Jonathon Aleck, also made it clear that collective lobbying by external interests - such as RAAOs - could, for example, do more to accelerate the rollout of the long-awaited Part 149 reforms, than the ongoing representations by internal bureaucrats. He also went on to remind the gathering that the

Australian sports aviation sector had recorded nineteen fatalities in the past six months, 80% of which involved RA-Aus and Hang Gliding Federation pilots. A sobering, but necessary reminder of the Forum's purpose....safety.

This was the cue for the Australian Ballooning Federation opening address, showcasing the outcomes of the collaborative research they'd been undertaking (and funding) in conjunction with the Queensland University of Technology's Centre for Accident Research. It's more than twenty years since the ABF suffered a fatality, and yet it's prepared to lead the way by funding cutting-edge safety research. Inevitably, you find yourself drawing comparisons with your own organisation.

The Australian Warbirds Association shared with delegates its experiences with integrating Safety Management Systems, Workplace Health and Safety and Quality Management Systems. Safety has now become a core function for the AWA, which staff - and Directors - treat with the same regard as they have (and still do) their financial planning, monitoring and reporting obligations. The Association's CEO, Steve Crocker, emphasised the need - and opportunity - for a generic sport aviation safety systems manual (RA-Aus Operations staff having already begun assessing the compatibility of the AWA's documentation).

The Sport Aircraft Association of Australia showcased its home-grown risk-profiling tool, an Excel-based utility developed primarily for the certification and registration of aircraft (and now being modified for pilot and facility application). This is designed for self-assessment, and provides users with a graphical (and quantifiable) representation of risk factors.

I was particularly interested to hear of the Australian Parachute Federation's progress since its membership base is larger than ours and it has responsibility for administering 70 clubs and 450 jump pilot authorisations. Unlike RA-Aus, the

APF is also affiliated with a peak international organisation, namely, the International Parachuting Commission. In 2012 the APF experienced its own annus horribilis, recording six fatalities (from a total of 300,684 jumps). The APF already has an SMS incorporated within its Operations Manual, and has since instituted a demerit and fine system to help facilitate internal cultural change. Interestingly, a statement-of-facts is published for all APF accidents within seven days, with detailed analyses and finding also published, as and when they become available. The APF's Facebook page has proved effective too for discovering, informing and educating members about non-compliance matters. The Federation is currently spending \$180,000 upgrading its website with the intention that the bulk of its transactional business will soon be conducted online. Again, I'm thinking to myself, what's the difference here?

Following are some of the specific actions which CASA undertook to pursue on behalf of RAAOs, following the Forum:

- Circulation of de-identified enforcement summaries;
- Circulation of a draft Exposition, suitable for RAAO's aspiring to Part 149;
- Develop - and circulate - common fields for SMS reporting;
- Develop common taxonomy and data fields (so as to facilitate interoperability between CASA-ATSB-RAAO databases);
- Provide RAAO's with a hotline for CASA legal advice.

Attending the 2013 Forum was a sobering experience for me. But I also found it reaffirming, and that sense of optimism remains, three weeks on. I'm buoyed by the willingness that RAAO's have shown to cooperate; and by the certainty that things can only improve for the RA-Aus. 🇦🇺

PRESIDENT'S REPORT ROD BIRRELL

AT the time of writing this, I have been in the job for 11 days and during that time the Board has already had a formal meeting with Dr Jonathon Aleck, Assistant Director of the CASA, along with CASA sport aviation staff. The meeting was successful and positive.

RA-Aus has a great future - we are not at any risk of being 'shut down' or otherwise constrained as long as we continue to look after the safety of our members, any people who fly with us and the public.

My personal goals for the RA-Aus Board are;

- Include the entire Board in policy development and decision making;
- Introduce an effective Safety Management System;
- Resolve the current problems with RA-Aus aircraft registration and renewal;
- Allow the General Manager to effectively manage the tasks the Board has given him;
- Work more effectively with other sport aviation organisations to achieve common goals;

- Continue to develop a long term plan for the creation of State and National Sport Aviation Centres;
- Work towards a balanced RA-Aus budget.

To give faster and more targeted news, the members only area of the RA-Aus is now active. To try it out go to <http://www.raa.asn.au/member-login/> and sign in using your membership number, your family name and the year you were born. The number needs at least six digits so if you have an early RA-Aus number please start with zeros to get the six number group. 🇦🇺

2nd Saturday of each month

Burnett Flyers Brekky

The flyers at Historic Angelfield, south west of Murgon, QLD, put on a large hearty breakfast for \$10 at their rustic Ops centre. Free underwing camping and friendly country atmosphere around the campfire. The Burnett region is worth seeing from the air. For more information, www.burnettflyers.org, email burnettflyers@yahoo.com.au or Ralph or Deb on (07) 4168 6248.



31 Aug

Gathering of Eagles

Watts Bridge Memorial Airfield south-east Qld. Open invitation to all aviators to enjoy the freedom of flight at picturesque Watts Bridge. Food, drink and Avgas available. For more information, John 0417 643 610, Ron 0428 747 737 or www.wattsbridge.com.au.

Wings over Warwick

Queensland Recreational Aircraft Association, incorporating Warwick Aero Club (www.qraa.info) invites all pilots and enthusiasts to the annual fly-in at Warwick Aerodrome (YWCK). The strip is 1600m all bitumen with no landing fees (www.warwickaerodrome.com). Includes a display of classic cars, motorcycles and model aircraft. Food and drink available from 8am.

For more information Kelvin Hutchinson 0407 733 836, Phil Goyne 0417 761 584 or Graham Hawthorne 0427 377 603.

7 Sept



6-7 Sept

Birdsville races

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

Ausfly

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

12-15 Sept

95.10 Weekend

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

14-17 Sept



>> Picture: Arthur Marcel

CALENDAR OF EVENTS

28-29 Sept

Westfly

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



Hastings District Flying Club Open Day Port Macquarie

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

18-20 Oct

Tamworth Festival of Flight

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

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



7-9 Nov

Catalina Festival

Australia's first seaplane convention will take place at Rathmines, Lake Macquarie ex-RAAF flying boat base on Thursday 7 and Friday 8, leading up to the 7th Catalina Festival on Saturday 9. Festival aims are a museum and hangar saluting the crews who served there during wartime. Last year's attendance was over 15,000. There will be bands, historic military vehicles, children's rides, a memorial fly past of seaplanes, flying displays, aerobatics and warbirds.

For more information, Malcolm Burns 0448 744 763 or mal.767@hotmail.com.

11-12 Jan 2014

Great Eastern Fly-In

The fly-in at Evans Head Memorial Aerodrome in northern New South Wales will be bigger and better than ever. The Great Eastern will celebrate its 22nd year with a refurbished Bellman Hangar and a display of an RAAF F-111 A8-147 and other warbirds. There will also be the usual fantastic aerial displays, events, catering and camping on site. For more information Gai Taylor 0427 825 202, (02) 6621 5592, email gaitaylor@exemail.com.au. Facebook or website www.greasternflyin.com.

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Kilcoy

by Edith Rutherford

KILCOY'S Inaugural fly-in at the idyllic strip overlooking Somerset's exquisite scenery was well attended.

Even though the wind gained strength through the day, it did not deter visitors from Gold Coast, Brisbane, Caboolture and others from around south east Queensland. President, John Lucas, was kept busy making cappuccinos while club partners served meals for the hungry.

Members set up new equipment made possible by a recent community grant, the result of a successful application by Kilcoy's hard working committee. The committee is working to refresh everything from the ground up.

The strip looks good and the number of hangars which dot the field are filling – it's easy to see why. It's an idyllic spot with spectacular views. A feeling of peace and tranquillity pervades. Even on a windy day it was an inviting place to unwind. 🍷



>> Mal Shipton and his Moth, *Emma*, named after his second daughter





All-In for Watts Bridge

by Edith Rutherford

WATTS Bridge is well known for its All-In Fly-In and on approach we could see a huge number of aircraft on the ground of every size and type.

There were several aircraft behind us as we turned onto final, so we hustled in and wasted no time taxiing towards the parking area. Club members were on hand, marshalling the parking aircraft like clockwork, which was great. It was not long before the line where we parked, went all the way to the paddock fence.

I gave up counting the numbers and started to pay more attention to the types of aircraft at the field. There were some real gems on display. The jet which pulled out onto the field behind the Jaguar caught most onlookers attention, but then the Morava was opened up, and this one had to be seen to be believed. The engine bays were pristine and the restoration immaculate, certainly to a higher standard than original would have been.

The 'Meet the Fokkers' display was also impressive, with aircraft in various stages of construction.

Food was in abundance, the pedal cars kept the kids happy and TIF flights pleased quite a few visitors. Helicopters joined the event, including an ex-military Kiowa. The weather was glorious, the crowd seemed happy, and Watts Bridge yet again, lived up to its reputation of putting on a good day. 🇺🇸





▼ The 'Meet the Fokkers' display was also impressive, with aircraft in various stages of construction



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LETTERS TO THE EDITOR



President for a month

Firstly, it would be remiss of me not to show my appreciation to the staff at RA-Aus and the members who showed me support during my very short tenure as RA-Aus President. Your support was and is paramount to the future of our organisation. It is unfortunate the adage of the 'squeaky wheel gets the oil' is alive and well on our Board, but it is the Board which makes the decisions for the organisation, whether they be good bad or indifferent. The short story is simple. The Board promised full support for my actions until the September board meeting. I had clearly documented it to them prior to my election and was conditional to me accepting the role. However when I made an executive decision, which would manage our safety culture in the short term for the safety of our members, the Board decided to censor my actions.

It ultimately made the President's role untenable. Interestingly, your new President and Treasurer were part of the group opposed to my actions. They will now be held accountable for theirs.

At the same time the Board put to a vote whether or not to go ahead with the temporary role of Safety Training Compliance Coordinator (STCC) which the Executive had created to embark on non-flight training programmes (We have fallen behind in recent years but it is critical for our future). The vote was tied, so was declared defeated. Therefore we did not get to move forward, which is disappointing. By the time you read this, the Board will have met with CASA. I hope that we as a Board get our act together and become professional in order to manage the direction we must go.

Ed Herring

The views expressed by Ed are his own and not those of the RA-Aus Board. The past President had the support of the Board to act with good governance. The Board formed the view that an arrangement by the President to appoint a former Board member to a new position as the RA-Aus Safety Training Compliance Coordinator did not reflect good governance. Neither the Executive, or the Board, was informed beforehand or approved of the arrangement. The Board passed a motion to overturn the proposal and the President resigned.

Rod Birrell, President

Captain Avius

I have always suspected Prof. Avius of being a wannabee A380 captain with all his sleeve stripes and shoulder bars.

Now I'm sure of it. He says, "It is not

appropriate to use elevators only to maintain the approach path. Use power as well." Certainly, this technique is favoured by A380 captains and GA flying schools. The schools have two good reasons: Wide circuits make more money and most GA instructors don't know how to make power-off approaches anyway. Power-off approaches were once the mainstay of RA-Aus sized machines like J-3 Cubs, Aeronca Champs, T-Crafts and Luscombes. Chop the power on downwind and use track, airspeed variations and slips to hit the spot.

The rot set in during the late 1950s when the Cessna advertising department came up with ads like: 'Take a drive in the sky in this amazing new airplane, the Cessna 172 with patented "Land-O-Matic" landing gear. The "Land-O-Matic" takes the skill out of landing and taking off! If you can drive a car, you can fly a Cessna!'

Cessna drivers can power onto the ground if they want with their Land-O-Matic gear, but I reckon it is far better to stay close and high and depend on skill, instead of an engine.

Norm Sanders

Ed - Norm, what makes you think Avius is a 'he'? And I know the Prof has been in an A380 up the back, but will no doubt accept all offers to ride up the front.

Being seen to be safe

Your editorial on being seen to be safe (Editor's Choice Sport Pilot May 2013) hits the nail right on the head. RA-Aus' media capability is laughable and this directly contributes to the poor perception of recreational aviation in the public arena, as well as with those who should know better (e.g. CASA).

Your suggestion to establish an Office of Safety Assessment (I'm happy with that name) is the best idea for improving the image of recreational aviation I've heard in a long time and should be implemented sooner rather than later.

I know RA-Aus has a lot on its plate at the moment, with ongoing registration backlogs, responding to the CASA audits and numerous actual and potential lawsuits. However a successful organisation in this day and age must be able to walk and chew gum at the same time, and it must be able to deal effectively with the media, especially when it has regulatory obligations that literally can be life and death for its members.

A good interim step would be to reintroduce the publication of serious incident reports. As far as I can tell, these ceased around 2004 and I've never heard a satisfactory reason why. These days it seems members never hear from official RA-Aus sources what the facts are about serious incidents. In the absence of facts, people speculate. The fewer facts available, the more they make stuff up. And for some strange reason, the stuff they make up is nearly always worse than the truth.

As you have pointed out, at least nine people have died in RA-Aus aircraft so far this year, and there have been other serious incidents which weren't fatal. Yet we have had no public utterances from our organisation - even acknowledging these incidents, let alone providing information which might help others avoid a similar fate.

While it's true pilots don't find new ways of killing themselves, there are lessons to be learned from every incident. Keeping those lessons hidden from the members is not what I regard as serving the interests of the members.

At the February General Meeting, the Board committed to a more open and transparent approach. Here's an opportunity where adopting a more open approach (rather than just talking about it) could actually save lives. Let's see if the leadership of our organisation is serious about turning over a new leaf. And if there's a reason why information can't be published,

let's have a detailed explanation of why. I, for one, am sick of being fobbed off with 'we can't say more for legal reasons'.

Tony King

Ed - There is a big a difference with RA-Aus Tony because our fatalities are dealt with by a coroner and not the ATSB. The ATSB has a government mandated immunity from prosecution when they release information about an accident. A coroner, on the other hand, cannot release information in case charges against someone have to be laid at a later date.



Safety from the other side

I loved your editorial on being seen to be safe (Editor's Choice *Sport Pilot* May 2013), and feel I am pretty well qualified to give a response in praise of your suggestion.

I work as a freelance TV news cameraman (stringer) for two of the country's largest networks and have been behind a TV news camera since 2003.

So I have an understanding what is required for a news report.

Bear in mind most staff working on my side of the camera have little or no idea about aviation. Certainly we are interested in aviation crashes because the general public wants to know what happened.

On arriving at a crash scene, and after I shoot my pictures, I need to interview someone, a person who has the authority to talk about what is going on at the scene.

This is vital, because the viewers want to know what has happened and they want the source to be indisputable.

Usually, this responsibility belongs to the most senior police officer on the scene.

If the police defer the responsibility, the next most senior media trained person usually gives the press conference.

In the case of an aviation incident, 99 out of 100 journalists will assume the principal investigation agency is CASA. After all, the word "safety" is used in the name of the organisation.

But the PR problem increases when we are told CASA doesn't investigate RA-Aus incidents.

At times, reporters are told that because the aircraft was experimental or home built, an investigation will not be carried out by them.

In those cases where it's a military, RA-Aus or other aircraft involved, it is pretty hard to explain to the viewers that yet another agency is to investigate. This is where things get confusing for reporters, especially when there is no spokesman for RA-Aus available or readily contactable.

So Brian's idea is brilliant.

Having an RA-Aus rep available to appear on camera is of paramount importance. The best and most credible answer would be to have the RA-Aus President do the interview. When the President becomes aware of a crash, he should issue a press release. But more importantly, because television news is visual,

he or she should do an interview wherever they might be at the time.

This can be done once at a local level with the nearest TV news crew or stringer.

The interview would then be sent back to the newsroom by the crew and edited into the story in time for the tight, immovable and unforgiving deadline.

Problem solved, and at little cost the RA-Aus – and reinforcing confidence in us recreational pilots with the general community.

Ben Longden

Ed - Or better yet, Ben, have the stringer upload the interview to YouTube and send a notification to all newsrooms around Australia to inform them the material is there and free for them to use. The idea depends on the President being media aware and properly trained which takes money and time.



The lunatic fringe

I am not a long term member of this great association but have had the privilege and great pleasure of being the chosen target of the Lunatic Fringe.

Yes, that illustrious fraternity of ignorant non-aviators who take great delight in inflicting misery on those who aviate. To push their selfish, ignorant agenda on our hard-fought privilege to fly.

You know the type. Envious neighbours, acquaintances, scorned women, jealous men, someone who has an axe to grind with us (real or otherwise).

They stop at nothing to harass, defame and spread rumors with the greatest of ease and the lesser of conscience. The right stuff for the Jerry Springer and Judge Judy shows.

In 2010, I was the proud owner of an Aerochute, as well as the licence and training to fly it.

I had also made some enemies in my community (before I began to aviate, but I won't bore you with the details).

I have done my human best to fly friendly, in a considerate/legal fashion. No honing. No playing up.

I observed and complied with the 7 o'clock fly friendly curfew in my region (I can see the local airport from my verandah).

Helos, gyros, aerobatic and performance planes fly over my place almost every weekend, yet when my Aerochute took to the air each time, I got a call from CASA or RA-Aus because some twit had lodged a fictitious, farcical complaint.

One time, I even made the local news rag's front page about a 'mysterious birdman buzzing' our area. The story had a photo of my machine climbing out over my property after 7am.

The funny thing is, I spotted the culprit photographer in the act - taking pictures of me climbing over my property in a proper fashion, well within my own boundaries.

It wasn't the most desirable thing to be the centre of a breaking news story about spooking and traumatising the stock and wildlife in our region.

But just today, I received a call from RA-Aus following a complaint about me flying my Aerochute, spooking someone's horse which reared and caused the owner's grandchild to fall to the ground

News flash! I sold that Aerochute nearly three years ago. Some people never give up nor do they get it. Pitiful really. Who regulates the lunatic fringe? Who holds them accountable?

I'm not sure whether I should laugh or extend pity to this person.

I'm sure there must be other pilots who also bear the scars of lunatic fringe.

A sadder but wiser aviator

To the Tech Manager

I don't know who is the unfortunate owner of the beautiful SeaMax on the cover (*Sport Pilot* April 2013), but I can only imagine how he/they felt following your crushing decision to not only privately pronounce that the aircraft airworthy certification as invalid, but felt the need to publicly embarrass him as well.

Recreational Aviation Australia has, over the years, held a wonderful modus operandi of assisting people to become pilots, pilots to become aircraft builders, and people to become adventurers. What happened?

I am not advocating a no-rules policy, but at the very least, I feel if an anomaly is discovered in a growing leisure sport industry, surely to goodness a private word is appropriate, rather than this disgraceful public embarrassment. Personally with the increase in amphibian aircraft (seaplanes), creeping into our code, I would applaud you as Technical Manager if your approach was to liaise with owners of seaplanes/floatplanes and CASA, to arrive at a decision where a completely new category could be introduced - allowing these magnificent new machines certification and maybe amnesty until a decision is made.

I am a mere mortal with the enormous privilege of a pilot's certificate. I know the satisfaction I get from submitting a story of my flying privileges and the feedback it generates from pilot friends, so I can only feel for the owner/s of the SeaMax.

Surely there is a vehicle by which a category encompassing amphibians, i.e. floatplanes and seaplanes, can be organised or introduced without calling them 'glider towing'. We've had floatplanes for years, why not seaplanes?

Help us to grow, and don't beat us around the head.

Laurie Barton Johnson

A final word on the step

I am so amused that although almost everyone can drive a car adequately, we all think we can do it better than anyone else and this applies to those of us who operate a boat or aircraft. But let me say this is a good thing because our sometimes trifling opinions get us thinking and make us all even better at it.

Some of us like to fly with a slide rule and some as free as a bird, so when it comes to expressions such as 'the step', we all have the same right to abbreviate long phrases.

When I am motoring my outboard tinnie just above idle, the stern digs in and a wall of water makes my forward speed less efficient. So I trim the boat by sending a crew member to the bow. I could write another 50 lines about how this action decreases the wall of water drag on the hull and makes my forward speed more efficient, but it's easier to say I'm off the step. Conversely when I fly with a nose up attitude and I decrease the wall of air drag on the wings and fuselage by dropping the nose, I can simply say I'm off the step because it doesn't matter how you describe it, as long as we all know we are reducing drag.

Peter Garrod

Incident reports

I am writing to query the absence of the incident and defect reporting section in the past few issues of Sport Pilot magazine.

As an Air Traffic Controller, I thoroughly understand the importance and significance of not only a strong reporting culture, but one in which the results and outcomes are made known to all relevant operators and stakeholders, in this case RA-Aus members. I sincerely hope that no commercial factors (for example, naming of particular aircraft involved in incidents) is the basis for this publishing omission. I am certain many members would agree with me that publishing these results greatly increases safety awareness and underscores potential faults in their aircraft or

operating procedures before they themselves become a statistic. As an RA-Aus pilot, I always read this section with much interest and also believe that its publishing brought an additional level of organisational maturity and credibility to RA-Aus. I am aware that RA-Aus has had a less than ideal start to the year regarding aviation safety, however I do not believe the solution is to simply ignore incidents and pretend they are not occurring.

I very much look forward to hearing from you regarding this matter.

Andy Rumbell

Ed - The Pilot Notes section was done by one person in their own time. It takes a long time to go through the reports to find relevant and practical incidents to publicise. That person is no longer at the office and, as far as I know, there has been no request to the organisation for someone else to do it.

Serving the sims

I was flicking back recently through my collection of RA-Aus mags and spotted a note to the Editor in regard to 'Flying recreational aircraft from your desk' written by Dave Tonks. I would like to share my story of desktop and real world flight.

I had been into plane spotting from a young age. Even on the sports field, I would end up stargazing in amazement as aircraft passed over my head. My first experience was with Microsoft Flight Simulator '98 to which I then said to myself, 'one day I'll try the real thing'.

Years later, I purchased Microsoft Flight Simulator 2004 and continued reading and tinkering with my 'virtual hangar' and was very impatient to see the release of Microsoft Flight Simulator X. The most exciting part with faster Internet was the multiplayer section. Since then I have dedicated a spare computer to serve the Flight

Sim community with a dedicated server and passionate group of regulars who jump into their virtual cockpits on a regular basis.

Our group was originally titled Cross Country Nav Australia, which focused on small prop-hop sessions, and my passion for flying grew further when many real world pilots joined in. Nonetheless, I made my first flight in February, 2011 in an Aeroprakt Foxbat A22L (24-5357) at Scone Aero Club, in the Hunter Valley. I obtained my RA-Aus certificate in February, 2012. I'm still working on my cross country endorsement, and my certificate takes pride on the living room wall. Seeing my dreams of

flight from PC based simulation to real world flight has been absolutely awesome and something I wish I had started sooner.

Not too long after obtaining my certificate, things online started to take off and a name change occurred with the amalgamation of two flight simulator groups to form Australia Servers Online.

We are also in the process of developing add-on scenery for Flight Simulator X with one airfield released already and soon to be revamped. Australia Servers

Online has been running for almost three years and is attracting virtual pilots from all over the world. For more information www.crosscountrynavaustralia.net/.

Matt Hoy



Something to say?

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

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

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

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



Search for new Avgas

THE search has begun for an official replacement to Avgas.

In the US, the FAA has asked big fuel producers to provide them with samples of alternative fuels so it can begin testing to see which one(s) might be best for general aviation aircraft once 100LL Avgas is gone.

Avgas looks like being phased out by 2018.

The FAA estimates that up to a quarter of a million aircraft around the world now use Avgas.

It wants to ensure that not only an alternative fuel is viable for aircraft engines, but that the provider of the fuel is able to produce and distribute enough of the product to satisfy the market.

The FAA also wants to assess the impact of the new fuel on the environment.

Aviation groups in the US have welcomed the move, saying they support a science-based approach to aviation fuel alternatives which focuses on preserving the safety, cost effectiveness and feasibility of the product for the aviation community.

STOLEN PLANE RECOVERED



A JABIRU SP 470 stolen from a West Australian hangar in June has been found not far from where it was taken.

The aircraft (19-3253) was discovered undamaged in a canola field, south of York, about 40 km from Northam airfield from where it was stolen earlier in the day.

According to reports, the aircraft had fuel for three hours flying. There was no

sign of the joyrider and police appealed to witnesses who may have seen the plane landing to contact them.

Aircraft theft is rare, but not unheard of. In the US (there seems to be no statistics available for Australia), there have been only eight aircraft stolen since 1990. Most were taken by people intending to use them to transport drugs.

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Changes at the top

THE turnover continues on the board of RA-Aus.

Less than two months after the resignations of the former President, Steve Runciman, and former Treasurer, Myles Breikreutz, the association's most recent executive members, Paul Middleton and Ed Herring, also resigned their own positions as Secretary and President respectively in June. Paul later agreed to return to the Secretary's role until the September Board elections.

Both men elected to remain as board members, but as a consequence of their decision, nominations were called for suitably qualified and experienced directors to fill the Executive vacancies on an interim basis until September.

RA-Aus General Manager, Mark Clayton, reports that on July 5, Victorian representative, Rod Birrell was elected President, and Victorian representative, Jim Tatlock elected as Treasurer.

Mark says CASA has been kept fully informed of the developments.

Earlier, West Australian board member, Gavin Thobaven also resigned his position effectively immediately.

CONSTITUTION REVIEW COMMITTEE

>> RA-Aus members always take a keen interest in the organisation



THE Constitution Review Committee was established by the board for review of it's Constitution. The Committee would like to advise members that work is proceeding in this regard. The work was suspended temporarily to allow the Structure Review Committee to complete its findings.

Work has now resumed with attention to these recommendations in order to complete reform alterations. Any changes to the Constitution at this time will themselves be the subject of this review. However, the Committee will take fair account of any proposal relating to the Constitution that is presented to it by members. Any member who wishes a response to be considered, should do so in writing to the RA-Aus Secretary.

The Committee will periodically report progress to members and a draft of the Constitution containing proposed reforms will be presented to members for review. The final form of the Constitution will also be presented in suitable form for consideration for adoption by the members.

Lynn Jarvis
for the Constitution Review Committee



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NOTICE OF 2013 ANNUAL GENERAL MEETING

The 2013 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 Aviation, Volume (25) Issue 7.

Time: 10.00 am

Date: Friday 13th September 2013

Venue: Naromine United Services Memorial Club
58 Dandaloo St, Naromine, N.S.W., 2821

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.
3. Business arising out of the Minutes of the last Annual General Meeting.
4. Presentation of Annual Reports by the President, Secretary and Treasurer.
5. Business arising from Annual Reports.
6. Any Motions on Notice.
7. Questions from the floor
8. Close of the Annual General Meeting.

Mark Clayton
Public Officer

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Being the machine

by Barry Hendry



BILL Dinsmore's recent article 'The Flare' (*Sport Pilot* March 2013) concluded with an interesting comment: "...the pilot should not think of what to do with the controls, but instead what to do with the entire aircraft."

I think this is a critical consideration for students and one which is probably not often appreciated. A recent learning challenge of my own, reinforced to me how critical is this state of mind.

I was undertaking an endorsement on a particularly challenging tail dragger. I have been flying for more than 35 years, so I reckon I have the fundamentals sorted. But I went through a particularly challenging phase trying to put this machine down for a decent landing. For the first time ever, my instructor had to take the controls as I was about to drop the aircraft from a fair height onto the runway. In my head I simply could not understand what was going on.

My instructor had told me the perfect landing in a tail dragger was when I had the stick back in my guts at touch down. For weeks, I had been visualising my landings; getting close to the runway then putting the stick back into my stomach. In my mind I was looking down at the stick – not out the front.

Then it hit me. I should not think about the stick, just about what to do with the entire aircraft.

Have you ever seen a back-hoe operator manipulating his machine with dexterity and finesse which makes the hoe arm look so smooth and controlled, like it is part of his own body? In the operator's mind, the hoe has actually become part of his body. He no longer thinks about which lever causes what movement. The machine has been integrated into his physical perception and becomes a natural extension of his body. We all do this when we ride a bicycle or drive a car.

I have flown a lot of model aircraft, mainly

helicopters. The mental processes required to hover a model helicopter in four unstable dimensions happen too fast to manage at a conscious level. In fact, if I start to think about what each stick does, I can get myself into a mess and lose control. The actions become subconscious.

At some point, my mind absorbs the helicopter as an extension of my body.

The same thing happens when learning to fly a real plane. I suspect the point when our mind makes that connection is the magic moment



when flying becomes such a joy to us. It is a state of mind I was lucky enough to discover at just 13 years old, when my father introduced me to gliding – the day I fell in love with flying.

And so it was with the tail dragger.

The perfect landing is a 3-pointer, with the tail stuck down after landing.

It means holding the aircraft off until the tail is down and ready to touch down – at least at the same time as the mains. A bit of heel and toe is better than the opposite. So, for the next week, all I thought about when visualising the perfect landing was what I wanted the aircraft to do. If the stick was back in my guts, it was a consequence, not an objective. From then on, I had it.

It is still a challenging bird to put down, but the aircraft is no longer a machine – it is an extension of me: I can pitch, roll and yaw to fly it the way I want.

So when does a student make this transition?

I think it is critical for instructors to understand this process and understand where the student is in their awareness. At which stage should you move from talking to them about the effect of controls, to what you want the entire aircraft to do?

For example, when teaching cross wind landings, talking about yawing the aircraft rather than pushing the pedals.

I have read a number of times about students who just can't get it. I wonder if it is because they have not been able to make the mental connection to the machine and to stop thinking merely about the controls.

Perhaps the student has not developed the same perceptive ability as the back-hoe operator. It is an attribute which varies for all of us.

If a student struggles with, or is unable to map their body image to the aircraft, I think they will have a very difficult time becoming a natural pilot.

Or if the instructor talks about what to do with the aircraft before the student has made the connection, they may not perform as directed nearly so naturally, easily and quickly.

Recognising the moment when a student makes that connection and understanding how best to teach a student, is a critical point. Understanding it might also help a struggling student to get over the hump or help them recognise why it is not working for them.


I don't know if you can teach how to make that connection. Have any instructors ever done this that?

Were you aware, as a student, of that point where you became one with the aircraft and suddenly felt like you were flying, not just sitting in a machine pushing levers?

It is what I love the most about flying. I believe it is what we must teach students, if they are to love flying like we do. 🍷



A *Pu*

 *Bruce has been, and continues to be, a major inspiration*





p takes wing

by **Andrew Carter** Founder of The Australian Vintage Aviation Society



BRUCE Clarke's Sopwith Pup, built from the Rob Baslee Airdrome kit and first seen in *Sport Pilot* earlier this year, flew for the first time on May 16 with me at the controls, as test pilot.

This is a very lightly loaded aircraft given its large wing area, and after advancing the throttle, it was almost instantly airborne.

It climbed away very comfortably. All the controls were positive and smooth. Turns in each direction were easy to co-ordinate. At 3,000ft I pulled the power off and tried a basic stall (which occurred at 35kts). All that was left to do for this first flight was test the glide, then land – both which were accomplished easily.

Not one to rest on his laurels, Bruce has already started building a Nieuport 24 Airdrome Kit and is assisting two others at Watts Bridge build their own Airdrome kits – a Sopwith Camel and an E.J Eindekker.

Having seen three of these kits go together, I can confidently say they are the cheapest, easiest and quickest way to get an accurate looking, full sized replica into the air. Having now flown one, I can also report they are exactly as advertised – a delight to fly.

Congratulations must go to Bruce for the speed at which he completed this project and the quality of the job he has done. I am only aware of two other Pups flying in Australia at this time. One, in Western Australia, is the world's most accurate reproduction. The other is a replica operated by the RAAF Museum at Point Cook.

Credit must also go to Bruce for actively inspiring and assisting others in their dreams to build and fly WW1 replicas.

In mid-June more than a dozen people arrived at Bruce's hangar at Watts Bridge to examine the Airdrome kits completed and under construction. They were able to look over the Pup, the Nieuport fuselage construction, Ron Dunn's Camel fuselage and have all their questions answered about this type of build.

Bruce has been, and continues to be, a major inspiration. I look forward to seeing the fleet of WW1 aircraft which will leave his stables in the next 12 months. For more information on WW1 builds www.tavas.com.au

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178 SECONDS LATER

Arthur Marcel replies to his critics

THE '178 seconds to live: is it a myth?' article aroused much debate, though some respondents, seemingly fixated on the aviation adage about old pilots and bold ones, mistakenly had the idea that the intent of the piece was to encourage VFR pilots to fly into cloud. The clear theme was, rather, that if VFR pilots do inadvertently find themselves without visual reference, they aren't necessarily going to die as a result.

This idea has been lately reinforced by two independent writers, Rob Dawson author of 'Banana Canyon' (*Sport Pilot* April 2013) and the anonymous author of 'Flying in a Cloud' (*Sport Pilot* May 2013); not to mention letter writing respondents Kevin Wilson, John Howard and Chris Jelliffe.

By the way, I thought that Rob Dawson was particularly hard done by in the *Sport Pilot* letters columns. Rob clearly had the common good at heart in telling what I thought was a truly ripping, obviously true, story of high adventure. It takes courage to put your name in a nationwide magazine against one of your bigger mistakes. Readers should remember that aviation has led the world with no fault self disclosure. If there weren't altruistic people like Rob to learn from, we would simply be left to learn on our own.

I thought Rob's story was typical of the type of situation most likely to bring pilots into contact with cloud. It has been my experience that VFR pilots are very loathe to fly into the stuff. They are more likely to come into conflict with cloud by pushing on under it, and then not being able to find a way out. The contentious point I was trying to bring home, is that engendering in pilots a paralyzing fear of cloud can be counterproductive, in this type of situation.

If there is one thing which imparts greater fear in VFR pilots than cloud, it is rising terrain. In adverse circumstances, pilots tend to fly up under cloud as far from the ground as possible. Unfortunately, the effect is to reduce their chances of seeing a way out of their situation. If they enter a valley and find ground and cloud coming together, they may, as a last resort, enter the cloud in a max rate climb which steepens instinctively when they lose visual reference, and this is when control of the plane may be lost.

Advances in aviation safety have come about not just as a result of no-fault reporting. We should never lose sight of the fact they have mainly come to us on the back of improved technology. By far the greatest

piece of navigational assistance to come our way over the past twenty years or so is the GPS. This equipment provides even the most cash-strapped pilot with state of the art positional reference at a glance. In critically confined situations of reduced visibility, these systems are without equal.

Technological innovation has not just been confined to assisting pilots in determining their geographical position. Advances are also being made with regard to helping them fly their aircraft in a controlled manner. Spatial disorientation in a horizontal sense is one thing, vertigo is another. There is no doubt that, in non-visual conditions, one's seat of the pants inertial kinaesthetic senses can overwhelm visual interpretation of flight instruments to the point where up becomes down. This is primarily due to a loss of periph-


ready here. It will not be long before someone makes it available. In the latest Flight Safety online magazine, in an article entitled 'It's getting real: flight simulation comes of age', CASA simulator specialist Quentin Fuller is effusive about the fidelity of modern flight simulators. He is quoted as saying that "[Boeing] 737 or [Airbus] A320 level D full flight simulators now allow a first officer's first flight on type to be a passenger-carrying flight – that's how good modern simulators are". My point is that if it can be done, in a simulator, it can also be done in the plane itself. And it won't be necessary to simulate anything except the outside vision. Every other sensation is already there for free.

Finally, let me say that I very much appreciate the interest shown in my article. Thank you all very much for taking the time to write,



eral input. Focussed macula vision is virtually 100% cognitively interpretive, while side vision is basically instinctive. As one's field of relevant vision is narrowed, the greater the mental processing competence required to maintain appropriate physical reactions. For this reason, I believe that when it comes to blind-flying instruments, bigger is always better, and today, large display, multifunction electronic flight instrumentation is as readily and cheaply available as are GPS receivers.

Some of these instruments even have 3D, GPS fed, terrain display, for example, the EFIS in the Lightwing SP2000. I believe the technology to project terrain images from a GPS data stream onto interior cockpit walls is al-

especially those who, like Michael Apps and Barry Wrenford, wrote longer, well considered responses. Perhaps we have to agree to disagree. I still maintain the University of Illinois study is flawed, not so much in the way it was done as in the way its findings have lent themselves to emotive misinterpretation for all these years. More than that, however, advances in aviation information technology are rapidly making the Illinois paper even less applicable. My central point remains, that blind fear is of little use to anyone. Informed understanding is much more likely to lead to better decisions (and outcomes). And, of course, the time to make those decisions is long before there is no choice left to be made. 

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Electronic flight bags and YOU

John Brandon has been exploring the issue of electronic flight planning as part of his Flysafe tutorials on the RA-Aus website. Here is an excerpt of his latest report.

THE Global Navigation Satellite System normally provides excellent position-fixing capability.

However, contrary to good sense, some pilots rely on GNSS receivers - plus electronic on-screen position tracking, as a primary-means navigation system.

But day VFR navigation does not allow recreational pilots to use primary-means systems for any flight, only the sole-means map-ground reference system plus supplemental-means systems. And a supplemental-means navigation system (such as NDB, VOR, GNSS) may only be used in conjunction with a sole-means navigation system as an aid to navigation/situational awareness as long as the supplemental-means system meets integrity and accuracy requirements.

GNSS receivers may supply position data to a portable electronic device as part of a supplemental-means system.

Electronic flight planning software has been available for many years, but the concept of the electronic flight bag has emerged now it is possible to link a tablet computer with GNSS reception and documents such as the flight manual/pilot's operating handbook; ERSA and the AIP book; ARFORs and NOTAMS; and georeferenced Airservices Australia digital aeronautical charts.

The current situation enables any reasonably computer adept person to put together a system of software, receivers, general purpose (rather than aviation-oriented) hardware and navigation databases tailored to their particular aviation needs. All accomplished in accordance with the civil aviation advisory publication CAAP 233-1(0) and at rather low cost - if well researched and done carefully.

Don't forget, though, an EFB is an aid to situational awareness and not a CASA approved navigation system.

THE ELECTRONIC FLIGHT BAG

The EFB document reader concept has been used, to some extent, for many years by some of the world's airlines, but the burgeoning world-wide public acceptance of tablet computers, led by the Apple iPad, has prompted ICAO and national airworthiness authorities to expand the regulations and enhance developments directed toward a paperless flight deck/cockpit.



>> Electronic flight plans are the norm these days

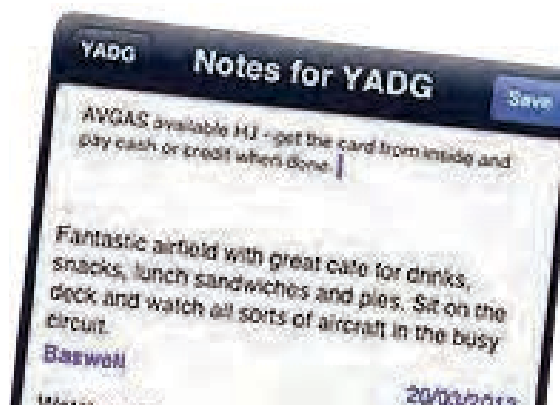
In November 2012, CASA released a 'notice of final rule making' including an advisory publication CAAP 233-1(0). The CAAP defines the EFB as: 'A portable Information System for flight deck crew members which allows storing, updating, delivering, displaying and/or computing digital data to support flight operations or duties.' The CAAP provides general guidance for private pilots and states 'The EFB, with GPS functionality, may be used for situational awareness only. It is not an approved navigation system and cannot be used as the primary means of navigation.'

The recommended minimum display screen size is A5 (210 × 148mm [257mm diagonally] or 8.3 × 5.8 inches [10.1 inches diagonally]). The A5 paper-based dimension ratios of 1.41:1 don't equate with the common display screen dimension ratios, e.g. 1024 × 768 pixels is 1.33:1 so, at 197 × 148mm, the iPad screen is as close as a 1024 × 768 pixel display can get to CASA's recommendation. The iPad Mini dimensions are about 162 × 122mm (201mm [7.9 inches] diagonally) so it may provide a satisfactory VFR display. The iPhone display is too small for satisfactory map reading.

CASA recommends a tablet computer be dedicated to the EFB/flight planning/flight

monitoring functions, however it is up to the pilot-in-command to ensure any tablet used has enough capacity for other functions without affecting the inflight EFB function.

CAR 233 requires pilots to carry the latest editions of the aeronautical maps, charts and other aeronautical information and instructions published in AIP or by holders of an 'instrument of approval'. CASA has the responsibility to regulate the provision of aeronautical information services thus CASA, not AsA, is the approval authority under CAR 233 (1) (h) and 1A; of course AsA is a CASA approved document supplier and



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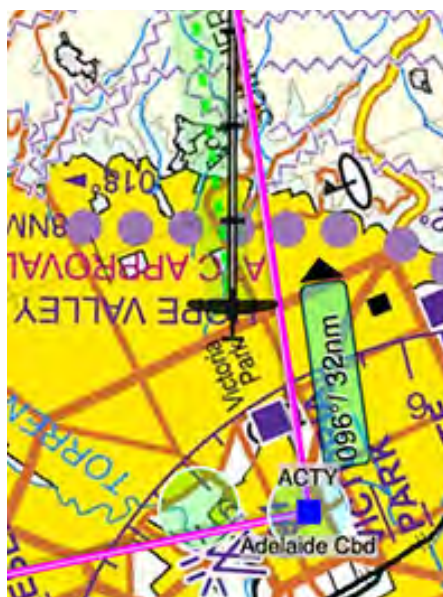
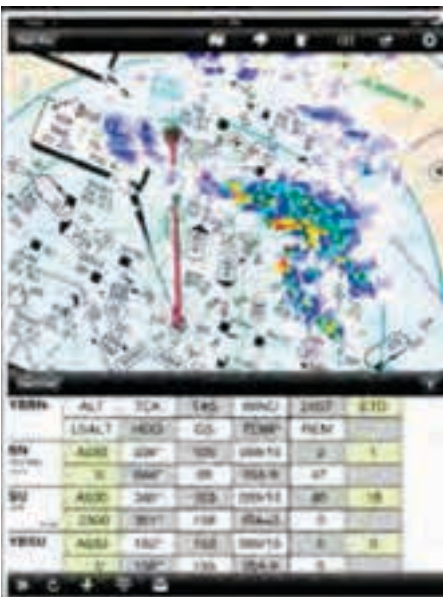
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>> EFPs are only backups for RA-Aus pilots

its documents do not need additional approval if they have been stored in an EFB in essentially the same form as the original AsA document.

A notice of proposed rulemaking - NPRM 0901AS - for CASR Part 175 'Aeronautical information services' was published in 2009 (associated with AsA's intention to change from AIS to aeronautical information management [AIM]) but no notice of final rule making has yet been issued. The proposed 'certificates of authorisation' for people to act as data service providers will specify requirements to demonstrate that the data they publish (that pilots are permitted to use as an alternative to the AIP) is equivalent to the data published in the AIP and on aeronautical charts, and that the service provider's systems and procedures do not introduce errors.

In November 2012 an amendment to CAO 82.0 was published, adding the requirements to be met for the use of an EFB, by the pilot in command of an aircraft operated under an Air Operator's Certificate, as a means of complying, or partially complying, with CAR 233 (1) (h). (Private pilots may use their own pilot in command authority to approve use of an EFB, bearing in mind the guidance material in CAAP 233-1(0).)

EFB SOFTWARE SUPPLIERS

There are a few Australian producers of flight planning software who have entered a Standard Data Licence Agreement with Airservices Australia enabling the inclusion of the AsA map packs as part of their software package. Two of those producers market the concept of a tablet computer/mobile broadband hardware system combined with EFB + flight planning + GNSS + flight monitoring software.

Note: it is the pilot's legal requirement to carry the current maps and charts for the sector to be flown, which have been approved by CASA. Thus until an instrument of approval has been received by the relevant data service provider, AsA's paper charts must be available in flight; another electronic device cannot be nominated as a back-up system. When the data service provider receives a CASA instrument of approval for the digital WACs and VNCs, then private VFR pilots will be able to use an acceptable tablet computer, rather than paper charts, as the primary means of in-flight documentation.

During 2012 the CASA flight operations inspectors were surveying iPad and flight planning software usage when conducting ramp checks.

EFB suppliers sell their VFR software product on an annual subscription basis - at November 2012 around \$75 p.a. The subscription includes the complete AsA VFR digital chart pack for Australia and the updates of charts and other aeronautical data in accordance with AsA's standard update cycle; it also includes software updates/expansions. Those data service suppliers might alter the AsA product; for example the 43 WAC charts have overlapping seams and the EFB supplier might stitch the individual charts together to produce one very large seamless mosaic. Locality names, or parts of names, may disappear from the seamless mosaic. Such activity, being an alteration of the AsA material, may be prohibited within a CASA approval instrument.

Data service providers approved under CAR 233 (1) (h) must also ensure all database material cannot be modified by the user.

The freely available Aeronautical Information Publication plus updates is also included in the package - the EFB supplier may add a search facility for ERSAs and the AIP book.

Although there may be a GPS engine included in the hardware it is recommended that an external GNSS aviation receiver engine be linked to the hardware. There are packaged GNSS engines available which output the navdata, via a Bluetooth connection, to an iPad, iPhone, Android or other display device. The cost for aviation types is \$75 to \$150. For example the Garmin GLO for aviation costs about \$150 and receives position data from GLONASS and GPS satellites (thus 48 satellite potential) with an update rate of 10x per second. Weight is 60gms and USB connection also available.

Note: from February 2, 2017 all aircraft operating under the instrument flight rules must carry ADS-B OUT equipment. It is probable many of those aircraft will also install ADS-B IN. It is then likely that a tablet type computer, linked to the ADS-B receiver, could be used for the cockpit display of traffic information.

The mobile broadband connection allows inflight connection to BoM weather radar, internet lightning trackers, regular checking of the NAIPS Internet Service for changed information relative to the flight plan (SIGMETs and SPECI for example) and to overlay that information graphically on the moving map display.

Note: the use of a cellular mobile voice or data communication device in an aircraft - that is not equipped with a picocell base-station - is not in accordance with the licence which legalises personal transmissions from a mobile telecommunications device.

The EFB supplier's products are:

OzRunways EFB from OzRunways (www.ozrunways.com)

AvPlan from AvSoft (www.avsoft.com.au)

To read John's entire article http://flysafe.raa.asn.au/navigation/electronic_nav.html

The view from CASA

We've heard a lot of opinions and rumours from people in the past year about what CASA might or might not do about RA-Aus in the wake of the failed audits. *Sport Pilot* Editor, Brian Bigg, went to the top for the real story. He posed a series of questions to CASA Acting Director of Aviation Safety, Terry Farquharson.

What do you think about the trouble RA-Aus got into with its failure to pass its recent audits?

TERRY: For reasons you will appreciate, CASA does not comment publicly on the outcomes of specific audit or surveillance exercises. Generally speaking, however, in conducting an audit of any organisation, CASA looks to see that appropriate systems and processes are in place, and that those systems and processes are being properly and effectively employed. Deficiencies in either aspect of these matters can be problematic. Where such deficiencies are disclosed, CASA looks to the organisation to introduce and implement appropriate corrective and remedial measures, with a view to addressing any immediate safety issues and to the prevention of such issues arising again in the future.



What do you think about RA-Aus' attempts to rectify the problems? Is it enough? Should more be done?

TERRY: Once again, CASA will not comment publicly on the details of its oversight-related activities in relation to a particular organisation. These are issues more properly addressed directly to RA-Aus. Generally speaking, however, while it is rare that the audit of any organisation will not disclose some shortcomings and areas for improvement, CASA's primary concern is to be satisfied that such issues have been recognised and are being effectively addressed.

Are you happy with RA-Aus management of itself? Do you see a chance that CASA could withdraw RA-Aus privileges permanently and bring most of its aircraft into the GA fold (this is a major rumour in RA-Aus)?

TERRY: It is not for CASA to be 'happy' or 'unhappy' with the management of any organisation, except to the extent that safety-related concerns may be found to be related to identifiable shortcomings or deficiencies in an organisation's management structure and/or practices.

In any case where CASA has reason to believe that such difficulties pose a sufficient threat to an organisation's ability or willingness to discharge its safety-related responsibilities, there are a range of actions CASA may take to ensure that those obligations are being met and, where necessary, to limit, condition or suspend certain activities until CASA can be confident that a sufficient level of safety is being maintained.

Virtually all sport and recreational aviation activities today are conducted pursuant to a series of exemptions from the regulatory requirements that would otherwise govern those activities. The privileges allowed under those exemptions are dependent upon compliance with the conditions set out in the Civil Aviation Orders. Those conditions include adherence to the requirements specified in the approved manuals of the organisations administering particular sport and recreational aviation activities, and CASA's continuing satisfaction that the organisations responsible for administering the sport and recreational aviation activities governed by those manuals maintain a sufficient degree of control and oversight of their members.

CASA is committed to ensuring that most appropriate organisational

models for managing the oversight of the sport and recreational aviation sector are in place. Responsible and accountable self-administration plays a central role in these arrangements, and there is no present intention on CASA's part to move away from this kind of approach.

Are you happy with the safety culture as it now exists in RA-Aus or could more be done?

TERRY: The development, maintenance and enhancement of a positive organisational safety culture is widely recognised as critical to the achievement of critical safety outcomes in any organisation. CASA is satisfied that, as an organisation, RA-Aus understands what it means to have and foster a positive safety culture.

There is always room for improvement in the safety culture of any organisation, however, and this is as true for RA-Aus as it is for any other self-administering sport aviation organisation.

Do you have a view on the number of accidents/incidents involving RA-Aus aircraft?

TERRY: CASA is naturally concerned with the number of accidents and incidents involving RA-Aus aircraft in recent times, and these concerns have been expressed to the RA-Aus executive, with whom CASA continues to meet and speak, with a view to ascertaining the reasons for these occurrences, identifying the most appropriate steps to take to address those issues and ensuring those steps are taken.

Where would you like to see RA-Aus as an organisation in the next 12 months / five years?

TERRY: It is CASA's hope and expectation that RA-Aus, among other self-administering sport aviation organisations, will be in a position to administer the activities for which it is currently responsible as an approved organisation under Part 149 of the Civil Aviation Safety Regulations.

The CASA ramp checks now springing up at RA-Aus fly-ins and events are generally being well received by RA-Aus pilots. Are there plans to expand/contract/change these in the near future? What has the feedback been like within CASA to the ramp checks?

TERRY: It is, and has always been, CASA's prerogative to conduct safety oversight activities in relation to sport aviation participants, as a complement to the corresponding efforts of the various sport aviation organisations. Ramp checks are part and parcel of those activities, in Australia as they are in every other leading aviation country. There is no general plan to either to increase or decrease the frequency of such exercises. Rather, activities of this kind will be developed in a manner consistent with CASA's evolving approach to risk-based surveillance and oversight. It is heartening to find that, as a greater number of sport aviation participants become more familiar with the realities of properly conducted ramp checks - they are coming to see them as an important, useful and instructive element of CASA's safety-related functions, as opposed to an inconvenient intrusion. 🇦🇺

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The Pursuit of Perfect Sound

Fabulous!

by Brian Bigg

EVERY Easter I make the trek to Temora for NATFLY and, while meandering around the flight line, I always pose myself the same question - if I had to change aeroplanes, would I buy one of these before me or simply replace mine with a newer model of the same brand?

As most of you who regularly read this magazine know, I fly an ATEC Zephyr. I've had it since 2005 and, as many of you also know, I love it to bits.

Sure it has little faults - the brakes have been terrible since the day I built it (one day soon I plan to replace the whole system) and I bake like a No. 15 Ingham's chicken under the huge canopy every summer - but my Mimi has taken me safely around Australia dozens of times and we know each other so well.

I love the fact that the enormous wings give me a huge margin of safety should the Rotax ever go quiet. I love turning the power down to idle mid-downwind and gliding it around the rest of the circuit to land and yet still have full rudder authority all the way to the ground. I love the fact that my pre-take off and pre-landing checklist is only three items long. And I love... well, as you know, I can go on about it.

It is safe, simple to operate and completely predictable. It does exactly what I require in an aeroplane, so it would take something special for me to want to change.

Because of my job as Editor, I get to fly almost everything out there and a couple of times I have been sorely tempted. Some of the plastic fantastics lure me in because of their amazing flying speeds, range and economy. But often the price of them makes me gulp. And, as things have gotten tougher financially all round, some of the aircraft at the lower and slower end of the category have wafted past my eyes alluringly too. After all, the point is to get off the ground as often and as cheaply as possible.

I moved some way closer to answering my own question this year when the Australian distributors for Czech company, ATEC aircraft, Dexter Burkill and Sean Griffin, imported the first Faeta 321, the updated version of my Zephyr.

The Zephyr model was introduced by ATEC in 1996. Hundreds of been sold around the world, eight of them in Australia and one in New Zealand. I have been told the owner in New Zealand has ripped the undercarriage off his a couple of times trying to get down on some of the rough patches of mountainous ground they call airstrips over there, but there have been no safety or structural issues with any of the Zephyrs built



*It is safe,
simple to operate
and completely
predictable*

in Australia (if you don't count my stupid brakes, which were probably my fault anyway).

ATEC continually updated the Zephyr until 2005 when, to comply not only with ultralight category limits, but also the emerging Light Sport Aircraft category appearing around the world, it introduced the Faeta 321. Overall, it looks pretty much the same as the Zephyr but the Faeta has a different construction and more modern technology behind it.

THE WING

The big difference is in the wing. The profiles of both the Zephyr and the Faeta wings are almost identical, but the Zephyr's is made of fibreglass, wood and polyester fabric. It's light, strong and

cheap to make. It gives the aircraft a very glider-like feel when flying.

The Faeta wing is a reinforced shell of a carbon-fibre sandwich. It is tapered and back-swept and made of laminated hard beech, saturated with synthetic resin. In flight, it feels more like a light aircraft, not a glider. By my reading of the technical specs, the difference appears to add only 3kg to the empty weight.

The other difference with the Faeta wing is that more real estate has been given to the flap at the expense of the aileron.

The different structure has also allowed the manufacturer to move the fuel tank from under the pilot's legs into the wings themselves. I sit on a single 80 L fuel tank. A Faeta pilot has the option of two 35 L tanks or two 50 L tanks in the wings. Most will probably opt for the 100 L capacity which the company says will give the aircraft an 860nm range.

The cabin feels narrower than mine, which is 120cm wide, but the tech sheet says not. That is more than enough. According to my logbook, 90% of the time I fly I am on my own anyway. It

Faeta

SPECIFICATIONS

Wing span	9,6 m
Length	6,2 m
Height	2,0 m
Wing area	10,1 m ²
Tail span	2,4 m
Wheel spacing	2,0 m
Empty weight	278 kg
Max. take off weight	450 / 472,5 kg
Fuel capacity	70 l or 2 x max.50 l



OPERATIONAL CHARACTERISTICS

(ROTAX 912 ULS, 450 kg, IAS speed)

Useful load	172 kg
G limits	+4g/-2g
Stall speed	52 km/h
Min. no-flap speed	64 km/h
Cruising speed	227km/h
Max. level speed	249km/h
Never exceed speed	275km/h
Rate of climb	7 m/s
Fuel consumption	8/14 l/h
	(160/200 km/h)



was an issue for me recently, though, when I took a very large friend for a flight and I virtually had to sit outside. The Faeta is approved for 550kgs MTOW but because it has such a low empty weight, it gets a useful load of around 300kgs, which is more than some aircraft approved for 600kgs MTOW.

ATEC has been working, since the Zephyr first came out, to improve the canopy locks. It's important when you have a front opening canopy to make sure it will stay in place during flight. By the time I built mine, they had solved the issue, but there is one very experienced pilot in Australia who owns an earlier model and who can tell you how hard it is to fly when the canopy pops up unexpectedly.

INSIDE

Climbing in, I appreciated the new step the Faeta has installed in front of the wing. With the Zephyr, you need a stepladder or be acrobatically inclined. I had to get very personal with my very large friend, I can tell you (shudder).

The Faeta only comes as factory built, rather



than as a kit, and you can see it in the smaller touches in the cabin. The velour covered panel is standard, the seats are a much higher quality than mine and the panel can be individualised according to your needs.

IN FLIGHT

Take off speed and distance appeared to be about the same as the Zephyr, but the different wing gives the Faeta a more stable feeling in flight and it feels less sensitive at low speed, not that mine is overly sensitive in that regard. It just handled like a bigger aeroplane.

I did find I had to keep the nose lower than normal in level flight. The Zephyr is well known for its already low nose position. The Faeta lets you see even more of the horizon. Anyone coming from a Cessna or Piper will think they are hurtling towards the ground when they first try level flight in these aircraft. It takes some getting used to. There was no way to test how the aircraft was in turbulent flight (mine can get quite bumpy) be-



cause the air on this morning was as perfectly cool and smooth as a Temora Easter can be.

The company says the new wing gives the aircraft a lot more spring in its step. We hit 120kts in cruise, well up from the 105kts I normally plan for. The Faeta also has a much lower stall speed. With Dexter next to me wondering whether I was up to it, I hung it on the prop at 29kts (with flaps). A wing dropped at 28kts. Mine will do that 5kts faster.

The landing was a lot slower too. I like to come in at 55kts to give me lots of room for gusts, but the Faeta was comfortable approaching at 45kts. The landing felt just the same.

Overall, I was impressed with the continued development shown by ATEC of an already popular model. They have obviously listened to their customers and have made loads of improvements on their early design. I love the new built-in step, for example. The Faeta is a terrific aeroplane in all respects.

But all that development and progress has resulted in an aircraft which is quite different from mine. To be honest, I was hoping for something which still felt like my Zephyr. But the Faeta is the Zephyr evolved. It looks much the same, but it flies quite differently. Much better, I have to grudgingly accept and the brakes really work well.

It is like when you get a new computer. If you go back to the old one six months later you wonder how you could have worked with such a primitive machine. Your expectations change. I just hope that having had a glance at the future, I won't be disappointed with my Mimi. And heaven help me next Easter if Dexter and Sean are at Temora and offering me a ride again. I could be in trouble. 🍀

THE Heath 'V' Parasol

by Len Neale
Restorer and pilot

This story of the first 95.10 category aircraft ever built in Australia, will be run in a series in *Sport Pilot* over the next five months. It is a gripping story of a remarkable man and a remarkable machine.

The beginning

VLADMIR Victorovich Slusarenko, the builder of the Heath Parasol, was born in Piflis, Russia in 1889, son of Victor Slusarenko, a General of artillery in the Imperial Russian Army. Even when just a young man he became interested in aviation, which was then in its infancy. In 1911, the young Slusarenko gained the first aviation licence to be issued in Russia and just the thirteenth international licence.

One of his earliest attempts was a flight of 400 miles from St.Petersburg to Moscow, at a time when flying 60 miles was regarded as a daring achievement. The aeroplane was a Farman, which looked more like a box kite than a flying machine. And, as often happened in those early days, engine trouble compelled him to make a forced landing. He crashed. When Slusarenko was rescued from the wreckage, his left leg was smashed at the knee and doubled up under his armpit. The doctor's view that he would be lame for life did not deter him from flying or from going up again in the same type of aeroplane.

The left leg, which was always stiff and largely useless, was again injured in a second crash in a Farman. Despite that, Slusarenko was able to walk with only the slightest limp.

Over the next few years, he advanced from piloting aeroplanes to studying aircraft designs and construction. He established an aeroplane factory at Riga in Latvia. During the First World

War, the factory was forced to close. It was later reopened near St.Petersburg in conjunction with the famous Igor Sikorsky. Between them they employed more than 500 men and built 392 aeroplanes for the Imperial Russian government before both were forced to leave Russia. Sikorsky emigrated to the US to build huge flying boats and develop the first commercial helicopters, the descendants of which are still manufactured today. Slusarenko's departure from Russia was to involve many more adventures.

Jailed by the Bolsheviks

During the Russian revolution, Slusarenko's father, like so many right wing white Russian generals, was murdered by the revolutionary left

wing Bolsheviks. They also arrested the young Slusarenko and threw him in jail.

They were looking for his supposed family wealth, but after a month they released him in the hope that by shadowing him, they would be able to locate the secret hoard. Slusarenko, however, was well known to many of the English residents and members of the British Military Mission in Russia. Through the good offices of the British Consul and others, he was smuggled out of the country in the same way so many aristocrats were whisked out of France during the French revolution. At Murmansk he was betrayed and re-arrested, but made a daring escape one night through a small window, crossing the ice to Northern Norway on a reindeer team.

While at Oslo in 1918, Slusarenko was invited to accept a lieutenant's commission and to serve with the British Expeditionary Force. He joined the newly formed Royal Air Force as a pilot and did valuable work. Then, when Admiral Koltchak raised a White Russian Army to fight the



Airmen take on dangerous race

THOUSANDS of people gathered at the Commandant's airfield in St Petersburg on July 23, 1911, at 3AM.

Their attention was riveted on the 11 pilots and nine aeroplanes due to leave the airfield to race to Moscow in the first ever Russian long distance flight.

Three of the pilots, Aleksandr Vassiliev, Sergei Utochkin and Vladimir Slusarenko were experienced. The rest were undertaking their first long flights. From the beginning, it was clear not all were prepared properly. One only managed to get his aircraft started three hours 37 minutes after the start of the race.

Sergei Utochkin, described as a man of varied interests, took the lead after take-off and was reportedly flying at high speed. However just 10km from Novgorod, his engine failed. Utochkin was forced to land on the road leading to the city. Fortunately, rescue teams had been placed along the flight route. They were mostly soldiers with mechanical experience. One of them ran to the airplane and was able to repair the engine, allowing Utochkin to continue his flight.

The first to reach Novgorod was Michael Lerche. But he did not enjoy his lead for long - a few kilometres further on, he lost control of his aircraft and it crashed into a ravine. Lerche escaped with shock. Other pilots weren't so lucky, in particular the aircraft piloted by Vladimir Slusarenko.

Under the terms of the competition, the pilot had to deliver a passenger to Moscow. Slusarenko's passenger was a man called Konstantin Shimansky.

Approaching Moscow in the lead, Slusarenko's aircraft developed engine problems so he prepared to land on the road.

According to what he told authorities, at that point his passenger went berserk, grabbing the controls and even trying to grab the pilot's hands and neck. As a result, the aircraft crashed and rolled upside down.

Slusarenko survived, although severely injured. Shymanski, who struck his head, died.

The first aircraft to Moscow's Khodynka field, after a full 24 hours and 41 minutes, was Alexander Vasilyev. He'd made only one unscheduled landing during the race, and spent 9.5 hours in the air. But he was not happy. On being announced as the winner, he shouted that the airmen had all been sent to certain deaths and that the flight was a shame for the whole of Russia.

Vasiliev was later killed in World War 1 after his plane was forced down.

Sergey Utochkin ended up in a psychiatric hospital after trying to sneak into the Winter Palace to talk to the Tsar about the future development of aviation in Russia.

Vladimir Slusarenko ended up in Australia. More about that next time.

>> Heath Parasol the first 95.10 in Australia

Bolsheviks in Siberia, he asked the British to permit Slusarenko to form a special air force.

After many adventures, the Russian airman reached Siberia, only to find Koltchak's army in retreat. Shortly afterwards, the Admiral himself was betrayed, captured and executed. Slusarenko escaped with the remainder of the army, which marched for three months in the middle of the Siberian winter, through deep snow and in the face of blizzards to get to Harbin in Manchuria, China. There he remained for five years as an engineer in the Chinese Eastern Railway until the Bolsheviks came and once again forced him to flee.

For a time he was a service car driver and mechanic, until 1925, when an Englishman with power in China arranged for him to come to Queensland.

NEXT EDITION: Getting here is not so easy.



>> Vladimir Slusarenko



>> Crowd at crash scene



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EDITOR'S CHOICE

BRIAN BIGG

In phone we trust

I HAVEN'T really set out deliberately to do so, but I find one of the must-do items on my pre-leaving home checklist these days is the battery level of my mobile phone.

Because of the thief who regularly pilfers things from my hangar, I can't leave anything of value in the cockpit. I have to take it all home. So if I know I'm going for a flight the next morning, I gather a little pile in the living room of the stuff I will need to take. Two headsets, both noise cancelling, so I have to check the batteries in both are still good; my new super duper EPIRB, maps and the last thing before bed, I put my phone on charge.

In the old days, I had a cheap CDMA phone which stayed full-time in the aircraft. The CDMA system, which has gone the way of the dodo, was terrific for flying because you could make a cheap call on it and the system would let you talk for ages.

Nowadays, the GSM system rules and it doesn't like you calling from 5,000ft. I can plug my iPhone into my headset and get perfect clarity listening to music. But try to make a phone call longer than 20 seconds or so and the system goes into meltdown.

According to the paperwork I've seen, it's because in the air my phone can 'see' too many cell towers at once. When we are on the ground, the tower closest to our phone gets the strongest signal. If other towers see the same signal, they defer to the tower with the strongest. From 5,000ft my phone signal can see quite a lot of towers, all pretty at much the same strength. This confuses the telephone company's software which decides, after a few seconds or so, to err on the side of protecting itself and boot me out.

So I tend not to make many calls in flight, other than a quick call as I approach the airport to tell my ride to come out and pick me up. But I still like to have a mobile phone with me for lots of other reasons, such as when my radio lets me down.

A couple of years ago I was transiting a class D area. As I approached the boundary, the tower cleared me to transit the zone and didn't ask for any onward reporting. I complied with the clearance and heard nothing more from him. On arrival at my airfield, I made the appropriate circuit calls and landed without incident. But when I got home, there was a phone call waiting for me requesting me to contact Air Services. Turns out the control tower had been trying to contact me as I moved through the airspace, but the controller couldn't raise me. I hadn't heard a thing. The next day when I had the radio checked, it turned

out to be dead on arrival. Astonishingly, it had died the exact moment the controller had given me the clearance, so I never knew there was a problem. What were the odds of that?

I had a similar issue a couple of years later. After a flight around the region with a friend, I made all the necessary calls as I approached and landed. But when I was putting the plane away, another pilot wandered by and complained I hadn't made any inbound calls. I had the radio checked again and this time it was found the passenger headphone jack had shorted and caused the radio to cut itself off. There was no indication in the cockpit it had done so.

And just last month, I was tooting along minding my own business in class E airspace

if I have an emergency. Many years ago, I was flying along the coast and saw what looked like the world's biggest shark just outside the surf line. It was only a few kilometres north of a reasonably sized town and was heading that way. But at the time, I had no way of warning anybody on the ground. I've never forgotten it.

Most of the checklists for flying into the out-back now include taking along a mobile phone. After an emergency landing in the bush, our brand-new EPIRBs might get the rescue people heading our way more quickly, but a quick phone call to the nearest of kin will also save a lot of grief.

I have a GA friend who uses his mobile phone as part of his flight planning. He sets the alarm



when Brisbane Control called for the aircraft approximately in my location to talk to them. I gave him my rego number and he chipped me for ignoring several previous calls. He told me I should have been monitoring the frequency. I was monitoring the frequency, I always do, but I hadn't heard anything.

So the radio goes back into the shop again next week. And if I am honest I have to admit I don't really trust it each time I fly until I make a broadcast and another pilot responds. Then I know it's working...this time. So, my mobile phone is my backup.

I've read several cases in the US where pilots have used their mobile phones to request assistance after an alternator failure killed their power. One lost pilot I read about even got ATC to find out where he was by triangulating his mobile phone signal. And even if you can't make a voice call, texting someone on the ground is still a possibility.

I quite like the idea of being able to call down

**I saw
what looked
like the world's
biggest shark**

each time he needs to change fuel tanks. He never misses a change nowadays, he says. Most of us are heading towards some sort of tablet for our navigation needs, so many of the things we might do with our phones will eventually be folded into our Ozrunways or Avplan apps. But not phone calls.

So for now, my mobile phone is a terrific emergency backup plan. And, I should admit, for taking selfies to let everyone know how much fun I'm having. 📸

PILOT TALK

Zane Tully & Jill Bailey - RA-Aus Operation Team

Think about it!

OPERATIONS recently received a report of a Pilot Certificate holder landing his RA-Aus registered aircraft well after last light. Investigation revealed the pilot had departed an airport with the full knowledge the flight would conclude well after last light, due to delays during departure, and yet he elected to continue the flight. He also elected not to divert to an airport which would have allowed him to land within daylight hours and take a train or bus home.

When a pilot departs an airport, knowing there is not enough last light to complete the flight to the destination legally or practically, we have to ask - what sort of aeronautical decision making was made? Was it a blatant disregard for the rules of flight planning? These rules, as we have stated in previous articles, are based on errors made by pilots before us and are often written in blood. Was it a misunderstanding of just how dark it was going to get and its impact on pilot vision, depth perception and judgement? Or, did the pilot just decide to keep going (get-home-itis) because he was close to home? Did he decide it was OK, because there was a full moon and he had a landing light?

In this instance, the pilot concerned has been mentored by Operations, with a briefing session provided by an RA-Aus Pilot Examiner. The Examiner, because he holds a GA CFI approval, can provide a complete briefing to the pilot regarding the dangers of flights after last light and night VMC operations.

Decision making errors by RA-Aus pilots have been all too common lately, particularly in light of the number of fatalities. And, while we know the majority of RA-Aus pilots are careful, conservative pilots aware of the potential for accidents or incidents, these sorts of errors just keep on happening.

Examples of recent poor decision making include a double fatality which resulted when a pilot and

passenger flew to a friends' property to 'show off the aircraft'. Sadly, due to a number of factors still under investigation, including last light and low level flight, the aircraft hit a power line. Flying at low level is dangerous and I don't believe any pilot will dispute this. There is a reason why we are legislated to not fly below 500' above ground level without specialised training and a legitimate reason to be that low, other than landing or taking off.

In another incident, a pilot departed for a nearby airfield with a passenger aboard. Also due to a number of factors still under investigation, but which may also include last light as a

contributing factor, these two members also perished. Both incidents are still under investigation, but the fatalities may be directly attributable to poor pilot decision making.

There are other effects of these fatalities too, including ongoing trauma for families forced to deal with the loss of a loved one, possibly the main income earner, increased scrutiny on our organisation and bad publicity for flying generally.

I vividly remember the first article I wrote for *Sport Pilot*, talking about why pilots run out of fuel. I compared car fuel systems and consequences for running out of fuel in a car versus an aircraft. The far more serious implications in an aircraft pointedly reminded pilots of the need for carefully considered flight planning and decision making.

Taking this same analogy, while we drive at night in our cars all the time, aren't there still times when we can't continue on a trip, as much as we may want or need to get where we want to go? I am talking about factors such as strong winds which blow trees onto roads, raging floods after heavy rain, or dust storms. Drivers generally jump into the car and start off on their journey, with no consultation of weather ahead, and often the last time the oil level was checked was when the mechanic changed it.

In an aircraft, we are trained and expected to pre-plan each journey. And put very simply, it is because we do not often have the luxury of pulling over if a problem occurs. Pilots must ensure the weather will remain VMC, daylight and fuel will be sufficient, and the aircraft will remain within its maintenance time frame, to complete the journey.

I will now climb down from my soapbox, which is needed when you are as short as I am, and simply request pilots think about the consequences of their actions, whatever they may be.

Recreational pilots do not have to be there. We always have the option to stay another night, take alternate transport home, or wait for better weather. 🛫

Anti-theft devices are required for any aircraft not secured in a locked hangar





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Fly Better

The things you should have been taught when learning to fly

THE following are words of experience and wisdom available in a series of e-books written from transcripts of a series of lectures given by the legendary flight instructor, Noel Kruse, founder of the Sydney Aerobatic School.

First a quick biography about Noel Kruse, as written by his daughter, Katrina.

'In 1960, at the age of 16, Noel spent his weekends at the Royal Victorian Aero Club swinging props of the fleet of Chipmunks and Tiger Moths. He gained his PPL at age 17 and at 18 years of age, was accepted into the RAAF as a cadet pilot. He graduated as a fighter pilot trainee, flying Sabres and Vampires, eighteen months later.

'Just before his 20th birthday he became an operational fighter pilot with No. 76 Fighter Squadron. Noel became an 'A' category fighter pilot during a tour of duty in South East Asia. Upon returning to Australia he became a fighter and bomber test pilot and then a FCI (Fighter Combat Instructor).

'Noel then went onto Tactical Transport Ops. Here he flew the De Havilland Caribou throughout PNG, Iran Jaya and Sumatra, becoming familiar with mountain, high altitude and short field flying conditions. He became Check and Training Instructor on the Caribou.

'Noel left the RAAF in 1983 and looking for a sport, he took up competitive aerobatic flying. Feeling a need for some better instructional information, understanding and technique in this area, Noel established and for over two decades ran the Sydney Aerobatic School. At the time, it was unique and was widely known for its advanced flying instruction.

'Noel now lives in NZ where he regularly flies his own Pitts S2S - to keep his hand in.'

Here are some examples Noel says instructors should understand and in turn,

pass on the benefits to students. They are the things that should be taught when learning to fly.

The first 50 hours of any student pilot's career is the most important of all their training. Practice makes perfect is the old adage. I would prefer the saying practice make permanent. It is good instruction that makes

using an alternate technique, the student will gain the benefit of learning correctly from the start.

If the instructor cannot anticipate and detect subtle errors and know how to fix them - the student will ultimately practice (and make permanent) incorrect technique.

And Noel's one final thought for students



The first 50 hours of any student pilot's career is the most important of all their training

perfect. Bad habits acquired in the first 50 hours become permanent with practice and repetition and will ultimately come back to bite them.

KNOW YOUR SUBJECT

The basic formula for teaching any motor skill is:

Demonstrate: the particular skill - perfectly;

Direct: Get the student to recreate the demonstrated skill - repeating it several times, accurately;

Monitor: for accuracy and critique constructively. Be aware of all errors, often subtle. By detecting errors early and correcting the error by further direction or re-demonstrating

to consider:

Flying is one of the greatest things you can ever learn to do. Don't spoil the dream by accepting mediocre flying instruction. Too many people have and they spend the rest of their lives flying on faith. Faith that the things they don't understand and can't control will never happen to them. Forget the faith. You don't need faith to fly. You just need to learn how to fly properly. 🛩️

Reference

www.flybetter.com.au

Books 1 - 4

Words and thoughts reprinted with Noel's permission.



Making propellers in South Africa

by John Dunbar

IN 1976, South Africa was preparing to defend itself against the spread of communism in Africa. There was trouble north of its borders. South Africa's apartheid system was a target for Fidel Castro who was in Angola looking at the possible takeover of South Africa to get its gold and diamonds.

Many South Africans feared the country would sink into financial ruin if it came under Communist control and go the same way as Rhodesia went under Robert Mugabi.

The Nationalist government, however, was hemmed in by an arms embargo, so to defend itself, the country was compelled to start its own weapons manufacturing. I was a member of the Johannesburg Flying Club at Barraquwanath Aerodrome and was approached by a fellow trainee pilot, Murray Cohoe. Murray had a contact who worked for Armscor, the government department responsible for manufacture and procuring local weapons.

They needed target drone propellers. These were normally provided by an Italian company, but the company had been forced to cut off its supply because of the arms embargo and a local manufacturer was required to fill its place.

The construction company where I worked had a woodworking shop to supply the joinery for our contracts. Murray suggested my company's joinery shop could be able to make the

propellers and it could turn out to be reasonably profitable.

A sample propeller was provided. Murray produced workshop drawings of the propeller and a drawing of a copy machine, which was then welded together in our workshop.

Armscor also required a ground test rig be provided to check each propeller conformed to the sample Italian propeller. So a second hand Chevrolet V-8 engine was converted to rotate the propellers at 4000rpm (their rated speed) and a scale was attached so thrust could be measured. Each propeller was test run for an hour and its thrust recorded.

Fifty two propellers were made, of which 42 passed the bench test. The rejects were eventually sold as decorative ornaments.

The next requirement from Armscor was for a propeller to be used on a 14 cylinder Pratt and Whitney twin row radial engine-powered swamp boat, which would carry a crew of 15 riflemen, a squad leader and machine gunner. The intention was to use the boats on the Caprivi Strip river border with Angola.

It was during this exercise on Hartebeestpoort Dam, west of Pretoria, that we discovered the epoxy leading edges, particularly on the tips of the blades, could not stand up to water spray erosion from the boat wash. The 15cms tapering inwards from the blade tip looked as if a rat

had chewed the blades. Performance dropped off rapidly, too, as the water gouged into the wood. So we made them with pressed brass leading edges, which Murray designed.

Eventually the war ended and the project was scrapped. By then, though, we had all the machinery and expertise to manufacture propellers, so Murray suggested we apply for a manufacturer's licence to continue making propellers for private aircraft. Rene Van Zyl was chief engineer at DCA and agreed we could make a test propeller for Murray's A65 Continental-powered Aeronca Champ and my similarly powered Piper Vagabond.

The ground test rig was used to test each propeller for 10 hours before they were mounted on the aircraft. The performance of the aircraft was recorded and compared with the performance of the metal propellers which the aircraft had been using.

In both cases, the wooden propellers proved superior. The A65 Continental engines were built to have wooden propellers. The flywheel effect is less with a wooden propeller and the engine more responsive when the throttle is opened. The gyroscopic effects are also less while banking, making the aircraft more responsive. Furthermore, the crankshaft suffers less stress from the gyroscopic effects during extreme changes in direction.



I was loaned a UK manufactured Tiger Moth propeller type DH 5220, as well as DH drawings for the propeller. Murray redrew the drawings, incorporating the epoxy bonded pressed metal leading edge he had designed and the workshop produced a pattern for manufacture.

Ted Phelps who needed a propeller for his Tiger Moth agreed to loan his Tiger for the test flight.

The Tiger took off early in the morning, piloted by experienced commercial pilot, Peter Nicholas. I was strapped in a Sutton Harness in the front cockpit with a stopwatch to record the climb rate to 9,000ft amsl. Then Peter executed a series of loops, stall turns and rolls ending in a three turn spin and recovery. He pulled G-forces sufficient to make me momentarily black out.

After landing, a thorough inspection of the propeller was undertaken and another flight was done to record indicated airspeed at various engine revs at 6,800ft which was 1,000ft above the airfield. The propeller passed the certification flight test. DCA was informed and certification approved for production and sale.

Orders for Tiger Moth propellers started coming in and eventually most South African Tiger Moths, including a Hornet Moth owned by the South African Air Force Museum, were fitted with our propellers. Hoffman propellers in Germany was also making props for Tiger Moths then, but the cost was very much higher than ours and the design did not conform to the DH 5220 profile.

During that period, we also produced propellers for homebuilt aircraft powered by Revmaster VW engines, as well as for the Ranger powered Fairchild four seater monoplane.

As time passed, the South African CAA asked all technicians in the industry who had been working under the supervision of qualified Chief Engineers, and were therefore experienced, to take exams and gain qualifications as certified aircraft engineers.

I passed those exams and worked as an engineer and alternate chief inspector rebuilding

Tiger Moths for Aircraft Refurbishing Company at Rand Airport, Germiston.

In order to generate more work for the company, a syndicate was formed and shares sold to rebuild Tiger Moth ZS-NWJ, which then operated as a charter business selling joy rides.

Murray had decided it was time to go back to Australia, the county of his birth, and told me to consider emigrating there. However it was a very difficult decision and took me several years to make.

In 2002, I brought all my machinery to Brooklands Airfield in York, WA with the intention of producing propellers and Tiger parts. However the business failed and I was compelled to accept I could not make a living out of aviation in Australia. However, in a last ditch effort, three propellers were manufactured in York. One went to South Africa, one to New Zealand and one was sold locally in WA.

I am of the opinion that York is too remote and away from aviation activity for the business to prosper. Exposure in a place where there are De Havilland aircraft would no doubt make all the difference.

I would like to see the manufacturing system, including all the machinery, go to someone who would get satisfaction out of it. If you are interested contact me (08) 9459 2938.

The flywheel effect is less with a wooden propeller and the engine more responsive when the throttle is opened



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LEARNING TO FLY



DR GERRY CONSIDINE

Jabiru on tour

FOLLOWING my first foray into the world of navigation exercises it was time to extend the distance for my second flight. This would be a 3.5 hour flight south of Port Pirie. I was asked to plan a flight from Pirie to Kadina, Yorktown, Maitland, Clare and back to Pirie. Having had lots of practice planning flights, it didn't take too long before my instructor, Earl, and I were able to fuel up the Jabiru and depart south for our first destination.

Kadina shares the same runway alignment as Adelaide International Airport, 05/23. This day the wind was blowing slightly from the north so our circuit took us onto final approach for runway 05. It was quite pretty watching the wind blow waves through the crops, before I turned my concentration onto final and the aim point. In front of a curious onlooker, we executed a quick touch and go then zoomed off again due south.

The flight over the spine of Yorke Peninsula proved to be visually interesting too. The planned track took us over the well-designed towns of Maitland and Minlaton and we could see both

coastlines from 4,500ft. Soon it was time to begin the descent into Yorktown and broadcast our inbound call. There was no time for sightseeing in the circuit around Yorktown with a number of tall radio masts intruding on the nearby circuit area. Even on final approach a large water tower held my attention until we were safely past. On the ground, there was time for a full stop and a few minutes to stretch the legs. In a Jabiru with two tallish pilots, the stretch was a must.

Yorketown International Airport terminal consisted of...a toilet, which was put to use.

After lightening the take off weight, Earl and I tracked north almost on a reciprocal heading to Maitland. Once there, there was more time for another stop to catch up with a local crop sprayer and flight instructor. A few Jabiru jokes later and we were off heading northeast. Our destination was the relatively new airstrip just north of the Clare township. So new, in fact, it wasn't listed in either the ERSA, the SA country runway guide or my WAC chart.

Fortunately the tireless local working party has a very informative website which contains

details like length, surface and CTAF. As we neared the Clare Valley Aerodrome, we spotted a big yellow shape wheeling around the green paddocks. On closer inspection, it turned out to be a big crop spraying Air Tractor. The timing worked out well, as the Air Tractor kept busy spraying adjacent paddocks while we buzzed around the circuit. He stayed on the radio letting us know his position and responded to our calls as we conducted a touch and go on the new strip.

The next day, would be my turn to repeat the navigation exercise in reverse. Not the aircraft itself, but the order of airfields. When the time came, I felt the usual mix of anxiety and anticipation before setting off. Fortunately Earl had taught me to plan a flight well and think about changes in weather. If he was confident I knew how to manage any situation that might crop up, so should I be. 🍷

NEXT WEEK

Gerry tackles his first solo navex and then attempts the flight test.



>> Yorketown International Airport

Our 10 day trip around Queensland

by Doug & Robyn McCullough

FOUR Jabiru J230s, one Jabiru J170, one Jabiru J160 and our Tecnam Sierra P2002 started the trip from Warwick, Palmers Island and Caboolture.

Most of us stayed the first night at Great Keppel Island, which was fantastic. We had great weather; the flight was smooth and only 6kts tailwind on landing. We were advised to land on RWY 12 even with a tailwind because RWY 12 is slightly uphill.

The next morning we set off for Charters Towers via Old Station and Emerald. Again the weather was perfect as we circumnavigated the island before departing across the water to Emu Park, then Old Station which was only a 47nm hop. Ron Creed at Old Station is always very friendly to the aviation community. He recently invested in a 24,000 litre fuel tank with credit card facilities



to encourage pilots to call in. He wants to keep the Avgas fresh by turning it over on a regular basis. I would suggest giving him a call before flying in.

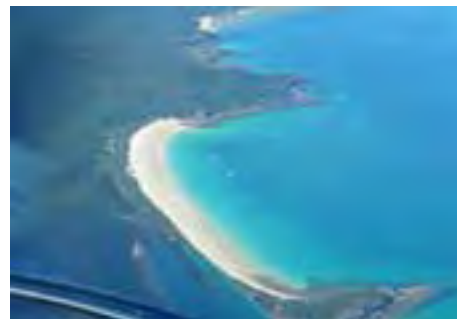
After refueling, we were off to Emerald - a distance of 146nm. While this is not a great distance, we prefer to take every opportunity to stretch our legs, so we try not to have hops longer than two hours. The next leg to Charters Towers was 237nm and the turbulence tossed us around most of the trip. Wind gusts would lift a wing, requiring a big aileron correction to get it back level. The VSI had us constantly climbing at 500f/m, then descending at 500f/m.

The next leg was meant to be to Cooktown via a refueling stop at Mareeba, however the weather indicated low cloud, possible showers and windy conditions, so we checked with Undarra to see if they could accommodate our group. They could, so we cancelled our accommodation in Cooktown and had a leisurely 146nm trip to Undarra arriving well before lunch. Those of us who had been there before relaxed, while the others took a tour of the lava tube caves.

A CLICKING NOISE

The following day we departed Undarra for Chillagoe, via Mareeba to refuel and visit the Warbirds Museum there. After the 89nm trip, I had a little drama landing in my Sierra at Mareeba. I could hear a loud click, click, click from the right main landing gear wheel. On inspection, I found one of the studs had loosened and was striking the disk brake caliper housing. Easily fixed.

We bid farewell to Mareeba and tracked for Chillagoe, via Dimbulah, (not to be confused with the town of Dimboola in western Victoria they named an Australian movie after called *Dimboola's Wedding*). The distance was a leisurely 52nm. We were met by a local tour operator with a small bus who took us all into town. With seven aircraft in the group and each of the hops kept small, it was always a challenge to ensure we maintained separation, but the airmanship was of high standard throughout the trip. Again, some of us had been to Chillagoe before, so the others took the tour of the well-known limestone caves and marble quarry.



From Chillagoe we headed for a leg stretch at Georgetown, then over Croydon to Normanton for a fuel stop prior to landing at Karumba.



msland



▶▶ We all had a great time there

A FLAT TYRE

At Normanton, several of our group had landed, another was on final and I was leading others on crosswind for runway 14 when I could see Tony Hinchley climb out of his Jabiru J230D still on the runway, directly opposite the exit. He reported his aircraft had a flat nose wheel and could not be steered off the runway. I did a

go around and we all waited for the others to help push the aircraft to a safe place where the tyre tube was replaced.

After refueling, we took the short hop to Karumba only 19nm away. There we were met by the motel owner who took our baggage while we walked the short distance to the motel. We all had a great time there.

MORE DRAMA

The main group of five planes set off the next day directly to Adel's Grove in the Lawn Hill National Park which is only 90km from the Northern Territory border. Graham and Liz, Doug and Robyn went via Wondoola cattle station to visit friends. But after the main group had left, we discovered Tony's nose wheel tyre was flat again, so Graham and I remained to help him. We eventually got Tony off the ground and Graham took off as well, but as I went to close my sliding canopy it wouldn't budge. I stopped the engine and tried in vain for about 20 minutes to get it to latch. Graham came back, landed and helped me prod the canopy slide, but it felt like something had fallen down and was preventing it from sliding forward.

Robyn and Liz went to the rear of the aircraft and looked back towards the nose under the slide. They discovered the rear roller had slid off the back of its track. The problem was quickly fixed and we took off for Wondoola for scones, jam and cream - one and a half hours late - then onto Adel's Grove.

The following day was a rest day, which was welcome, because the temperature hit 35 degrees..

Flying out of Adel's Grove early in the morning the group chose to overfly the spectacular gorges before turning south to our refueling stop at Mount Isa on our way to our

ON THE TRIP WERE:

Kelvin & Denise Hutchison, Jabiru J-230D, 24-7388

Graham & Liz Hawthorne, Jabiru J230, 24-4903,

Tony Hinchley & Merv Deen, Jabiru J230D, 24 7353

John & Gwen Tyburczy, Jabiru J230, 24-5013

Denise & Alec Harslett in their Jabiru 170

Mark Bransen in his Jabiru J160

Doug & Robyn McCullough, Tecnam Sierra, 24-4651

next overnight stop at Boulia 137nm away. That night we attended the Min Min light show which is a must see if ever you are in Boulia.

Our plan was to fly direct to Windorah to refuel, then onto Quilpie for lunch and onto Charleville for our last night's stay, but we were told it was worth overflying a place called the Wall where the Diamantina River flows through a gap in the Hamilton Range, on its way to Lake Eyre. (The GPS co-ordinates are 23° 41.175'S 141° 06.845'E and it is worth seeing).

After overflying the Wall we tracked south to Windorah for refueling before heading to Quilpie.

Just after we landed, a Cessna flew in with a number of footballers on board for the area's semi-final game at a field near the airstrip. The place was hopping. Charleville was only a short 109nm trip later that afternoon.

The following morning we were all up around 6am and headed towards our home fields where we all arrived safely, pushed home by great tailwinds which had us all registering ground speeds of between 130- 150kts. Not bad for ultralight aircraft. 🇺🇸

Safe skies

The 2013 Safeskiies conference will be held in Canberra in October. It is a biennial aviation safety conference aimed at all levels of the aviation industry. Safeskiies Chairman is David Forsyth.

What is Safeskiies?

DAVID: Safeskiies Conferences Inc. is an Australian based not-for-profit organisation. As well as the conference, Safeskiies also holds the Sir Reginald Ansett Memorial Lecture. The conference this year has as its theme 'People and Technology', and speakers will examine issues such as UAVs, rotary wing aircraft developments, pilot training and automation, cabin safety, the latest technology in large passenger jets and a case study from the Air France flight 447 accident investigation. There will be speakers from the UK, USA and Europe; and from Boeing, Augusta and Cranfield University.

Why should people attend Safeskiies?

DAVID: It brings highly respected speakers from around the world who provide the latest developments in operational safety. This year we have Raymond Benjamin, the highly respected Secretary General of the International Civil Aviation Organisation (ICAO) delivering the Sir Reginald Ansett Memorial lecture. It is rare for the head of ICAO to visit Australia, and the opportunity for Australian aviation people to meet and hear such a senior global figure is rarer still. Mr Benjamin has been in this position since 2009, and he has brought focus and direction to make ICAO more prominent and effective in its leadership role as the global policy-setting forum for international civil aviation.

The conference itself provides networking and excellent learning opportunities. Australians usually have to travel overseas to obtain exposure to international safety experts. Safeskiies brings those experts down under, and keeps the conference fees low (from \$795) so people from



all levels of aviation, especially operational practitioners, can attend.

What are the highlights?

DAVID: Highly respected international speakers include Captain Mike Carriker, Boeing Chief Test Pilot, a former Navy pilot who flew A-7E and F-18 combat jets, who has logged more than 8,000 flight hours in more than 130 airplanes.

Bob Watson has headed several maintenance organisations and will talk about culture effects on maintenance safety and the safety benefits possible by outsourcing.

Tim Coombs, a former NatWest Investment Bank executive, and now a UK based partner

in the firm Aviation Economics, will discuss why safety makes good economic sense, and paint a picture of the current economic state of the airline industry.

Captain Bob Sheffield, a former USAF fighter jet pilot, is also an experienced pilot of Russian Mig aircraft. Interestingly, he also has a degree in petroleum engineering and was head of Shell Aircraft. He is currently with Augusta Westland helicopters and will discuss the International Helicopter Safety Team's work.

Professor Graham Braithwaite from UK's Cranfield University will talk about adapting to hard learned lessons in safety.

Peter Jorna, President of the European Association for Aviation Psychology, will discuss the latest research developments into the man machine interface.

Alain Gildeau, formerly from the French accident investigation bureau (BEA) will discuss the latest findings from the investigation of the Air France A330 accident over the Atlantic Ocean in 2009.

Michael von Reth, cabin manager on the Qantas A380 which experienced catastrophic engine failure, will talk about keeping the passenger cabin under control in an emergency.

Captain Richard Woodward, a highly experienced Qantas pilot and Ausalpa representative, will discuss technology challenges for airline pilots.

Shane Connolly, the Assistant Commissioner of the Federal Police, will discuss security and safety issues.

Dr Andrew Lucas will discuss risks in the UAV growth phenomena.

This will be the first Safeskiies Conference to have a question time at the end of each session. For more information www.safeskiiesaustralia.org.

Information provided by Safeskiies 

MOTIONS FOR SPECIAL RESOLUTIONS FOR THE AGM ON 13 SEPTEMBER 2013

At the Board Meeting in February 2012, the Board voted unanimously in favour of a proposal to establish a Constitution Review Committee (CRC). The CRC was commissioned to review and make recommendations to the Board for updating the Constitution allowing for all the changes over the 30 years since the AUF/RA-Aus was founded. Early in 2013, a Restructure Committee was formed to look into possible structural changes to our organisation. The CRC's work was suspended for a period while the Restructure Committee looked at major change.

Following discussions with the CRC and Restructure Committee, we understand that they will be making presentations to the members at the 2013 AGM on the direction they are headed and will seek input from interested members.

Per Rule 24 (ii) of the *Constitution* we are proposing below a number of motions for Special Resolutions to be voted on at the 2013 AGM. The motions that you are being asked to support are aimed largely at making it easier for Members to be involved in the running of RA-Aus and to reinforce the need for good governance. Some of the changes proposed, like Postal Voting, will make it easier for all members to have their say in the future of their Association.

Special Resolution 1

Two definitions are amended to clarify their intent and one definition is to be deleted as it is a duplicate.

That the definitions in **Rule 1** be amended as follows:
"Executive" be amended to read:

A sub-committee of the Board comprised of the President, the Secretary and the Treasurer.

"the Rules" be retitled as **"Rules"** and amended to read: that part of this Constitution, as amended from time to time, contained in Parts I to V, inclusive.

"the Act" to be deleted (it is a duplication).

Proposed by: D Ramsay 026026 **Seconded by:** C. Richards 15700

Special Resolution 2

Currently, Rule 1A notes that RA-Aus is to be governed by the Operations and Technical Manuals but does not mention the Constitution. This amendment makes up for that deficiency.

That **Rule 1A RA-Aus Governance** be amended by the addition of the following words:

"The management and operation of RA-Aus is governed by this Constitution as amended from time to time."

Proposed by: D Ramsay 026026 **Seconded by:** C. Richards 15700

Special Resolution 3

Currently, Board Members may serve an indefinite number of terms on the Board. This amendment proposes limiting Board Members to three consecutive terms (six years) and then requires a two year break before coming back to the Board. This amendment avoids abusing the good will of volunteers serving very lengthy terms on the Board and allows for new input at Board level while maintaining a balance of experience and freshness. This amendment is also directed at reinforcing the pre-eminent position of the Rules over individual Board Member's wishes.

That **Rule 13 Election of Board Members** be amended by the addition of the following two sub-paragraphs:

(vi) A Board Member in their third consecutive term on the Board is to be ineligible to hold office as a Board Member for a minimum period of two years after completing their third term.

(vii) In accepting nomination for Board election, candidates are agreeing to be bound by the Constitution and if after having been elected are found to have breached the Constitution, they will immediately resign from the Board.

Proposed by: D Ramsay 026026 **Seconded by:** N Sigley 003140

Special Resolution 4

Currently, the role of the President is recorded in one sentence. This amendment adds clarity to the role of the President and reinforces that the Board is the paramount authority.

That **Rule 14A President** be amended by the deletion of all the words and the substitution of the following words:

14A. PRESIDENT The President shall

(i) In accordance with Rule 26, Chair all meetings and shall determine subject to this Constitution any matters in dispute regarding proceedings at those meetings.

(ii) Act as spokesperson for RA-Aus while strictly observing the will of the Board.

(iii) Be the principal defender of the RA-Aus Constitution, taking appropriate action for any breaches that come to the attention of the President.

(iv) Provide monthly reports to the membership and ad hoc reports of matters that need to be urgently advised to the Members.

(v) Make the President's Annual Report to the Members available to the Secretary in accordance with Rule 21.

Proposed by: D Ramsay 026026 **Seconded by:** C Richards 15700

Special Resolution 5

This proposed amendment recognises that the Secretary is in an oversight role and that RA-Aus employs staff to do the work that the current Rule 14B assigns to the Secretary. It imposes a duty on the Secretary to ensure that members have access to essential Annual Reports prior to the Annual General Meeting so that they can come to the AGM better prepared.

That **Rule 14B Secretary** be amended by the deletion of all words and the substitution of the following words:

14B. SECRETARY The Secretary shall

(i) Ensure that all secretarial functions of the Association are performed and a proper record of all the affairs of the Association is maintained, including all correspondence, minutes and other papers.

(ii) At the direction of the Board, conduct a plebiscite of the Members in respect of a matter of policy, and the result of such plebiscite shall be binding on the Board, subject to the right of the Board to act contrary to the result of a plebiscite in the case of an emergency only

(iii) Ensure that the annual reports of the President, Secretary and Treasurer and the audited financial statements are provided to the Members in accordance with Rule 21.

Proposed by: D Ramsay 026026 **Seconded by:** C Richards 15700

Special Resolution 6

This amendment recognises that the Treasurer is in an oversight role and that RA-Aus employs staff to do the work the current Rule 15 assigns to the Treasurer like receiving and banking cash. This amendment requires the same reporting schedule but with greater clarity. It also adds the requirement for the Treasurer to ensure an annual budget is prepared and presented to the Board in good time and clarifies the Treasurer's role in finalising the annual financial statements.

That all the words of **Rule 15 Treasurer** be deleted and replaced by the following words:

15. TREASURER The Treasurer shall

- (i) Ensure a true and complete record of the financial and business affairs of the Association is maintained and that systems with sound internal controls are in place for all the financial transactions of RA-Aus.
- (ii) Ensure that a detailed budget is prepared for each financial year and have it presented to the Board for their approval at least one month prior to the commencement of the Financial Year to which the Budget relates.
- (iii) Ensure that a Balance Sheet as at the end of the Financial Year and Half Year, and a Profit and Loss Statement for the Financial Year end and Half Year end are published in the Members Only Section of the RA-Aus website within thirty days after the end of the Financial Year and Half Year, respectively.
- (iv) Recommend the Annual Financial Statements to the Board and, with the Board's approval, sign the Statement by Members of the Board of Management on behalf of the Board, together with another Board Member approved by the Board.
- (v) Ensure that the Board approved and audited full-year financial statements are published to the members in accordance with Rule 21.
- (vi) Make the Treasurer's Annual Report to the Members available to the Secretary in accordance with Rule 21.

Proposed by: D Ramsay 026026 **Seconded by:** A Saywell 015361

Special Resolution 7

This amendment simply corrects a typographical error.

That **Rule 16 Vacancies** Sub-paragraph (ii) be amended by changing the reference to "Rule 16 (ii)" in the body of the text to read "Rule 16 (iii)".

Proposed by: D Ramsay 026026 **Seconded by:** A Saywell 015361

Special Resolution 8

In the unlikely and so far unprecedented circumstance that a Board Member were to be removed from the Board by the members in a General Meeting, this amendment requires that that person would not be eligible to re-join the Board for at least two years.

That **Rule 17 Removal of Board Members** be amended by the addition of the following sentence:

Board Members removed from office in accordance with Rule 17 are to be ineligible to be hold office as Board Members for a minimum period of two years from the date of their removal.

Proposed by: D Ramsay 026026 **Seconded by:** David Isaac 025205

Special Resolution 9

In the past the Board has traditionally met, face-to-face, in conjunction with the September AGM and in the month of February. As we now have a General Meeting in conjunction with NATFLY, this amendment aligns the two face-to-face meetings with the two General Meetings.

That **Rule 18 Board Meetings** and quorum Sub-paragraph (i) be deleted and replaced by the following:

- (i) The Board must meet face-to-face following the Annual General Meeting and in conjunction with the General Meeting required by Rule 23 (iv). The first meeting of the Board after the Annual General Meeting shall be the Annual Board Meeting.

Proposed by: D Ramsay 026026 **Seconded by:** N Sigley 003140

Special Resolution 10

Currently, when the Board makes a decision via an electronic Board Meeting, the decision lacks permanent effect until ratified at a face-to-face Board Meeting which could be up to six months later. This creates unnecessary uncertainty which this amendment would eliminate. There is nothing to prevent a rescission motion being put and voted at the next face-to-face meeting should a Board Member feel that necessary.

That **Rule 20 Voting and decisions** Sub-paragraph (v) be deleted and replaced by the following:

- (v) A resolution in writing, approved by the Board Members representing a majority of the total votes which may be cast if a face-to-face meeting were to be held, shall be as valid and effectual as if it had been passed at a Board meeting duly called and constituted.

Proposed by: D Ramsay 026026 **Seconded by:** N Sigley 003140

Special Resolution 11

This complex amendment requires changes to *three* Rules to achieve its purpose. Essentially, it changes the Natfly General Meeting into the Annual General Meeting and then the meeting in September reverts to being an ordinary General Meeting. To have the AGM in the first half of the Calendar Year, the financial year end has to be changed from 30 June to 31 December to meet the statutory requirement to have the AGM within 5 months of the end of year.

This amendment also requires the Secretary to invite Members to bring forward business for the Meetings *before* the official Notice of Meeting is sent out. It also requires the Secretary to send the Annual Reports including the audited financial statements to members *prior* to the AGM. This should result in quicker and more fruitful AGMs.

That all of the words of **Rule 21 Annual General Meeting** - holding of be deleted and replaced with the following words:

21 ANNUAL GENERAL MEETING – CONVENING

- (i) The Board shall set the date for the Annual General Meeting to be held no later than five months after the end of RA-Aus's Financial Year on, where practical, the Saturday of the annual, national fly-in.
- (ii) At least 42 days before the date fixed for the holding of the Annual General Meeting, the Secretary shall cause to be sent to each Member a notice specifying the venue, date and time of the meeting, the order of business, and a request for any motions to be placed on notice for the Meeting.

(iii) At least 21 days before the date fixed for the holding of the Annual General Meeting, the Secretary shall cause to be sent to each Member a notice specifying motions to be voted on at the Meeting and the proposer's explanation of the changes, together with the Board approved and audited Annual Financial Statements and the Annual Reports of the President, Secretary and Treasurer.

And,
That **Rule 23 Other General Meetings – calling**, Sub-Paragraph (iv) be amended to read:

(iv) Approximately six months after the Annual General Meeting, the Board shall convene a General Meeting to be held at a location determined by the Board.

And,
That **Rule 32 Funds – management**, Sub-paragraph (vi) be amended by substituting the words "thirty-first day of December" for the words "thirtieth day of June".

Proposed by: D Ramsay 026026 **Seconded by:** C Richards 15700

Special Resolution 12

This amendment is aimed at reinforcing the need for the Chair of a meeting to be conscious of and respect any apparent or real conflict of interest that would arise should they Chair a particular meeting. It also sets a hierarchy of order as to who chairs a meeting in the absence of the President.

That the words of **Rule 26 Presiding Member** be deleted and replaced with the following:

26. PRESIDING MEMBER

The President shall Chair every meeting subject to this Rule. If there is no President, or if the President is not present within thirty minutes after the time notified for commencing the meeting, or the President stands aside from chairing the meeting, the Secretary or Treasurer, in that order, shall Chair the meeting. If none of the Executive is to Chair the meeting, then the Members may choose one of their number to Chair the meeting. Provided, no person shall Chair any meeting where this would constitute a conflict of interest as democratically determined by the members present at that meeting.

Proposed by:
D Ramsay 026026
Seconded by:
N Sigley 003140

Special Resolution 13

The Proxy process is administratively very clumsy to say the least. A more efficient process would be for every member to be able to vote on every matter to be put to a General Meeting.

That **Rule 30 Appointment of proxies** shall be amended by the addition of Sub-paragraph (iii) to read:

(iii) As an alternative to the appointment of a proxy, a member may submit a postal vote on any motion that has been listed for consideration at a General Meeting. The postal vote to be in the form set out in Appendix C.

Proposed by: D Ramsay 026026 **Seconded by:** D Isaac 025205

Special Resolution 14

When the Proxy form was amended last year to allow a proxy giver to empower their proxy holder to vote as the proxy holder sees fit it inadvertently eliminated the facility for the proxy giver to nominate an alternate in case their first choice was prevented from attending the meeting.

That the Proxy Form in Appendix A be replaced by the form as attached.

Proposed by: D Ramsay 026026 **Seconded by:** N Sigley 003140

Special Resolution 15

Currently, all formal notices are required to be "sent by pre-paid post to each Member at the Member's address appearing in the Register". This amendment allows for Notices to be delivered to members' email address appearing in the Register of Members.

That **Rule 37 Service of notices** shall be amended by the replacement of the first sentence with the following words:

"The service of any notice required by these Rules may be effected by sending such notice either via prepaid ordinary post or by email to the respective Member's address appearing in the Register."

Proposed by: D Ramsay 026026 **Seconded by:** A Saywell 015361

EXAMPLE FORMS

**CONSTITUTION OF
RECREATIONAL AVIATION AUSTRALIA INC.**
Issue 13 – September 2013

**APPENDIX A
FORM OF APPOINTMENT OF PROXY**
(See Rule 30)

I, _____ (full name) _____ (Member No.)
a financial member of RA-Aus appoint:

_____, _____ (Member No.)
a financial member of RA-Aus, or, failing that person, appoint

_____, _____ (Member No.)
a financial member of RA-Aus as my proxy to vote on my behalf at the meeting of RA-Aus
(Annual General Meeting or other General Meeting or Board Meeting) to commence on the
(Annual) day of _____ 20____, and at any resumption (after any adjournment)
of that meeting.

My Proxy is hereby authorised [delete if not applicable] to either vote as seen fit on all matters at
the meeting, or vote on the following resolution(s) in the manner indicated:

Resolution Number	Title	For or Against

_____, _____ (Signature of Member giving proxy) this _____ day of _____ 20____.

**CONSTITUTION OF
RECREATIONAL AVIATION AUSTRALIA INC.**
Issue 13 – September 2013

**APPENDIX C
FORM OF POSTAL VOTE**
(See Rule 30)

I, _____ (full name) _____ (Member No.)
a financial member of Recreational Aviation Australia Inc.,
record my vote, as indicated below, on the following resolution(s):

Resolution Number	Title	For or Against

_____, _____ (Signature of Member) this _____ day of _____ 20____.

members' market

2671 JABIRU SP 500/6 19-3717



Well maintained hangared. 449.5 hrs. 123kts @19lhrs 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 8790

3028 FLIGHTSTAR 11 SC



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3113 SPORTSTAR SL



Bargain low hour Sportstar SL, private use, 215 hours approx TTIS. Dynon D10A EFIS, almost new Varia 2-blade in-flight adjustable prop, Garmin GPS495 AirGizmo dock, electric t&b, Whelen LED landing light and external power socket. 600kgs MTOW. L2 maintained, RA-Aus registered. \$80,000 no GST. Please call Mark 0414 642 340

3154 JABIRU J230-D



J230-D Rego 24-7370. Factory Built Dec 09 TT325Hrs Factory Option 6 Panel. Dynon 180 EFIS Garmin 495 Gps, Microair Radio and Transponder Led Navigation and Strobe Lights Always Kept in Hanger Nil damage in perfect condition. Full window covers included. \$85,000 ono Contact David 0407 008 896 or email davidg@fnoc.com.au

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3195 2010 PARADISE P1



2010 Paradise P1, the Rolls Royce of LSA aircraft.

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435 hrs TT engine and airframe, 7+ hrs endurance @ 18 lph, 110-120kts cruise, VHF, Dynon EFIS, Mode C, 50kg luggage. Owned & maintained by L2. \$99,950 ONO No GST. There is no better aircraft advertised here. 0419368696

3209 X-AIR A1 CONDITION



TT 361 nil incidents, Rotax 618eng (RAVE) for high altitude. 3 blade Bolly prop. Modified HD undercarriage, wide wheels, always hangared, yellow and green, new tail cloth. Dual headsets, intercom, radio plus UHF. Alt, compass, IAS, slip ball, EG's, eng instruments \$16k. Ph 0416204472, roaroo12@yahoo.com.au

3210 JABIRU JT230-D



Total service time: 595.1hrs, Last service: 583hrs. Fitted with Garmin GPS 296, Microair Radio 760, Electric Turn Coordinator, Standard Flight and Engine

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Gauges. Serviced by L2. Registration 24-5316. Flies well. Located in Chinchilla, Queensland. \$78,000 contact Mark Murray 0499 002 642.

3213 FOR SALE JABIRU J-230D



Airframe 940 hours, latest factory reconditioned engine 40 hours. Dynon 10 Efis, plus analog instruments, Garmin 296 colour GPS. Transponder, external charge connector, external recognition light. Lambswool seat covers, adjustable rudder pedals, wheel spats, fin strobe. L2 maintained, always hangared original owners. \$83,000 incl GST, phone Bill 0429 054 205

3218 SKYRANGER SWIFT



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

3222 J170 19-4969



2.2L hydraulic engine, 330hrsTT, built 2007, ex cond, wet wings 135L, elec T&B, fuel flow meter, Lowrance 500 GPS, all current mods done, 10ply tries, based at Mildura,Vic. REDUCED TO \$53,000. Ph Tom on 0428 562 020

3227 JABIRU J120C



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

3238 AIRBORNE WINDSPORTS



XT 912 CRUZE wing, TT 188 hrs, two helmets &

headsets, Micro-air radio. Has engine cover. Comes with roll around trolley system for easy movement - wing UP or Down. ALWAYS hangared ! & All in excellent condition. Price \$44,500 Ph 0416 041 007 for more details

3243 SEAREY AMPHIBIAN



Australia's most popular seaplane. Expensively restored. FOLLOWING ALL NEW:- 100hp Rotax 912ULS engine, IVO propeller, VFR instruments, ICOM 210 radio, Microair Transponder. Wings re-covered in Ceconite. New windscreen and canopies. \$64,000. Thousands below kit price. Save years of work! \$000's of extras. Custom covers. Launching trolley. gwsb@yahoo.com. 07 55242144. 0411206698

3249 1/6 SHARE JABIRU J230D

Jabiru j230d 1/6 syndicate share, micro air VHF x 2 ,transponder, avmap insured and hangared at tooradin vic, 50 hours on latest engine \$14900. ONO. \$140 PCM and \$70 per hour. Call Glenn Wattie 0418320385

3252 FOXCON TERRIER



838 TTIS ea81 Engine New Propellor & Tyres Micro Air Radio 2 headsets Standard Instruments Garmin GPS Ballistic shute Cruises 85 95 kts Hangared S E Qld Selling lack of use \$28,000 pilot00lw@hotmail.com 0466966259

3266 FOXBAT A22

24-4548 colour:- Yellow, 468 hrs, Std instruments, Garmin 296GPS, X-com radio, 2x Head sets, stobes, Aircraft cover. Location Drouin \$70,000. Ph Trevor 0438619116 kaydan@dcsi.net.au

3287 EUROFOX 3K



\$59,990 - 2008 EUROFOX 3K. TT:1650. L2 maintained 912ULS. Excellent touring A/C. Great condition. Solid performer. Dynon D100 EFIS, AvMAP IV GPS. Hangared since new. For sale due club fleet upgrade. Contact Peter Ford (pford@mac.com) 0438882052. Hastings District Flying Club - Port Macquarie (www.hdfc.com.au)

3290 JABIRU J120



Manufactured May 2010, 252 hours trouble free,

AD's up to date, new through bolts/nuts. Nil incidents, LAME/L2 maintained, suit new aircraft buyer, Dynon EFIS, Transponder, VHF/GME UHF CB radio/intercom, Garmin 495 GPS, Leather embroidered seats, Sensenich prop. Cabin heater, booster seats, aircraft flies/runs like a dream, Always hangared, 9.5/10. \$50,000 0418614102

3295 JABIRU 2200

Jabiru 2200 Engine, No: 22A 2107 250 Hrs TT. All current ADs up to date. Engine removed for 6 cyl up-grade. Includes ram air ducts, oil cooler and exhaust. \$8,500. Phone Brian 0411135050

3301 SAVANNAH - STOL



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

3304 TEXAN TOP CLASS SPORT 550



Texan 2007 top class sport 550 New Duc prop TBO on Rotax motor 2000hr 667 to run Avmap ADI Gramin Transponder Xcom radio New paint plus much more . Currently working out of Caloundra or Cabooture with leading flying school payed weekly for more info call 0418713350 \$79,000 +gst

3309 THRUSTER TST



Good condition, always hangared. TT 1292 hours, 348 hours Rotax 582 motor. Heavy Duty under carriage. Intercom with 2 head-sets,UHF Radio.Very reliable, making room for new aircraft. \$12,000 All reasonable offers considered. Contact Anthony 02 69 938189 or 0429 938189

3312 ALLEGRO 200



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

MEMBERS' MARKET

3315 JABIRU - SHARE THE DREAM



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

3323 ZODIAC 601 XL-B



ZenairAustralia is upgrading its 601 XL-B, Rotax 912 S (100hp) MTOW 600kg, Upgraded to 650 Canopy, Crusie 105kts, Dynon D100 with auto pilot, Mode C Transponder, Garmin 196, Wing lockers, A great aircraft for touring or just a local flights. \$65000 Bendigo. Ph 0417 121 111

3330 HUGHES LIGHTWING HELLVIEW GR 912S



Aircraft is always hangared. Flaps, 72" warp Drive adjustable prop, long range tanks, carb heat, cabin heat, Magnum tip strobes, intercom, Dave Clark 13.4 headphones, Icom Vhf, Garmins GPS3, Fuel pressure gauge and warning light. 12v turn bank, oil temp, oil press, egt, cht, volts, VSI, Alt, Tach & hrs. \$38,000 Phone 0267962203

3331 LIGHTWING GR 582 BONNET AND COWL

Lightwing GR 582 Engine bonnet and cowl. White in colour excellent condition. \$300 026796203

3332 FLIGHT DESIGN CT2K



CT2K, 2004, 775 hrs, 100 hrly completed by L2, full condition report done, L2 maintained, Rego till Oct, hangared since new, adj 2 blade prop, 50 kg luggage, 16 lts ph @ 110 kts @ 4300 rpm, cruise 120 kts, rate of climb exceeds 1200 fpm, clean reliable. \$77,000. Brian 0419156133

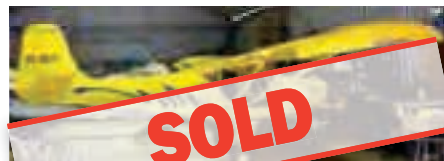
3339 LIGHTNING LSA



LIGHTNING LSA GRT Glass cockpit, GRT Engine

monitor, Auto pilot, Garmin radio, Transponder, Garmin 695 GPS, PS Intercom, Kannad ELT, Park brake, Electric trim and flap, Jabiru 3300 engine. Always hangared and in excellent condition. \$105,000 ono Phone 0408813501 South Australia

3358 SKYFOX GAZELLE



good aircraft 900 hrs 1/T all new hoses top overhaul new tyres basic panel cheap to maintain nothing to spend \$29500.00 ph 0428582217

3363 JABIRU SP 500. 2.2



Always hangared and in good condition. Seat Covers Micro Air VHF, Mode C Transponder. Stand By UHF. GPS. Solidlifter engine All ADS up to date. 2 Head sets (Pilot ANR BOSE. Vac Pump (DG and AH) \$35000 sparrowj@adam.com.au 0883836140

3380 PACIFIC HAVEN AIRPARK. NEAR HERVEY BAY

own a share in a 3,000ft all weather bitumen runway and taxi ways with pal lighting 15/x14/metre hangar, 3 bedroom house on 2.5 acres, established lawns and gardens. no body corp. fees. sale due to ill health. \$595,000. phone 0741290651 or donlee@y7mail.com.

3384 VANS RV12



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

3387 JABIRU 3300 6CYL

JABIRU 3300 Build Year: 2006 Thin Fin engine (Zero Hours never been started but turned by hand regularly). \$12,000 Jabiru wooden Prop, Spinner etc (all zero hours) \$1500 if purchased with engine. Phone Greg Tucker 0439617044 email: greg.bathurst@harvey-world.com.au.

3390 ROTAX 912 100HP

Rotax 912uls 100hp engine, updated crankcase (no fretting), brand new updated ignition modules, includes engine/gearbox/oil tank, starter motor recently serviced. Out of hours 1850, camshaft worn, available now (ex Victoria) - selling for parts. Pick up or allow extra for packing/freight costs. \$2400 or \$1900 without carbies. mail@goflying.com.au

3396 SKYFOX GAZELLE



Comes with fresh 100 hourly. New motor out of box just installed. Inside and outside 9/10. Very tight and tidy airframe. Icom radio, King transponder, full instrument panel. NDH. Always hangared and LAME maintained. New side and roof perspex. \$45000 + GST ONO kjeffs@bigpond.net.au 0438508576

3398 THRUSTER T500



Thruster T500 Rotax 582, 230 hours since overhaul. UHF and ICOM VHF radio. 2 seater with long range fuel tank, doors. Flies great, well maintained. Located Lockyer Valley with own hanger on private airstrip. \$14,500 Phone Paul 0427622176

3402 NZ MADE BANTAM WITH JABIRU 2200 ENGINE



based at Bindoon, WA; hangar may be available for sale also; hydraulic lifters; micro air radio and coms, helmets, new battery, must sell moving over-seas; \$32,000 more photos on request. free 2 night accomodation in villa in Bali to buyer. ph 0438054072 kathylittle8@gmail.com

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, includes trailer with wing holder and jerry can holders, new battery, Based in WA photos available on request only selling because going overseas. hangar could be available based at Bindoon WA 0438054072 kathylittle8@gmail.com

3406 FOXBAT A22L



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

3411 KIT FOX



Build Year: 1992 Rego: NA Price: \$19,000 KitFox Mark IV 1992 never completed but near completion. All components are in new condition including 80 hp Rotax that has never been run. Everything to complete the plane except Avionics Contact: Peter Thomas 0427641904

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MEMBERS' MARKET

3416 JABIAU SP500 - 3300



TT 250hrs. This beautiful one owner aircraft has had no expense spared. Excellent GA Panel, Quality Radio + Icom with headsets. Artificial Horizon. Garmin 296. 2 Pac Paint Leather Trim, Quick release wings, Lame 2 Serviced Price Reduced \$45,000 0418573212

3417 KITFOX 3



Kitfox 3 670hrs TT engine and airframe. Lame built and maintained, it has full instrumentation, 3 blade bolly prop, 100 ltr tanks, burns 14ltr/hr and has a 75kt cruise. Always hangared, this attractive plane is an absolute joy to own and fly. \$37500 Ph. John 0359788212.

3420 SKYDART 111



197hrs. TT eng & airframe. Rotax 447. Trailer incl. Very economical at 11L/hr. Great fun a/c simulate glider with power setting. ASI., ALT., M/Comp. CHT. EGT. RPM. Hr. Meter. Cockpit similar to glider. \$8900. Bob 0749344299

3422 ZODIAC 601XL-B FOR SALE



120HP 6cyl TT169 hrs. Magnificent built aircraft superb looks flies like a dream no expense spared. Glass panel Dynon D100 & D120 Avmap4 Micro air radio/ transpdr, new leather seats no accidents kept in hanger. Arguably the best \$1000's under cost NOW \$69,900 ONO call for more info and pics. 0428923250

3423 SAVANNAH VG XL



NatFly 2011 trophy winner. 100hp Rotax, 1000 fpm climb, tundra tyres, Bolly 3 blade prop, long range tanks (7 hours), Flight Data Systems fuel flow guage. Finished in 2 pack white with polished ally struts and instrument panel. Lovingly built and flown by owner and always hangared. \$80000. hoey@adam.com.au. 0439854266.

3425 JABIRU



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

3426 CHEETAH XLS



Cheetah XLS 24-7072. 76 hrs airframe and engine. Jabiru 2200 PP. Single owner always hangared. Easy to fly and maintain. 110ltr tank, spacious cockpit. Digital inst with analogue backup. 70kts cruise. Based Bunbury, WA. Half share considered. \$39,500 Contact George on janspo@westnet.com.au or 0406226566

3427 KR2-SX FOR SALE



KR-2SX steerable nose wheel, Matco Hyd. brakes & wheels+ p/brake, Subaru EA81 Stratus conv, dual bing carbs, dual spark, Amax PSRU, 3 blade 72" warp drive prop, 3 fuel tanks 70ltr, Mgl Flight 2 primary flight inst, T30 dig tacho, Save 1000,s HRS & \$\$ on building

project. No reasonable offer refused, view more recreationalflying.com, Taree A/P, Harry 0249971500

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

3432 JABIRU LSA55



For Sale Jabiru LSA55/3J One owner, always hangared 1400 hours TT. 2.2 solid lifter engine, Garmin 495 & 195 Micro Air radio & transponder, fuel flow, landing lights, 85 litres fuel, cruise 105 kts on 13 litres. \$39000 Contact Steve Lenne 0428732267

3437 ZODIAC 601XL-B



Zodiac 601XL-B, LSA 600Kg with Jabiru 120HP TT - 90hrs. Excellent condition, well maintained and built. Nil accident history. Icom 200 Radio, ASI, AH(elec), VSI, ALT, compass, AVMAP Geo Pilotll, CHT, cabin heat. Many extras including wheel fairings(not shown in image). Price: \$58,000. Phone Mirko on 0438 303 966.

3439 JABIRU J230



Jabiru J230, 2008, 520hrs, A-1 condition, twin Becker

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MTOW 250kg - Payload 135kg - Engines: 23-50hp

Stall speed: 36kts - Tail dragger or tri gear

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radios, transponder, built-in GPS system with back-up Garmin 296, plenty of extras, \$68000ono. Phone James 0458 519 296.

3440 DRAGONFLY MICROLIGHT



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

Brett 0418747988

3441 GARDAN GY201 MINICAB



Cruise 80kt, climb 600fpm, plan 15L/hr fuel. Side by side seating, split flaps, sliding canopy, dual controls. Continental A-65 with recent overhaul, full instrumentation and all receipts. Regretful sale, lovely aircraft to fly. \$18000 Goulburn NSW, 0432 162 206.

3442 JABIRU SK



Built 2003. Total hours 212. 2200 engine, new prop, good panel, includes VSI and DG, Icom radio, Garmin GPS III Pilot, 2 headsets, strobe and custom stripes. Always kept in hangar (hangar space for sale in Bunbury WA) \$30,000 ono, Hangar - \$20,000 Contact: Greg 0408 746 391 greg@outbacktrax.com

3447 TECNAM P2008



Dynon Skyview, Garmin SL40 VHF comm, Garmin GTX 327 transponder, Garmin GPS Map 695, Fuel Scan FS-450 Very good example of this type. Call or email for more info. Could be converted to RAA register. \$110000 +GST 07 3203 1777

3450 SKYFOX CA22



A beautifully refurbished aircraft. New fabric and paint, new windows, new tyres, new tail wheel, new upholstery, new hardware fitted throughout, new hoses through out, rebuilt rotax 912. A delight to fly Ph Tom 0419476677 asking \$33,500

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 Ph Ian 0418880257

3453 JABIRU 160C



Aug 2006 Drop, Factory built, only flown low and slow by Adelaide's oldest teenagers. TTIS 1353hrs Engine New 350 hrs No accidents, no problems, Lame maintained. Time to disconnect the Gosports Price \$55,000 Ph: 08 8536 4739 or 0403 551 707 Delivery anywhere in Australia.

3456 \$16,000 TWO SEATER SIDE BY SIDE



Bantam B22s Two seater side by side, flaps, nothing to spend, only 72 hours on engine, easy to fly, no accidents, no flying faults, easy transport on car trailer. Previously advertised for \$22,000 reduced to just \$16,000 For full technical details and Video CD of take-offs and landings phone 0417-646075

3458 JABIRU SP UL 19-4319 FOR SALE



This aircraft is in immaculate condition with low hours and nil incidents, always kept in its hangar and fully serviced, would suit a new aircraft buyer. Paint and interior trim done professionally, asking \$48,000. Selling due to retirement after many enjoyable years. Contact Len on 07 32035546 or email rily54@bigpond.com for more details.

3459 CORBEN BABY ACE, 65HP CONTINENTAL



Corben Baby Ace, 65HP Continental. Microair Radio. Hours 400. Registered recreational category. Amateur built. Excellent condition. Year: 1977 Total

Time: Approx 400 Engine Type: Continental A65 Prop Type: Wooden Engine hours to run: Over 1000 Prop hours-On condition Interior Condition: Open cock-pit Registration: 283745 Price: \$AUS20,000. Negotiable. Phone: 0409827754

3460 SEAREY



Searey "C" Hull, 912 Rotax, Electric Gear, Dynon 180 instruments, GPS, Stobes, Nav Lights, 66 hours total time, VHF, VOR, Transponder. Alum fuel tank, tundra tyres and more. LAME /L2 owned and always hangared. \$85,000. ono. Located VIC Ph: 0419 727077

3461 DRIFTER W/B



w/b drifter 503 with g/box 325 hrs 3 blade brolog prop, reg 01/14 dual controls, long range tank sicanite ailerons / tailplane skins good gps, icon radio, l2 maintained, built by wayne fisher for himself, top condition and flies like a dream. \$ 17,500 ono phone 0265536325

3462 TEXAN 600 FLYSYNTHESIS



noise cancelling headsets, ballistic chute, EKP1V avmap connected to trutrak auto pilot, altitude hold, garmin sl 40 comm, garmin mode c transponder, one owner, always hangared, nil accident history, rotax 912s, 3 blade prop. Beautiful aircraft, 498 hrs total time. \$104,000.00 contact Paul Brown 0412827558, paulb@gcj.com.au

3463 AIRBORNE XT 582 TUNDRA



2009, 225 hours, Cruze wing, Rotax 582 UL99, oil injected, electric start, Icom radio, Lynx headsets, excellent condition, maintenance log, bearing and Betso tested, registration 02/2014. Location

Ballina. Urgent sale, reasonable offers over \$22,000 considered. Contact 0431137682 or 0266762119, seaview92@gmail.com

3464 SKYFOX GAZELLE



One third share in a Skyfox Gazelle located at



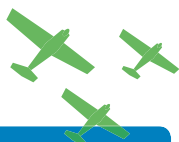
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Caloundra Queensland. Price \$10,000 Contact Peter 0429 144 991

3466 AIRBORNE TRIKE



Edge X 582 Classic with new streak 11B wing brand new complete blue head motor. Brand new Bolly Prop. Excellent heavy duty trailer with wing carrier's. Full Rego. 2 helmets [1 brand new]

stone guard, heavy duty covers, radio etc. 2 freezer suits, tall windscreen. Many extras. Price \$21,000 Phone 03 5499 8277

3467 SPORTSTAR MAX



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

3469 WANTED TO BUY

Wanted To Buy Bantam ultralight aircraft, must be Jabiru powered, will look at all offers. --please phone 0400022382

3471 STING S3 LSA



TTIS 740Hrs engine 560Hrs Excellent condition, a dream to fly at 110-115kn with a near new Sensenich ground adjustable prop, full set of round gauges including ADI, Zaon traffic alert, Garman 496 GPS, GTX 327 Mode C transponder, SL 40 com and greenline EMS. Based at YBNS. \$97,000 Ph Mark on 0417222692 or 0429390131 AH

3473 XT 912 CRUZE



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3479 JABIRU SP500



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3480 RANS S65 COYOTE 2



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Esqual VM1 Europa, 6cyl Jabiru 3300 engine (125hp) - 178hrs only. Excellent Condition - Leather Interior, Always hangared, Garmin GPS, Rego 19.3839, \$90,000 (No GST) Contact Jim on 0407768701.

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25 years ago

by Mark Clayton



John Farnham's Age of Reason was charting at number one (having recently displaced Kylie Minogue's I Should Be So Lucky), Bob Hawke still had a few years to run – as Prime Minister – and the paintwork on the new Parliament House in Canberra was still drying (as was the ink on the recently promulgated Civil Aviation Act 1988).

AUF membership had climbed to 1,700, up 13% on the preceding year, while the total number of fatalities for that year remained stable – at five.

The annual membership fee was \$30 and the newly promulgated ANO 95.10 had allowed MTOW to increase to 290kgs.

The August issue of *Australian Ultralights*, featured on its cover a monochrome image of a Winton Grasshopper which was, by then, already a comparatively obsolete design. Planning was underway for the Bicentennial Airshow and the Letters to the Editor – a good barometer of organisational health – concerned matters of great moment (viz. whether Drifter or Thruster had built the most Australian ultralights; and whether the S.A.A.A. was trying to take over ANO 101.55).

From this same column came the following observation... "Of the 39 pilots who have killed themselves in the various Australian accidents attributed to so called 'Ultralight Aircraft' during the past eleven years, 33 of these were high time General Aviation trained pilots."

Display advertisements in the AUF magazine that month featured the Drifter A-503, the Quick-silver GT, and a full page colour ad for the new Sadler Vampire, which boasted a cruise speed of 60KIAS.



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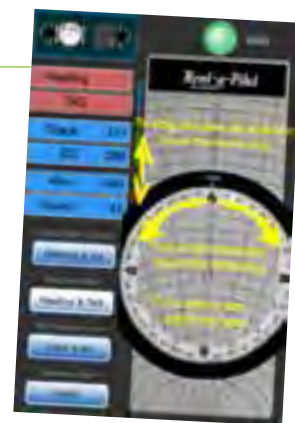


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The App store has finally caught up with the venerable flight computer.

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HAPPY LANDINGS


Ibis takes off again by Karin Leask

HERE at last. The Ibis has landed. Chris and Donna Kennedy of Wondai, Queensland, have taken delivery of their Ibis Magic GS 700 after a long and anxious wait.

As many would know, Ibis aircraft were affected by the ongoing registration issues of RA-Aus, leaving Chris and Donna with an

aircraft paid for but never flown.

A now smiling Chris is enjoying his new bird (totally with Donna's blessings) and will be seen in and around the skies of Wondai.

Ibis aircraft now have Experimental airworthy certificates issued by CASA and have been re-registered by RA-Aus as home builds. 



>> Chris and Donna Kennedy of Wondai



Got an aviation moment you'd love to share? Your kids or maybe your club get together? Send a photo as a jpeg attachment and a short explanation to editor@sportpilot.net.au

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