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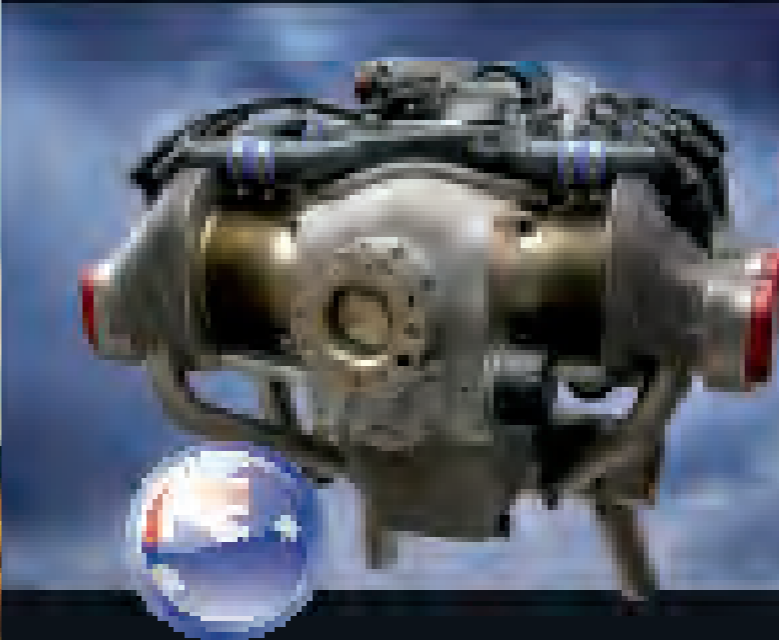
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Sport Pilot Magazine is an official publication of Recreational Aviation Australia Inc. and is published 11 times a year by Stampils Publishing.

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Get Involved! Have Your Say! Send in stories, articles letters and photographs. Let everyone know what your club/school/group is up to. Make sure we all know when your fly-in is coming up. And don't forget to send us photos of the big day. All contributions welcome. Contact editor@sport pilot.net.au

WHAT IS RA-AUS?

Recreational Aviation Australia Inc is an association of recreational aircraft owners and pilots. It exists to look after the interests of more than 9,200 members across Australia. The members fly a variety of aircraft under 600Kg, some factory built, others built from kits, and some home built.

WHAT QUALIFICATIONS DO I NEED TO LEARN TO FLY?

If you are medically fit and physically capable, and you are above the age of 15, you can earn a pilot's certificate. You can actually learn to fly before then, but you can't go solo or get your certificate until your 15th birthday. And if you are under 18 years old, you will require written parental consent. Flying a recreational aircraft is not as complex or demanding as other types of aircraft. And once you have become a recreational pilot, it's a reasonably easy step to progress to more complex types, if you are looking for a career as a pilot. Holders of PPL, CPL or ATPL licences who want to obtain an RA-Aus Pilot Certificate can undertake conversion training at an RA-Aus flight training facility. Every applicant must complete such dual training as deemed necessary by a CFI and, in any case, shall have not less than 5 hours experience, in an aeroplane registerable with RA-Aus, which shall include a minimum of one hour solo.

WHERE DO I START?

Call RA-Aus head office in Fyshwick in Canberra. The staff can help by telling you what's required and point you in the direction of the nearest flying school or club to where you live. Or you can call one of the board members listed here, who represent different Australian regions. They can answer all your questions.

FINDING YOUR NEAREST FLIGHT TRAINING FACILITY (SCHOOL)/CLUB

Email ops@raa.asn.au



>> Cover image is a Jabiru 230, photographed by Jabiru Aircraft Company



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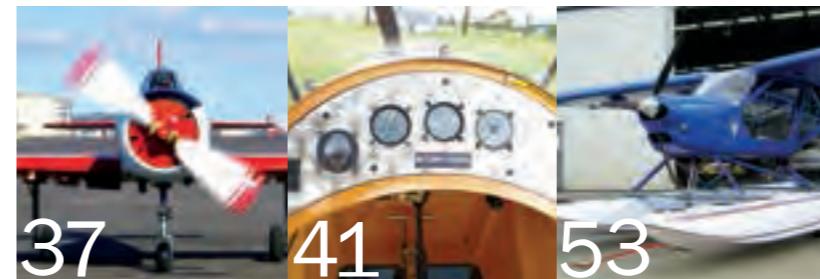
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TERMS AND CONDITIONS

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President's Report

Eugene Reid



LAST month I asked all pilots to try and be careful if they hadn't flown for a while. I advised them to check their aircraft carefully because Spring was often a bad time for accidents.

I hate to say it, but we have had another bad late winter / early spring. It is not only recreational aircraft. General Aviation, both fixed wing and helicopters, has also been involved in serious accidents. As far as I know, they haven't been caused by lack of flying due to winter or lack of maintenance. Of course, the investigations have not yet been completed, so we can't be sure of what caused the accidents.

The only thing I can ask is please make sure all the emergency procedures you were taught when you learnt to fly are still at the same standard or higher than they were then, so you will be prepared if an emergency presents itself.

By the time you read this, we will have had our Annual General Meeting and be starting a new year. I can't predict everything that will happen at the meeting, but I can welcome the new Board members who have been voted in and thank those retiring members who have been representing you until now.

Four new members is a major change for a board. I have spoken to all four and I was impressed with their attitudes. They have all had experience on boards and have a good under-

standing of their responsibilities.

Congratulations and welcome to Bill Cain, Ed Herring, Don Ramsey and Gavin Thobavin.

This is the largest number of new members I can remember for many years. I look forward to working with the new Board.

In the coming year, we will be in a good position to bed down safety management systems focusing on corporate governance; expansion of risk management practices; information management systems and finalisation of the enhanced self-administration project. We may possibly be also looking at re-structuring for the transition to Part 103/149. We are in an ideal position for the increased, in depth audit planned by CASA.

We can look forward to securing more flying privileges and working as a united team to achieve our goals, now and in the future. The Board will be working to keep member's current privileges and to expand on them to increase safety and enjoyment of flight.

There are areas of Australian airspace we are forced to fly around / over. Dangerous "tiger country" or water. We need entry, or at least transit, privileges. I expect the CEO and Board members will also bring up other issues during the board meeting which need addressing.

Sue Perakovic has quickly moved into the

role of Administration Manager. This doesn't surprise me after the marvelous job she did at her first NATFLY at Temora this year.

Early September we held interviews for a new Operations Manager and I welcome Zane Tully as Operations Manager (moving from Assistant Operations Manager). And Jill Bailey was appointed as Assistant Operations Manager, the position which became available when Zane moved. Zane will be on a fast learning curve with 166 schools (and growing) to look after. He has completed the new exams which were badly needed, as CASA changes rules and regulations. No doubt this will be an ongoing process.

These positions become available because our previous Operations Managers, Lee Ungermann and Mick Poole, are now working for CASA. At least we know that we have good people to deal with in CASA.

Lastly, it has been decided to have NORRA-Aus (Northern Recreational Aviation Australia) Fly-in again in 2012, at Monto as it was in 2010. This event was a great success thanks to a lot of work from our Northern Board members and I look forward to attending. The NORRA-Aus team is already working hard again, not only to have a successful event, but to make it even better.

Enough said. Time to commit aviation.

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calendar of events

Horsham Aero Club Rescheduled Fly-In and 50th club anniversary celebrations

22-23 October

Camping available under wing. Food available Saturday. 50th anniversary celebrations and hangar dinner Saturday night. Breakfast Sunday. Ph Garry Jelly 0408 519 956, John Barber 0427 810 236.



Cervantes Fly-In

28-30 October

In conjunction with the Pearce Flying Club, WA. Dinner on Saturday Night with guest speaker (TBA) and Pinnacles tour. Accommodation available upon request. Expressions of interest to: Brian White 0427 084 313 or John Bartle 0418 944 302.

AAAA Tiger-Moth 80th anniversary Fly-In

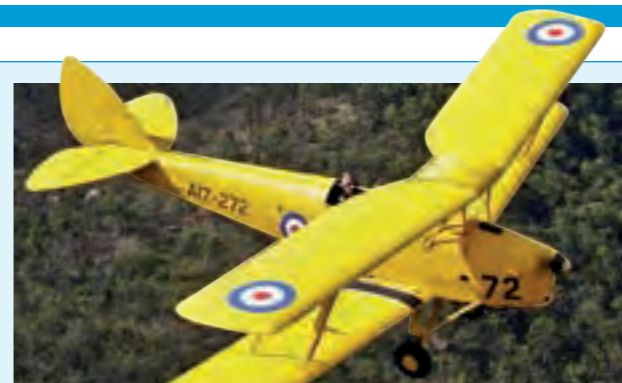
29-30 October

Leeton Aviator's Club. Contact Bob Rankin 0427 552 846.

Barossa Airshow rescheduled

6 November

A family fun day. Rides, amusements, static displays, stalls, food, wine. Fire bombing display, helicopter joy flights. Matt Hall, Australia's only pilot to compete in the International Red Bull Air Race will perform. Plus South Australia's own aerobatic champion, Chris Sperou. Winner of Community Event of the Year in 2000 and an SA Great Commendation in 2007. Anyone not familiar with the 600m strip at Rowland Flat should contact Steve Ahrens for a briefing 0427 244930.



Mt Beauty Fly-In Gathering of the Moths

18-20 Nov

Flyers of all denominations are, once again, invited to fly to the sheltered Kiewa Valley, at the foot of the picturesque Victorian Alps. Full range of accommodation available. Contact Mark Ghirardello 03-57544572 or 0409 544572.

Great Eastern Fly-In

6-9 Jan, 2012

Evans Head Memorial Aerodrome

20th anniversary. Flying, Sun and Surf. Air Displays, the Flying market, Great Eastern Drive-In, Pilot's Dinner, outdoor film night, camping, food, fun and more! Contact: Gai Taylor 0427 825 202.



Moot Yang Gunya Festival and Mundulla Show

3 March, 2012

We would love to have flying enthusiasts fly into Bordertown, SA. Shuttle service to Mundulla Showgrounds. Blessing of the Horse Sunday at 7:45am on the main oval, followed by an entire day of show jumping, dressage and harness events. Vintage machinery display, giant pumpkin competition, yard dog competition, ute muster, indoor and outdoor trade sites, camel & Clydesdale/heavy horses on display. For more information www.mundullashow.org.au

Gloucester Aero Club Fly-In

5-6 November

A relaxed weekend. Gloucester is west of Taree in a lovely part of NSW. Lunch Saturday. Dinner Saturday night with a bonfire. Brekkie Sunday morning. Clubhouse and camping facilities available (shower, toilets, kitchen). Motels in town (book early). Nominal charge for landing, camping and meals, as well as a chance to contribute to the local Westpac Rescue Helicopter. RSVP if possible by 20 October for catering. For more information gloucesteraeroclub@gmail.com or on Facebook.

Tyabb Airshow

4 March, 2012

Flying operations began at Tyabb, Victoria in 1962. This milestone will be the theme of the 2012 Airshow. Proceeds of the airshow will benefit local charities, boost the town, the aero club and private aviation. For more information www.tyabbairshow.com.au

Clifton Fly-In

11 March, 2012

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

Come late pm Saturday, 10th for BBQ, drinks. Fly or drive in, see ERSA. On field camping, bring your swag. Advise for catering. Contact: Trevor Bange Phone 0429 378 370; A/h:(07)4695 8541; Email: trevorbange@bigpond.com

Sonex Regional Fly-In

12-13 November

Goolwa Airfield, South Australia
Details on sonexaus.wikispaces.com or contact chris.dearden@daedalus.net.au



5th Catalina Festival

5 November

10 am to 4 pm. Ex-RAAF Flying Boat Base, Rathmines, Lake Macquarie, NSW. Float Planes, Flying Boats, Amphibians. Goal is to erect a Commemorative Museum and Hangar saluting all the gallant Airmen of World War 2 who served at the Base and display the Catalina Flying Memorial. For more information, Bill Hitchcock 0438 448 115 wildbill@bravo.net.au, Mike Usher mikeandlyn3@bigpond.com

Back to Holbrook Fly-In and Jab Fest

5-6 November

Holbrook Ultralight Club will host the 6th Annual Rag & Tube fly-in and Jabiru Festival at Holbrook Airpark. Forums Saturday afternoon. 'Dinner among the aircraft' Saturday night. Hot breakfast Sunday morning. Underwing camping available. For more information www.holbrookultralightclub.asn.au or Bryan Gabriel 02 6036 2601.

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September star letter



Each month the editor chooses one of the Letters to the Editor to win a great prize. This month the star letter will receive a year's subscription to Av-Plan, an electronic flight planning app for the iPad (see p16)

* Hard to please

I FINALLY managed to sit down and run my magnifying glass over the past couple of issues of Sport Pilot magazine. Unfortunately, I have yet to find the "FREE pilot gear" advertised on the front cover. I did notice there are some contests but these, by their very nature, aren't free (and for everyone). So I would be pleased if you could point me in the right direction for the free stuff. Or, alternatively, just stuff it all into a mailing bag and send it to me. The new magazine looks really great - keep up the good work (and more FREE stuff).

- Col Jones

Ed- Some people are hard to please, aren't they? Guess we'll just have to stick some free stuff into a mailing bag and hope it keeps you happy, Col. By the way, this won't work again if anyone else out there is thinking of doing the same thing.



>> The offending words. Someone doesn't like free stuff apparently



Boonah is Beaut!

I HAVE just been reading my copy of the latest issue of Sport Pilot, I would like to congratulate you on the magazine, such a great improvement. I noticed the ad asking for contributions which is great as I am keen to send in photos and stories.

My name is David Mason, 25 years old and I own a Drifter aircraft based at Boonah in SE QLD, I will try and pass as much news and photos onto you as I can.

I have recently become the secretary of "Boonah Aviation Inc" which is the committee in charge of running the airfield and we are undertaking some great improvements to the airfield, it would be good to have a small write up in the mag about these upgrades sometime in the future.

I only bought my Drifter a few months ago so would be keen to share my adventures with you guys as well.

- David Mason

Ed- Keep it coming, David. We want to hear from all the clubs and groups out there. And by the way, if any of you you haven't been to Boonah, you don't know what you're missing. It's a great RA-Aus field

Something to say?

Email editor@sportpilot.net.au

DON'T hold it in and give yourself a headache.

Share it with the members and not only will you get it off your chest. But you could win some great pilot gear. Every month, one Letter to the Editor will be chosen for a special prize.

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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.)

A techy old pom

Lets get one thing straight, I had no quarrel with the previous format of Recreational Aviation Australia Inc. Magazine. Neither do I have one with the new format published by Stampils Publishing. However, I do have a little niggle about abbreviations sprinkled about the text in articles printed in both formats.

I am a 'tetchy' old Pom and I don't much care to have my reading complicated by clusters of letters that need to be interpreted to their full meaning (for example: CFI, VFR and so on). Lazy writing 'will' be tiring to the reader leading to the loss of interest in the article being read, OK?

And there is another thing too (just kidding). I found my copy of the September issue a great read and inspirational. The article on 16 year old Solomon and his need to be a flyer. It's so typical of Australian generosity. His need was understood and underwritten. Steve Tizzard's greeting from the 'wilds' of Canberra with the 'go around' advice will add maturity to pilot thinking that there is no shame in having to go around if you have stuffed up your approach to landing. At last 'actual' flying meets 'simulated' flying with the perceived benefits to both, appropriately on the pages of Sport Pilot. I'm feeling excited and inspired and I think your new format is great and I want to read more.

- John Drew, Student Pilot

More reader suggestions

A MAGAZINE landed, (pardon the pun) on my desk a while back, "I don't remember subscribing to that" I thought.

Looked attractive though. Then I noticed RA-Aus on it and upon closer inspection, a new cover, a new inside...hmm, neat.

The pictures in the member's market were a bit out of whack, but overall, I was suitably impressed. (The pictures are better now though.)

I liked the new cover and layout. I had some trouble working out when an article finished, but now you've started putting the Radial Cowl (from the SPORT) with the 3 Blade prop at the finish. I really like that idea.

Very impressed with the whole thing.

Some have voiced concern at the change without consultation - 12 months later there

would still be no consensus.

So, I think those who are entrusted to oversee the RA-Aus have done well. They bit the bullet and made the change, well done.

A reader did suggest a Quiz Section. I think this could be good, but with only perhaps five questions.

Four technical, which will have a definitive answer, and one of them being a bit more along general/topical/controversial line, which would still need an explanation from the questioner.

Congratulations on the new publication.

- Lloyd Kay, Bell Sport Aviation

Ed- Thanks Lloyd. All changes are the result of members letting us know what they like and don't like about the magazine. That's how we keep improving it and make sure it is what the Association wants.



Flying recreational aircraft from your desk

By Dave Tonks

real life, I would be a Boeing 747 Captain. Thousands of hours at a guess.

So yes, please. Convince Dave to do some more.

- David Lefrancke.

P.S. If you need any help with anything flight simming I'm your man.

Dave Tonks responds- Glad you enjoyed the little flightsim article I put together for the last edition of Sport Pilot.

Brian Bigg did a great job with the article - two nice big pictures makes all the difference.

I particularly liked the cockpit shot of 455 on downwind for O4 on page one of the article. I reckon you wouldn't know it wasn't a real cockpit. Check out the gauges. Everything is spot on, even the frequency on the radio. The only thing I missed for Downwind Checks is Boost Pump On (red light, bottom left of tach) - very accurate stuff folks, and the scenery is exactly what you would see from the cockpit. When I go to idle throttle at the start of the base leg, I know the flightsim Drifter will touch down exactly where the real one does in nil wind

conditions. I would love to do more flightsim articles for the magazine.

Touch and go gets bumpy

I WAS a little concerned to read the article entitled "touch and go ...bang!" in the September issue of Sport Pilot.

The article was not well balanced, with bold titles, "negatives of the touch and go", and "Positives of the full stop landing", which don't portray a fair explanation.

Touch and goes form the basis for circuit training in every school I have dealt with, and at airfields all over the country they seem to be the standard tool for teaching pilots to land. To say that they should be reserved for the most advanced post solo student is the opinion of the author.

Now every student in the country is going to think his or her instructor is putting them at risk by performing touch and goes. What rubbish! There's a reason there is an instructor onboard, and that's to make sure loss of control doesn't occur, as well as to efficiently teach the student the skills needed to handle the aircraft both in the landing phase and on the ground and during roll out.

The author's reasoning is flawed in many respects: carby heat being returned to off in the ground roll is but one example. Surely there are far better and useful subjects Professor Avius could write about, ones which don't breed ambiguity and confusion among the student body.

Let's face it, most RA-Aus aeroplane are not complex machines. Transitioning from landing to takeoff is not a huge concern.

Our club has operated for 25 years from a short, narrow grass strip, training in Gazelles, Sportstars, Jabirus, Bantams and various other aircraft. In my recollection, loss of control accidents in the landing phase by students have been zero.

- Andrew Campbell

Steve Tizzard CEO responds- I am not surprised to read a criticism, in this case by Andrew Campbell, regarding the article by Professor Avius titled: "Touch and go ... bang" in the September issue. The original article went ahead for healthy discussion purposes, even though I did not entirely agree with every last word Professor Avius said. For example, 'stop and goes' were not mentioned (strictly for long runways) or the option for a mix of stop and goes and touch and goes. Let's face it, many now teach circuits big enough for a wide-body jet, with as few as four to five circuits an hour, with the commensurate reduction in 'runway time' - brickbats or bouquets welcome!

Andrew Campbell should explain why Professor Avius has flawed reasoning in respect of "carby heat being turned off in the ground roll"

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CEOs who fly make better leaders



It may come as no surprise to those of us who fly, but two university professors in the US have found a link between success in business and flying. The researchers, Matthew Cain of Notre Dame and Stephen McKeon of Oregon, compared 179 pilot CEOs with 2,900 non-pilots in the same position. They noted that risk taking behaviour (such as flying a light aircraft) makes an effective corporate leader.

Matthew Cain explains, *Many people who like to fly for sport do so, in part out of a desire to experience new sensations. This type of novelty-seeking behaviour has been shown by psychologists to be correlated with creativity and*

cognitive innovation. These are the same types of individuals who may be well-suited for entrepreneurship, since entrepreneurs are often tugged in many directions at the same time. The ability to balance many tasks and make quick but calculated decisions are valuable skills in the business world. This could also explain why hobby pilots often make good CEOs. They are not deterred by risk and are comfortable taking their firms in new directions when needed.

So, the next time your spouse spies you picking up the headset and keys to the aircraft, you can legitimately claim to be 'honouring your business initiative.'

Centenary of first Australian licence

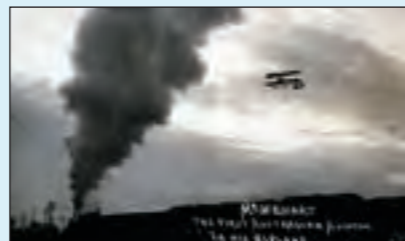
Excerpt from Sydney Morning Herald, Friday 17th November, 1911

The first Australian to qualify for a pilot certificate of the Aerial League is Mr W.E Hart, of Parramatta.

The flight was commenced at 5.20am and completed at 5.56am, the distance being covered an estimated 20 miles.

Mr Hart described five complete figures of '8' at an average altitude of 200 ft. He carried with him one passenger (the son of the mayor).

A notable feature of his work was in his skill in handling the machine on the



ground. On completion of the test it was found that one of the piston rings of the engine had been faulty throughout.

It was an ideal morning for the test which was conducted in a Bristol bi-plane.


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Deadline: The deadline for stories and pictures in Sport Pilot is the 11th of each month. Space can be tight so the earlier you send your story in, the better chance it has of making the next edition.

Don't miss out, email: email editor@sportpilot.net.au

UNDO Sport Pilot September Page 5: Featured aircraft is an AIRBORNE XT912 Tundra, not a QUICKSILVER as printed

Royal Newcastle catches the Skycatcher



THE Cessna Skycatcher has finally arrived and we're excited about being the first aero club to offer it for training or hire.

This lovely aircraft is simple to operate and easy to fly. It's certified in the Light Sports category and combines state-of-the-art technology with the stability and reliability of Cessna's classic high-wing design.

The Skycatcher's unique control system will immediately put a grin on every pilot's face. It's mounted beneath the instrumental panel, and behaves just like a floor-mounted stick. Just like those on aerobatic aircraft.

Slide into the Skycatcher, and you'll notice a cabin markedly different from previous Cessnas or other light sport aircraft; it's measurably wider. The windshield and windows are large, giving the pilot improved visibility while making the big cabin feel even more spacious.

The Skycatcher is the ideal for students as well as those more experienced pilots looking for a modern and economical means of

It embodies the same core values Cessna builds into all its aircraft

recreational flight. With stable, forgiving flight characteristics, students can learn the skills they need to become safe and assured pilots in a confidence-inspiring aircraft.

Furthermore Garmin G300 all-glass avionics are perfect for total situational awareness. The G300 has been designed specifically for the Skycatcher. It features a single flat-panel display which provides primary

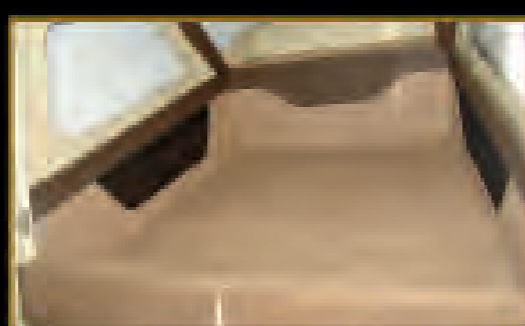
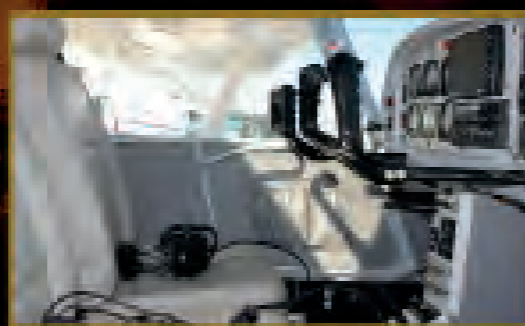
flight, engine and moving map information in a split-screen format.

Our Skycatcher will be fitted with a second multifunction display ideal for showing weather details. The display provides easy-to-read windows for altitude, airspeed and heading as well as engine operation data. Synthetic Vision Technology provides a realistic view of the outside world for better situational awareness relating to terrain, course and aircraft altitude. The Engine Monitoring function makes traditional round dials obsolete. You can select the data you want to monitor and how you prefer it to be displayed.

The Skycatcher might be the lightest certified aircraft in the Cessna piston line, but it embodies the same core values Cessna builds into all its aircraft; reliability, durability and safety.

Learning to fly has never been this easy or accessible.

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EXPERIENCE THE MAGIC

Flight Trial AvPlan Electronic Flight Bag

by Paul Turner

A FEW months back, my good friend, and Deputy Editor of Sport Pilot, Kreisha Ballantyne, offered me the right hand seat flying from Sydney to the Bundaberg Airshow.

I thought it would be a great opportunity to try out one of the new Electronic Flight Bags which have recently come onto the market for use with the Apple iPad. I have in the past used a couple of electronic tools to assist with flight planning, notably Copilot, OzRunways and the iPhone NAIPS app. However, for this trip, I was keen to try out one of the newest Australian-made products in this space, 'AvPlan' from AvSoft.

Kreisha was pilot-in-command and navigated using 'traditional' paper maps and flight plans. I kept a parallel plan using the AvPlan. This allowed us to assess the relative strengths and weaknesses of both paper and electronic tools.

AvPlan is a dynamic flight planning tool which runs on the Apple iPad.

It simplifies and enhances the normal flight planning process by integrating map, aircraft and weather data with an intuitive user interface. Through the GPS and 3G connection on the iPad, Avplan brings the plan to life and becomes a valuable aid to normal pilot operations.

Normal Flight Operations

This product was clearly designed by a pilot, to be used by pilots. It feels very natural and follows the normal flight planning processes.

Ease of Use

With almost no training and limited practice, I was able to create and use complex multi-leg plans.

Improvements to Flight Planning

- Time to complete a complex flight plan, including identification of waypoints, NAVAIDS and airspace limitations was a fraction of the time to complete the same task using paper maps and printed publications.

- Unlike paper maps and plans, incorrect identification of waypoints is instantly obvious and easily corrected.

- The tool allows the pilot to easily and quickly create and modify plans. The planning process is enhanced and changes from a static data recording process to a dynamic decision making process.

Improved Flight Safety

No Electronic Flight Bag or Flight Planning Tool is a substitute for good airmanship and should not be used as a primary navigation instrument. However on our flight, AvPlan still gave us:

- Improved situational awareness via its aircraft-on-map display and integration with BoM weather radar information.

- Rapid in-flight plan amendment and diversion planning (simply 'tap and drag' waypoints to instantly update the plan).

- Continuous update of heading, and time to destination information.

- In-flight access to up-to-date weather and NOTAMS.



>> Av-plan in action

Highlights

- Rapid and complete flight planning at the beginning of each flight.

- Easing the stress of flying into unfamiliar territory, including accurately guiding us through CTA (over the top of Brisbane Airport; into Tamworth Airport) and avoiding CTA when required.

- Quick and easy amendment of our planned track to avoid rain showers as we departed Bundaberg for home.

Overall Impression

When we started the journey, I was (at best) an interested observer. By the end of the first day, I was pleasantly surprised. By the time we arrived at Bundy, I was an enthusiastic supporter. And by the time we arrived back in Sydney, I had become a devoted fan. This application has changed how I think about the use of electronic flight planning tools and will be a constant companion for any flights I make in the future.

The AvPlan Story

AvPlan's creator is Bevan Anderson. Bevan is both an experienced private pilot and an Information Technology professional. In a recent discussion, Bevan gave me an insight to the history and vision for AvPlan.

"I started the project in early 2010, when the iPad was announced by Apple.

"I had the thought, 'Imagine flying with a self-updating flight plan. One which behaved like a paper plan, but then linked to all sorts of other useful in-flight information. One which harnessed the power of NAIPS, but hiding the complexity. One which provided me the information relevant to the

task at hand, but did not bombard me or force me to search for data.'

"This is the vision which started the project, and I believe I'm well on the way to delivering it.

"The App doesn't, and probably never will, ever tell you where to fly. Most aircraft are equipped with plenty of avionics which tell you that information. In addition there are usually big windows with lovely views of the outside which can also be used. I don't want this App to be viewed as just another GPS replacement app - it is different to that."

The App is sold as a subscription. There is a base subscription which incorporates all the App's planning features, but only has a PCA chart and

no ERSA, DAP, AIP and no other maps. The VFR upgrade adds the ERSA, AIP and VFR charts. The IFR upgrade adds the DAP and IFR charts. These are available as monthly or yearly subscriptions through the App, or as yearly subscriptions via www.avsoft.com.au. The subscriptions on the AvSoft site are significantly cheaper as they bypass the Apple royalties.

The App runs on all Apple iPads (1 & 2) and will be coming to the iPhone in the coming month. Almost all features will be usable on the phone, but it will be smaller. A subscription will be valid on both devices - the subscriptions will allow two simultaneous devices.

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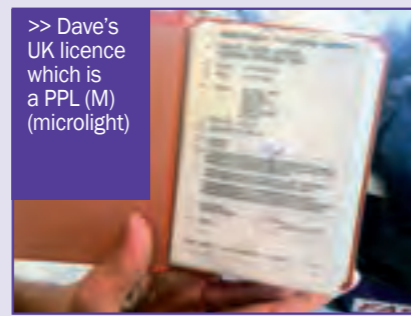
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>> Steve Tizzard presents Dave with a plaque from RA-Aus



>> Dave's P and M Quick Microlight, powered by a 912 Rotax arrives at Bankstown



>> Dave's UK licence which is a PPL (M) (microlight)



>> Dave Sykes with Dave Caban and Steve Tizzard

On a wing

Wheelie, Dave Sykes, arrives at Bankstown

ANYONE with even a remote interest in aviation will be in awe of this man's bravery.

Dave took up flying after a motor cycle accident left him without the use of his legs. With his P&M trike modified for his disability, Dave has racked up over 50,000 kms as a pilot.

"I call it the motorcycle of the sky" quips Dave. "You're out there, sitting in the elements, steering it with your body."

His latest adventure started with a bet in the pub. "A group of us were sitting around drinking beer, asking me what should I do next."

"I said, 'I think I'll fly to Australia.'

"You won't," said my mates.

"I will," I said.

And there it began.

In his four month, 21,809 km trip, Dave has been



and a chair

by Kreisha Ballantyne

trapped in a sandstorm in Saudi Arabia, blown into a ditch in Pakistan and caught in monsoonal rain so bad in Burma he lost the use of his transponder.

"I was completely frightened, but you either die or carry on. You have to find the strength. I'm on my third transponder, due to the weather. My cameras have packed in. Everything electronic has gone wrong. But as long as I don't lose this" he says, holding up the allen key to his wheelchair, "I'll be fine."

Flying over 20 countries, with no ground aids, Dave claims the most difficult aspects (other than unpredictable weather) are the language barriers. Despite that, he seems awed at the level of kindness he received along the way.

"I was really touched by the people in the poorer countries, like Burma. The hospitality was amazing. In fact, I'm going back for my holidays. The people who have the least, offer you their last bowl of rice."

Things were easier for his last leg down the Australian east coast. After departing Wallsend in Newcastle, Dave tracked down the chopper lane at 500ft to Long Reef, orbiting the harbour and flying over the south tower at 500ft.

"Flying over the harbour was the best feeling in the world. This has been two years in the making. I was flying over the Opera House thinking "my mates won't believe it."

Dave was escorted to Bankstown by Dick

Smith in his helicopter, and greeted by the press, local aviators and, of course, RA-Aus. CEO, Steve Tizzard presented him with a plaque on behalf of RA-Aus, and a cheque for Dave's charity of choice, Yorkshire Air Ambulance.


And one other donation which moved Dave to tears, a scholarship for a disabled flyer in Australia.

When asked what's next, Dave replied, "I would like to carry on around the world, if I can find the funding."

How about it any well off recreational flyer out there? Want to see Dave finish his journey around the world? Maybe a couple of beers in a pub with him will convince you he can do it, on a wing and a chair. 🍷

Pilot talk

Zane Tully
Acting Operations Manager

 *Once the decision to go around is made, do not procrastinate*

Aviate - Navigate - Communicate

The Go-Around

In last month's issue of Sport Pilot our CEO, Steve Tizzard, mentioned the importance of making the decision to go around. That got me thinking. There is more to a go-around than meets the eye and yet it seems to be an exercise least practiced. I would therefore like to share my thoughts on the go-around by further expanding on Steve's advice from last month.

My first step was to consult CAAP 166-1(0): *Operations in the vicinity of non-towered (non-controlled) aerodromes and discovered this brief insight into the procedure. Paragraph 4.7.1 of that document states: A pilot who elects to abort a landing should manoeuvre to keep other traffic in sight. Maintain a safe distance from all aircraft and rejoin the circuit when it is safe to do so.*

Suggested go around manoeuvre

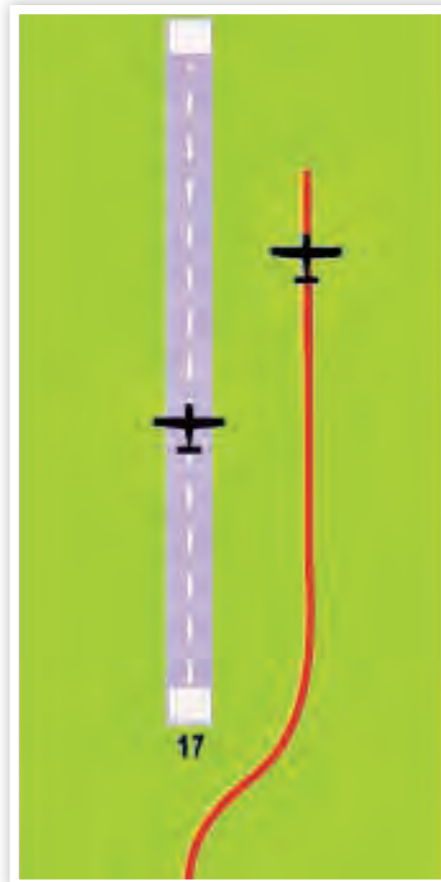
The brief nature of this description further inspired me to write this generic overview of a safe go-around procedure.

The decision to go around should be made earlier rather than later. This is so that the go-around can be conducted in a calm relaxed manner, at a safe height above the ground and at a distance from the runway threshold which will allow room to manoeuvre, if required. Once the decision to go around is made, do not procrastinate.

Increase power positively to full throttle; maintain balance with rudder and keep the wings level with aileron. Use elevator to adopt the attitude for best rate of climb. This combination should equate to the arresting of the descent while maintaining a safe flying speed. Remember, the nose up pitch may be very pronounced (depending on your aircraft type) due to the built in forces which may be exacerbated by the aircraft's configuration for landing (in most cases the pilot may have set a significant amount of nose up trim). Therefore trim as required to reduce control column forces.

Once the aircraft is at a safe height; retract the flap progressively (if fitted to your aircraft type), never all at once.

Retracting the entire flap at once and/or having minimal power applied, may cause the



aircraft to descend, which is not desirable. A radio broadcast declaring a "go-around" is recommended, but at no stage should a radio call ever interfere with flying the aircraft. Remember your priorities...AVIATE-NAVIGATE-COMMUNICATE.

Always maintain a safe flying speed and

keep all traffic ahead and below in sight. A manoeuvre which may assist with keeping traffic in sight is as per the diagram in CAAP 166-1(0) para 4.7.1: By adjusting the aircraft flight path to the right hand side of the runway centreline. However, this should only be performed if and when it is safe to do so.


Conducting a go-around over the runway centreline may create a situation whereby the aircraft taking off is established into a climb underneath the aircraft conducting the go-around (and in the blind spots of both aircraft), thus creating the risk of a collision. So, keep a good lookout to SEE AND AVOID.

In contrast, an aircraft which established on a final approach, flying above the aircraft's normal approach speed, not in landing configuration; then flown parallel to the ground at low level for a considerable length of the runway, ending with a conversion of speed to altitude, does not constitute a correct go-around procedure. This type of manoeuvre is known as a 'beat-up', but it is in fact showing off.

CASA and RA-Aus take a very dim view of this show-off manoeuvre. It is very clearly low level flight (below 500') without meeting the regulations as stated in CAO 95.55 section 8, Provisions Relating to Flight Height Limitations. For this reason, any substantiated evidence received by RA-Aus of showing off will be followed up and investigated. More often than not the decision to show off falls within the realm of Human Factors, for it is generally conducted when there is an audience.

The go-around is a legitimate manoeuvre which should be practiced from time to time. It should always be considered a viable option for the safe operation of an aircraft. This may be because of an interrupted approach, an approach which does not fit the pilot's parameters (as per our CEO's article last month) or one that just does not seem right.

Whatever the reason, there is never any shame associated with a pilot's decision and execution of a go-around.

Happy and safe flying. 



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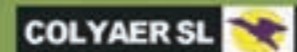
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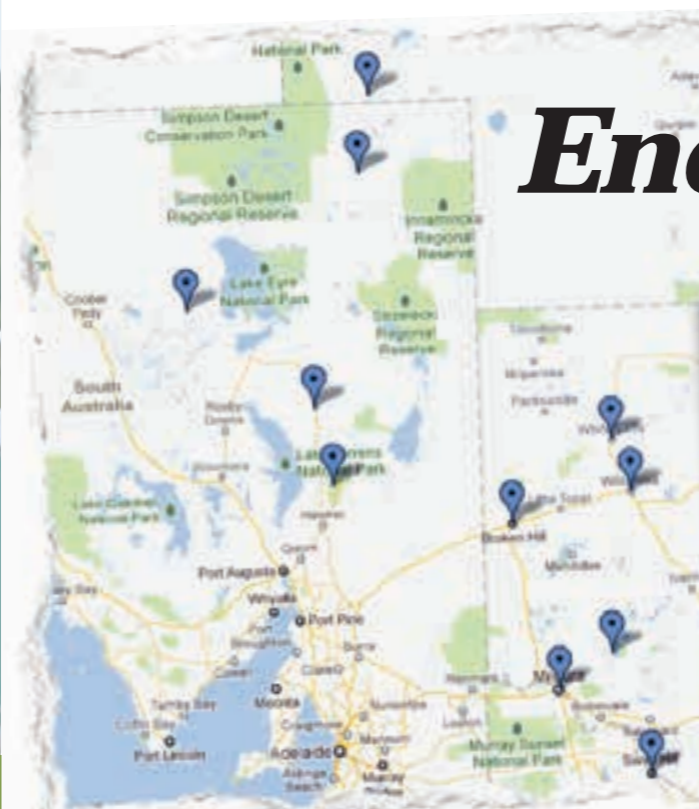


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reader's adventure

Endless vista



>> Ian Loveridge, Glenn Wattie, Peter Williams, Jonathan Castelino, Luc Palisse

by Jonathan Castelino

SIX Pilots, Three Aeroplanes, CAVOK for Five Straight Days and Endless Vistas of an Incredible Aussie Outback.

What started off as a casual conversation over instant coffee in a hangar at Tyabb on Victoria's Mornington Peninsula, turned out to be the trip of a lifetime.

Luc Palisse and his mate, Jacques-Florian Letourneux, a fellow pilot from Noumea, New Caledonia, paired up in Luc's Fly Synthesis Texan TC 600. Peter Williams paired with Tooradin CFI, Ian Loveridge in Ian's Texan TC 550 and Glenn Wattie and Jonathan Castelino in their Jabiru J230D.

Peter did the prep work including an excellent route selection and booking accommodation and fuel (he had done a similar trip last year.)

11 June: Airborne on a clear morning, tracking for Swan Hill for fuel and then on to our first stop, Mungo Lodge, NSW.

Mungo Lake was quite distinct with its "Walls of China" and the Lodge's gravel cross strips. Our versatile Texans were perfect for a short field touchdown on runway 17 at the Lodge where the accommodations and dining are excellent, great for unwinding after a nice day in the air.

12 June: Low fog cleared and we took the "scenic route" to Broken Hill following the Darling up to Pooncarie and a very full Lake Menindee, then a short facilities break at Wilcannia's "Arrivals Hall".

Two Chieftains, two Texans and one Jabiru 230D arriving at White Cliffs at the same time made for an interesting approach but good airmanship all around ensured safe landings for all aircraft.

Jim, the local CFA member, took us to see "Mad Jock's" opal museum where for a princely sum of \$5 per head, we got the grand tour with the added attraction of Jock's off the wall anecdotes resounding along the mine shafts.

Departing White Cliffs, we made for Broken Hill where we picked up a hire car and checked into the Gateway Motor Inn which afforded us very nice large and well appointed rooms.

13 June: Took off from Broken Hill and we tracked towards the Flinders Ranges to Lyndhurst, SA by way of Lake Frome which was uncannily akin to the Whitsunday Beaches with its patches of water and white salt bed. Lunch and refuel at Lyndhurst where we met fellow pilots from Aus Air Services, Tooradin VIC who were operating Lake Eyre Scenic Flights.

Heading set for Marree where we picked up the Birdsville track, with a short detour up the Cooper Creek to view the punt (only used when the Birdsville track is flooded), then over the Goyder Lagoon, past the winding Diamantina River and finally landing at Birdsville.

Off to Little Red where one of the best sunsets awaited us. A truly spiritual experience. An excellent steak and wine at the legendary Birdsville Hotel capped off a long but exciting day of flying.

14 June: Birdsville to the almost full Lake Eyre North by way of the Simpson and Tirari Deserts. We just had to spend time over the Lake.

Reluctantly, we had to tear ourselves away and headed to William Creek where we enjoyed some nice tucker.

Airborne again. Southeast over Lake Torrens en route to Rawnsley Park nestled in the south-east end of the magnificent Wilpena Pound.

An endurance of 4.5 hours + reserve allowed us to spend about an hour over a sur-



real and dry Lake Torrens after which very light winds along the ranges made the Rawnsley Park approach a non-event.

Excellent accommodation and food at the Wilpena Pound Resort capped off an amazing day, our last on this trip. There were a few momentary sad faces, this being our last night, but we made every moment count.

15 June: Another flypast over the Pound - a great way to end the trip.

Lunch stop at Mildura and then about three hours of flying brought us back home. The Rotax 912ULS fuel burn average of 18 litres per hour at 65% power ensured our Texans averaged 110 to 115 KIAS with plenty to spare. Arguably one of the best touring light sports aircraft around, the Texans also give its pilots one of the best views from the cockpit.

Approximately 2300nm (4400km) over 5 days through some of the most incredible parts of this great country.

For some of us naturalised Australians, the sheer vastness of this country and the ability to travel great distances without the burdensome bureaucratic requirements of border crossings is truly appreciated.

Next trip? The Great Australian Bight!



perfect
in every way >>



>> Kenny's immaculate kit built Rans in all its glory



KENNY Edwards admits to being a perfectionist, but he didn't need to tell me. I knew it the moment I set eyes on his immaculately constructed Rans S7S Courier.

Our encounter took place at Watts Bridge Memorial Airfield in June. Kenny was on leave from his day job in Papua New Guinea where he flies heavy lift helicopters. He is also an experienced LAME. When on leave, he hangs out at Watts in a rented hangar, building aeroplanes.

The Courier is Kenny's fourth build. His previous efforts had already won awards on the Australian homebuilding scene by the time he started construction on the Courier in late 2008.

by Arthur Marcel

The plane had its first flight in mid 2010. It has been given RA-Aus registration 19-7222 and has now completed all its mandatory test flying.

Kenny's Courier is an exceptional aircraft, but not just for the quality of its build. It is powered by a Rotax 912 ULS driving a three blade, Sensenich Airmaster AP332 constant speed feathering propeller, giving the aircraft maximum versatility and range. The aircraft has even longer legs thanks to its Turtle Pac "Little

Buddy" auxiliary fuel system.

This electrically-actuated transfer, bladder contained system is easily and quickly installed into or removed from the rear fuselage without special tools (a screwdriver is all that's required). It extends the aircraft's normal cruise endurance by over two hours and weighs less than 5kg without fuel.

The Courier's all white colour scheme has been achieved using the PolyFiber system and is without blemish. The instrument panel is a fully functional work of art. Honestly, there is no way to describe this aircraft other than 'perfect'.



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Reporting - what's in it for me?

Steve Tizzard



EVERY incident and accident which occurs in Australian aviation is reported to the Australian Transport Safety Bureau. These run the gamut from hitting a lizard on the runway to an engine failure resulting in a forced landing. If something reportable happens, a Responsible Person (this is a legal term) lets the ATSB know about it.

Last year, the ATSB received more than 15,000 notifications. These were processed and analysed, and a decision made if they needed to be investigated. And all were recorded in the database. Even if not investigated, notifications serve a valuable purpose. The database provides a detailed portrait of Australian aviation. They allow researchers, investigators, and aviation stakeholders to examine trends, identify patterns, and target problem areas. It's one of the most important tools they have.

However, there are concerns incidents involving recreational aircraft are going unreported.

"The number of aircraft registered with RA-Aus is increasing rapidly," says Steve Young, the ATSB's Notifications and Confidential Reporting Manager.

"In fact, activity in this entire sector of the aviation industry is swiftly rising. But the rate of occurrence reporting appears quite low."

Troublingly, it also appears the existing data does not provide a full and true picture of incidents and accidents.

Traditionally, ATSB investigations focus on fare-paying passenger operations, with limited involvement in RA-Aus aircraft. For many people, this raises the question: 'why should I bother reporting to the ATSB?'

"To begin with," says Young, "people are legally required to report accidents."

"But beyond that, occurrence data plays a valuable role identifying emerging safety trends and issues."

With the growing interest in recreational flying, occurrence reports to the ATSB can pay major safety dividends. ATSB research and statistical reports cover a variety of subjects, including ageing aircraft, performance, skills and experience, and accident and incident rates. The ATSB also develops safety and education material where safety issues are identified.

"Professor Avius" mused in the RA-Aus magazine, "...how often do we disagree with the statements found in articles and the analyses

of incidents and accidents..."

Experience tells us that if we know a source is trustworthy and known to us, we are more likely to trust what the data is delivering - we may even learn from it. However, understanding the data requires consistent and comprehensive reporting.

Developing an open and mature reporting culture

As of January 2011, there were more than 3,200 aircraft with a valid RA-Aus registration, approximately one-fifth the size of the CASA 'VH' register (approx. 14,300 aircraft). However, the difference in reporting levels between 'VH' and 'Non-VH' for registered aircraft less than 2,250 kgs MAUW is staggeringly disproportionate.

"Take into consideration the fact that, under the ATSB regulations¹, all aviation stakeholders must report occurrences to the ATSB," says Young.

"The ATSB has received, on average, 125 reports a year for the past four years for RA-Aus aircraft. This represents around four per cent of the aircraft on the register. By comparison, the 'VH' equivalent averages 2,450 reports, equating to slightly more than 17 per cent for the same period. If RA-Aus occurrence rates were comparable to the 'VH' equivalent, the ATSB should expect to receive around 550 reports."

If this seems unreasonable, think of it in terms of "one report, once a year, for one-in-six aircraft on the RA-Aus register."

What do I need to report?

"If you're in doubt if something needs to be reported," says Young, "report it."

"The ATSB prefers over-reporting of incidents to under-reporting. Over-reporting helps us to provide a more meaningful basis for conducting trend analysis and research."

The aviation industry has a responsibility to report safety matters as an 'immediately reportable matter' or a 'routine reportable matter' under the TSI Act/Regulations. If you are unfamiliar with the legislation, visit www.atsb.gov.au. If you're not sure if you should report an incident, call the ATSB on 1800 011 034. But if in doubt, report it.

The ATSB, in co-operation with other self administering agencies, is developing a more robust on-line form. This will be tailored to meet Sports Aviation specifications and should take

only 10 to 15 minutes to complete. The on-line submission sends the report directly to the ATSB for processing.

Comment by Steve Tizzard, RA-Aus CEO:

RA-Aus applauds initiatives, such as this one.

In fairness to our members, the apparent disproportionate occurrence reporting for 'VH' and 'Non-VH' light aircraft also stems from an era when we were under the mistaken impression our reports were not wanted by the ATSB.

Further, our operations are day only, VFR, non-aerobatic and to a larger extent, purely recreational i.e. no commercial pressure to complete an operation. Accordingly, our operations may generate fewer reports than would be expected from general aviation.

And I have a real example of how a supposed one-off event can save lives.

About 35 years ago I was teaching aerobatics in a Cessna 150 Aerobat. During a stall-turn to the left, the trainee was slow in closing the throttle. I moved my left hand to close the throttle and, in so doing, undid the safety harness locking mechanism. I ended up partially on the instrument panel. There was turmoil in the cockpit until I was resealed and strapped in again.

I was able to demonstrate to a LAME how the incident happened - the inside of my left elbow undid the safety catch. I submitted a Form 225 (Incident Report) to the forerunner of the ATSB, then known as BASI and was subsequently very careful when teaching aerobatics in that type of aircraft.

About five years later, the evening television news led with a story from overseas of a girl who fell out of an aircraft while her father was doing aerobatics.

I contacted BASI and suggested this accident may have been similar to mine - it involved the same type of aircraft. I was initially told my incident was the only report of such in Australia. However, two or three weeks later, the same officer advised me there had since been many verbal reports of similar incidents. The final outcome was that the type of seat belt under discussion was then subjected to specific checks at regular intervals.

The moral of the story is simple - report all incidents and allow the experts to determine what action, if any, is to be taken.

¹Transport Safety Investigation Regulations 2003 (TSI)

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*"The Sky Is
The Limit!"*

FLYING *as a trade*

by Sue Carroll

In July of this year, 11 aircraft and 24 people departed on an aviation adventure which took in some of Australia's most magnificent landscapes, wildlife, flora and people. I could go on forever about the breathtaking seascapes of South Australia, the wide desert terrain blanketed with ancient formations and lakes. The sight of animals and plants prospering from the recent rains. Or the iconic outback characters and settlements we encountered.

But this is a story about the application of the theory to the practise of flight and the opportunity to correlate the two, for an optimal learning outcome.

Our flight path took the gaggle of aircraft from central Victoria to south western NSW to north central SA Lake Eyre, Coober Pedy, then down to Ceduna for a circumnavigation of the Eyre Peninsula, with the final leg to Central Victoria via Mildura.

Along the way our pilots had to contend with weather conditions which required the utmost attention.

The experience level of the group ranged from 5500hr professionals to newly qualified pilots; and some navigational students with a range of experience in between.

The question is what do we label this sort of aviation? Is it an art form, a science or academia and how best to learn it?

Some of you will remember feeling defeated, stressed or just frustrated at the questions in your pre solo test / BAK / PPL / CPL tests. They seem ridiculously tricky, irrelevant, obscure or impossibly unclear.

Are the examiners sadistic? Is their sole purpose to torment or spoil an otherwise perfect past time?

But going for a flight in the real world quickly reveals why the theory is there in the first place.

End of daylight/beginning of daylight (EOD/BOD), UTC, ARFOR/TAF interpretation, PNR, Fuel planning, TEM, Vertical Navigation, GPS usage, range and endurance, PRDs, human factors, general knowledge, airmanship proficiency levels matching experience, operational met, backing and veering winds, cross wind components.

We had to contend with all of these issues during our adventure - not as threats, but as day-to-day considerations.

The very nature of the Australian continent means such considerations are very real.

Not to deal with them would be to question whether or not a pilot has sufficient back-

THEORY	APPLICATION
EOD - BOD	Departure Times, effect of further south in winter. Pilot in command - management of pax timetables to prevent late departures.
UTC	South Aust time zones - correct communication of ETAs at busy RPT airports, pilot awareness,
ARFOR/ TAFS	Accurate reading of changes, times, RWYs - cross winds, NOTAMS, VMC, alternates
PNR (POINT OF NO RETURN)	Not only for larger commercial type aircraft - smaller aircraft endurance limitations when encountering strong headwinds - critical knowledge area
FUEL PLANNING	Accurate pre flight planning, decision making / alternates when forecasts are not accurate. Understanding Range and Endurance
TEM - THREAT AND ERROR MANAGEMENT	11 aircraft in company - Threat and Error Management - Undesired aircraft states - Ground handling / navigation error identification, Circuit arrivals and departures planning. Pilot fatigue and proficiency / experience for conditions presenting.
HUMAN FACTORS	Weather, airspace penetration avoidance. Counter measures - Day to day planning briefings, actions and review at end of each flight legs.
NAVIGATION	Vertical planning, flying on top, accurate map reading, backing up with GPS - not other way around! Prohibited and Restricted areas permissions/penetration avoidance,
GENERAL KNOWLEDGE	Carby icing conditions, ammeters, oil levels, preparation prior to adventure, 100 hourly status, emergency supplies - consumables, tire tubes, proficiency to use
MET	High and Low systems, resultant winds - backing and veering understanding means efficient planning to avoid headwinds where possible. Deviation around small shower cells, risk assessment

ground knowledge to conduct such flights safely and successfully.

All of these items are covered throughout all levels of theory testing. They directly affect all flights, and never more so than when undertaking an outback adventure - it all comes together and makes sense.

Reputable flight schools train and follow syllabuses structured by the regulator. Theory courses are also structured to support key areas of underpinning knowledge.

Once a pilot has passed the tests, they are deemed licenced to a safe standard. The licence is not a station at which you arrive, but just a point to continue learning.

This was the overwhelming feedback from participants of our adventure. "We learnt so much!" some said.

"I feel like I learnt as much again during the fly away," said another.

I contend that learning to fly isn't merely an art form or science.

It can't be completely learnt as a university course or degree, so can it be taught successfully by teachers with limited experience?

We learn best when we put students with teachers who have passion and real experience to pass on. We learn best when teaching combines theoretical and practical experience together, not one without the other.

Learning to fly is more like a trade, on the job training from a master skilled as a teacher, experienced and with a course delivery which is comprehensive and complete.

From the CFI to the newest pilot and everyone in between, flying in Australia offers the perfect blueprint for each of us to continue improving our mastery of the trade.

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YOU see them here. You see them there. On country strips, on farm properties and at flying schools nationwide, you see them absolutely everywhere. They are, without doubt, the most ubiquitous aircraft on the RA-Aus register. No prizes for guessing to which award winning aircraft I'm alluding.

Anyone who flies - from Drifters to jets - knows about Jabiru. Just why are these little white birds so popular? And with sales figures of more than 1800 airframes and 6000 engines worldwide, there's no debate they are popular.

Jabiru aircraft are without exception, Australia's most outstanding aircraft success story.

Many pilots, even if they don't fly the Jabiru aircraft, use the Jabiru engine.

I asked Sue Woods, Jabiru's business manager, for her thoughts on the company's world-wide success.

"In Australia, nothing comes close to the power and performance of the J230," she says.

"We have sold 816 J230/430s worldwide. The MTOW (tested to 700kg but in Australia limited to 600kg under the LSA category) in combination with the 120hp engine is proving extremely popular.

"They are used in so many applications. Besides recrea-



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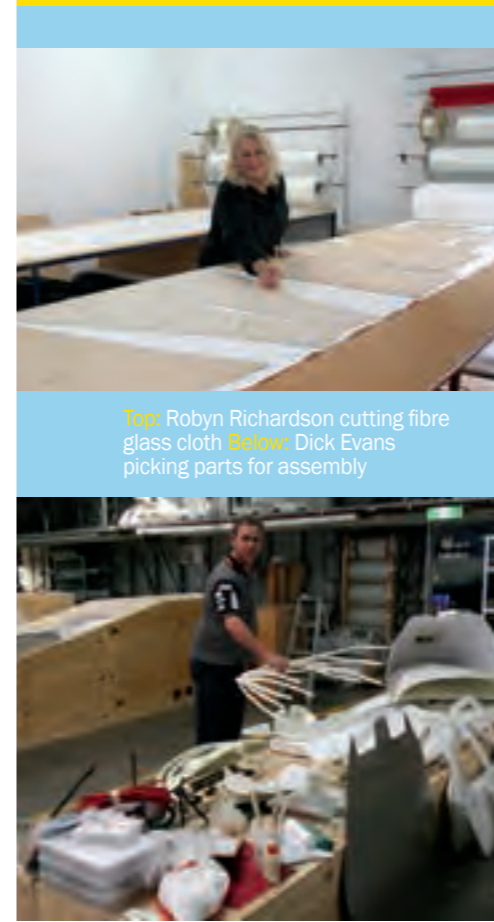
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Top: Robyn Richardson cutting fibre glass cloth Below: Dick Evans picking parts for assembly

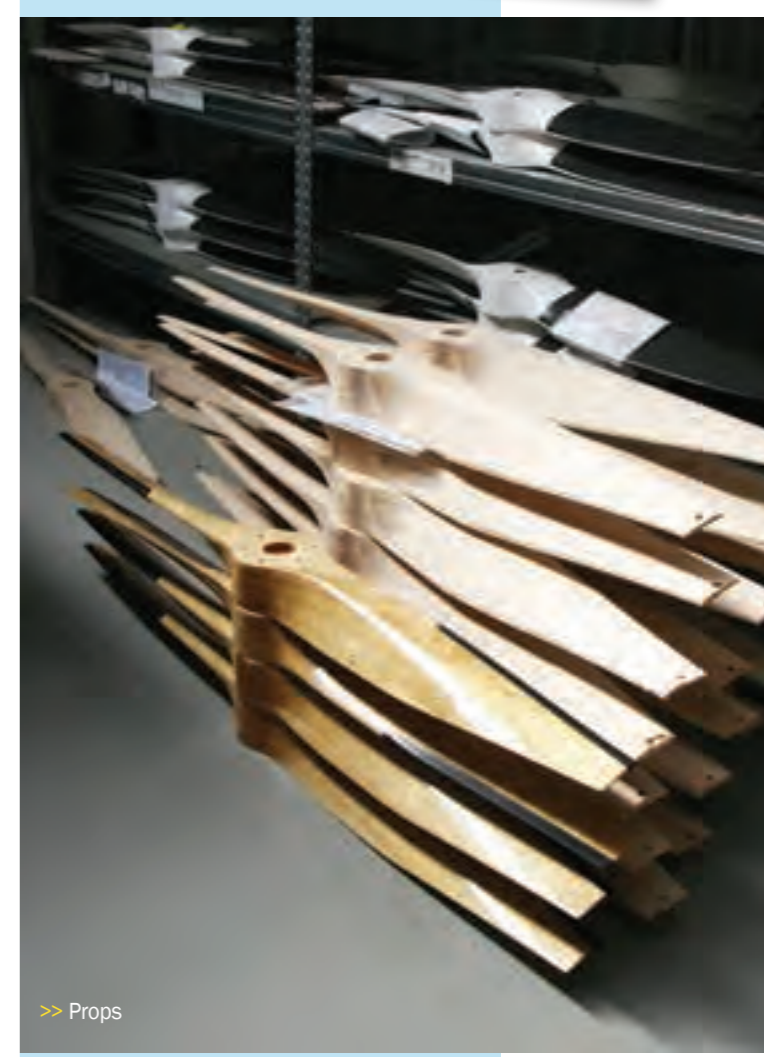


Tino Modesti and Leith McLellan

tional flying and flying schools, Jabiru's (specifically the J430) are used in Africa as air ambulances. In South Africa, Jabiru aircraft are also used for carrying cameras for mineral exploration; the low magnetic signature of the aircraft is ideal for this. In the U.S. the aircraft are used to carry million dollar equipment for police surveillance. The J230 is now available on floats in the U.S."

Where Jabiru began
In early 1988, Rodney Stiff and Phil Ainsworth formed the Jabiru company to develop a highly efficient, composite designed light aircraft. After only four years the Jabiru LSA 55/2K model was type certificated by the Australian Civil Aviation Authority under an Australian standard (CAO 101.55). One month later, their Italian engine manufacturer (IAME-KFM112M) advised that it was ceasing aircraft engine manufacture. The KFM engine was then the lightest 4 stroke engine available on the market and the Jabiru aircraft had been developed around this engine. Earlier prototypes powered by 2 strokes had proven to be unreliable and the 2 stroke concept had been abandoned. Relying on their previous experience in the sugarcane harvesting

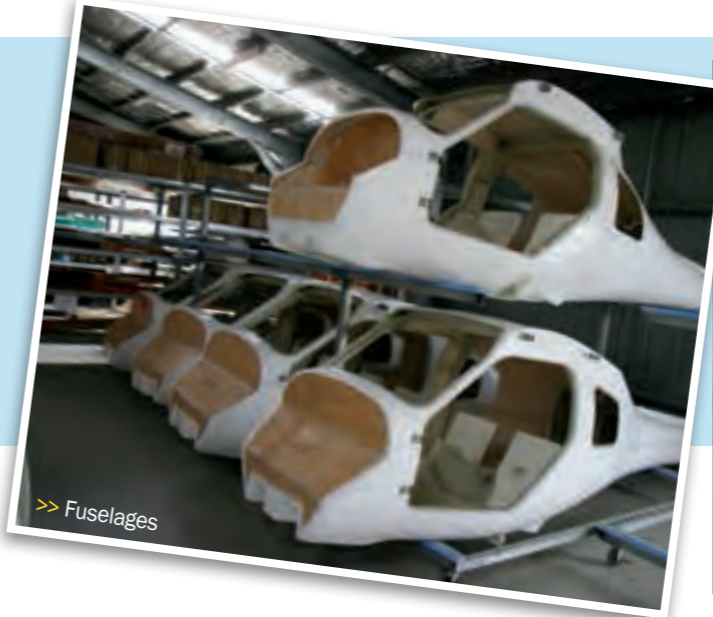
equipment industry, Rod and Phil decided there was a significant opportunity to develop lightweight aircraft engines in the 30-120hp range. The first step was to develop a 60hp engine to power their new (engineless!) Jabiru aircraft. In an intensive research and development program, the Jabiru 1600cc engine was developed over a period of 18 months. In March 1993 this new engine was approved by Australian CAA for installation in Jabiru aircraft. 54 '1600' powered aircraft were manufactured over the period April 1993 to March 1996. Jabiru displayed its aircraft with the 1600 engine at Oshkosh in 1994. The reception of both products was extremely encouraging, but, more significantly, the company learned the market was demanding a larger capacity engine. It began the development of the 2200 engine immediately. The new engine was first displayed at Sun 'n Fun in 1995. The first 24 were released to the market in September the same year. After Sun 'n Fun 95, Jabiru decided to offer the aircraft as an Amateur-built or Experimental Kit. An intensive program followed from which a kit constructor's manual was developed from the company's existing aircraft QA manual. In



>> Props



Top: New engines
Top left: Airframe parts packaged
Bottom left: Mould making



>> Fuselages



>> View hangar



>> Packaging of airframe parts



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June 1995 Jabiru shipped its first kits to USA. FAA formally accepted the Jabiru SK airplane as eligible for airworthiness certification under FAR 21.191 (g) on February 8, 1996.

And, twenty three years later...
Jabiru, at peak production, produces airframes at the rate of 20 per month and engines at the rate of 90 per month. Aircraft and kits have been sold to 16 countries and engines to 31 countries. In keeping with its mission of providing affordable flying, and to assist in its engine installation into other aircraft types, Jabiru has developed, and continues to develop, Firewall Forward kits for most popular light aircraft (check jabiru.net.au for more info). This program has been substantially supported by Jabiru's international distributors who have worked with the company to rapidly extend the range of aircraft types now fitted with the Jabiru 2200 engine. Firewall Forward Kits (or Firewall Rear Packages for pushers) are now available for many types.

When asked about Jabiru's future, Sue has this to say
"I hope to maintain my father's mission to make flying affordable by providing a strong aircraft at a price that is far more reachable than the price of the new Cessna 172.
"Our market is changing from flying enthusiasts to turn key pilots. There is a lot more

competition now with over 100 other Light Sport Aircraft manufacturer as well an ever growing array of "boys toys" competing for the dollar once the family has left home and the home mortgage is paid.

"Keeping the product competitive in the changing market is always a high priority. Being in the aviation business is challenging, but the reward for us is to hear the airways abuzz with Jabiru call signs as we fly to the numerous air shows around the country.

"We would like to see the Jabiru as numerous in provincial towns as it is in Bundaberg.
"And more instructors like Cliff Banks from Swan Hill who has over 12,000 hours on them."

The Jabiru product range includes

- Jabiru Type Certificated, factory manufactured aircraft.
- Jabiru Amateur-built or Experimental Kits.
- Jabiru Aircraft Engines.

In addition, Jabiru manufactures its own propellers, wheels and brakes and control system components. A range of propellers, specifically designed to complement Jabiru engines, is being developed.

youtube.com/watch?v=1Yoa1kwG-1A&feature=related

Chocks away for Wide Bay

by Kreisha Ballantyne

"I'd like to say we co-ordinated the weather, as well as the event" remarked Ainsley Gately of Event Networks, the organiser of the Wide Bay Airshow.

And maybe she did, because the weather, like the show itself, was superb. The circuit was buzzing as we flew in around lunchtime on the Friday, with some orbiting to allow the RPTs to land. With the unicom guiding us in, we touched down on grass runway 25 and were marshalled to parking by an enthusiastic and helpful crew of volunteers from the Griffith Aviation University.

Already, on Friday afternoon, there were 25 aircraft parked ahead of us, and another one was landing every few minutes. A total of 75 RA-Aus aircraft flew in; about the same number as the VH crowd. As soon as we unloaded and tied down, a volunteer car arrived to taxi us to the show. With Friday being the Trade Day, I had a good browse around the stands, catching up with Skyshop, Bose, QBE and CASA, while being treated to the Roulettes practice display.

Saturday and Sunday brought stunning weather, the likes of which is always expected in Queensland, but not always delivered. With a slip-slap-slop, we headed out to the



>> Photos: Paul Turner



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1 Anton and Jacky Meier with the Sportcruiser
2 SeaMax and Phil Woodbridge
3 Zane Tully and Kreisha
4 Paul Bennet's Pitts



2



7



8



3



4

5 Yakitty Yaks
6 Grand Dames
7 RAAF Roulettes
8 Wide Bay Organiser Ainsley Gatley
9 Jabirus

field early to watch the displays and meet the aircraft demonstrators.

Highlights of the show include the Roulette display, the Jabiru formation display, Matt Hall (as ever!), Paul Bennet and a wonderful array of warbirds including the Wirraway, Winjeel, Avenger, DC3, Spitfires and Yaks.

The static displays included a wide selection of RA-Aus aircraft, including the Sportcruiser, Ibis, SeaMax, Super Petrel, Airborne microlights and of course, the Jabirus.

Prominent industry figures present were Peter John of CASA, Matt Hall, the Royal Australian Air Force and, of course, our very own Zane Tully.

As the event came to a close, so did the weather. Around 4pm, the sky darkened, the wind picked up and an innovative man started selling tie-down kits. Happy to spend another night in town, my co-pilot and I headed to the RSL for another fabulous local steak.

With a turnout of 17,500, an event like this absorbs the entire town - not just in the turnout of locals, to volunteer and run food stalls, but also for the hoteliers, restaurants and pubs.

I'm sure a town famous for rum and ginger beer is delighted to have yet another feather in its sunhat in being linked to this international airshow.



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the flying flea

by Philippe Bouillet



THE Flying Flea was designed in the 1930s by Henri Mignet, an enthusiastic and genial handyman now considered the father of light aviation in France. The Flea was Mignet's 14th prototype, and the second to fly. Mignet published a book describing the birth of the Flea and its success was immediate.

About hundred Fleas were built by amateurs in the year following the release of the book. Since the builders were from all walks of life, except the aviation business, it is not surprising a number of fatal accidents occurred soon afterwards.

The Flea acquired a bad reputation which still exists today.

In fact, the accidents prompted a

thorough investigation into the causes and the design was modified to improve the stability of the machine. Rules governing the balance of the aeroplane were determined by studies in wind tunnels. Mignet continued his research and published the plans of the HM290 in 1945 on a single sheet.

But World War II as well as personal dramas in Mignet's life in the post war years, prevented the Flea movement taking off and developing. After the war, Mignet left for Argentina, where he continued to invent new aircraft. In 1977, another Frenchman, Rodolphe Grunberg, redrew the plans of the HM293, and his own building success gave a new life to the Flying Flea movement in France.

→ The flying fle rolls

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reader's story



>> The flea's cockpit

What's so special about the Flying Flea? Quite a few things, actually. It is relatively small, the biggest part is only 2.5 metres long. The two wings are in an unconventional tandem configuration. The back wing has a fixed 6 degree angle with the fuselage, the larger front wing's angle of attack, controlled by the stick, varies from 0 to 14 degrees and works as the elevator.

The aircraft has no aileron. The side movements are the result of the deflection of the large rudder, itself controlled by the stick. The particular wing arrangement prevents the Flying Flea from properly stalling. Instead it descends gently and remains controllable even if you keep the stick fully backwards.

HM293 is made of wood (spruce and plywood), fabric and metal fittings. It can be built as a tail-dragger or a tricycle. According to Mignet, anyone who could build a packing case and drive a car could fly a Flying Flea, which explains the voluntarily simple design.

I built 10-7589 in my garage, without any fancy tools or machines. I am much indebted to my friend, Glenn, for his fantastic welding skills, and all the others who have lent tools or offered advice and encouragement.

My Flea is powered by a Rotax 503, and she

and I had our maiden flight on March 12, 2011. I had no prior experience on a Flea and was a bit nervous at first, with a tendency to overcorrect. That disappeared in a few hours and I'm starting to know her better.

She takes off in a short distance and is very fun to fly and land. Cruise is at about 50kts at 5500rpm, so I have plenty of time to admire the scenery.

No need to tell how rewarding it is to fly an aircraft you've built yourself. The Flying Flea attracts a lot of people when I taxi back to the parking area.

Of course, if you are into high speed flying machines, this one is not for you. But if you like the sound of the hand planed shaving wood; if your budget and time are limited and the sky is appealing to you, the Flying Flea is really a project worth considering. You'll collect many friends on the way.

There are three Flying Fleas on the Australian Recreational Aviation Register at the moment: two HM293s and a two-seater Balerit. I hope we'll see more of them in a non-too distant future.

By the way, I fly at Penfield, Victoria, in case you'd like to have a closer look.



>> A Flea in flight

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Propeller strikes

EVERY now and then I receive an incident report indicating that an aircraft has sustained a propeller strike. There is no problem with this, but there are also a number that go unreported. In most instances the owner of the aircraft fits a new propeller and continues on normally, and this is where the problems begin.

Every time an aircraft has a prop strike, maintenance and engine checks must be performed, before the next flight. After all you don't want a further problem should the engine stop, or in some cases the propeller exits the aircraft. Propellers are normally bolted to the engine either directly or through a gearbox or drive train. It should be remembered an aircraft propeller is being driven by the engine. In doing so is absorbing all of the horsepower the engine can supply and in most cases this is a very delicate arrangement, but when a propeller strikes something hard, it will cause a momentary stop. In some cases the stoppage is so small that the aircraft operator may not even notice, but the engine will. The question is where does all of that horsepower go if the fuel is still being burned?

Instead of the power being transferred to the propeller it is being sent back to the engine, but now in the wrong direction, so we have the pistons supplying energy to one end of the crankshaft, while at the other end the excess energy will be placed on the crankshaft in the opposite direction. This will cause a momentary twisting of the crankshaft, and after all the crankshaft is not designed to be twisted. This twisting will cause minute changes in the structure of the engine reciprocating components, which may eventually cause the shafts to fail.

What I am getting to is that *every time a propeller strikes something hard with the engine going; there may be damage, so it is absolutely essential that the engine is checked.*

These engine checks after a prop strike can vary between a simple flange run out check and engine run: all the way up to an engine strip down. I have examined a failed crankshaft, where it is obvious that there has

been a propeller strike, where it can be seen that there was a small crack caused by the impact, which grew over time. After all there is fuel burning quite rapidly in the engine, which causes small stresses on the components at each stroke.

In every case, if the propeller is subject to a prop strike, the engine manufacturer's instructions should be studied, and the engine checked strictly in accordance with those instructions. Any time a prop strike causes an engine stoppage, the engine must be stripped down and the components checked for damage. Any damage found must be treated as serious.

Don't let this happen to you!



Control Cables and Control Rods

Transferring your movements in the cockpit to the part of the aircraft that causes the aircraft to change direction is an extremely important system. But with this in mind aircraft control systems are probably the least inspected and maintained. This is not because people do not want to do the work, but because rarely are people told what to look for. There have been a number of control cable failures reported in the recent past, which could have been prevented. All cables that can be accessed should have a visual inspection during each daily inspection.

All control surfaces should be checked for excessive movement at the same time. So what are we looking for? Wear on a control cable could be shiny areas where the strands of the cable have been rubbing, or broken strands.

Excessive wear is where the space between two strands of a cable has joined.

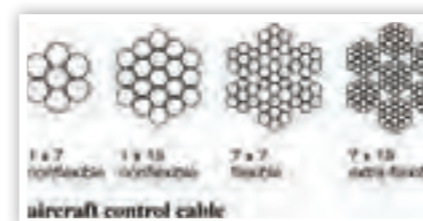


>> From bottom to top: note the minor wear - usually caused when the cable runs over a pulley or through a fairlead, (middle) note the spaces between the strands has joined, this is enough to change the cable. Top - this is worn beyond limits - remember 2 strands broken or worn beyond 40% in one bundle mean the cable is unserviceable. When refitting cables make sure that each cable is within its tension limits (and account for the ambient temperature), when there are two cables on a single control each cable tension should be the same.

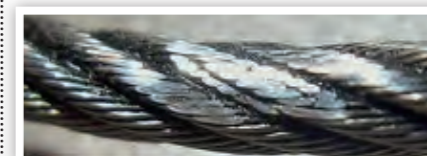
From AC 43-13

Cables where two or more strands are worn beyond 50% should be replaced and wear between 40 and 50% should be closely monitored.

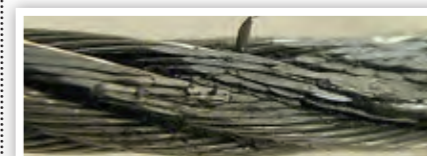
For broken strands it depends where the break is - a single broken strand within 25cm of a join, fairlead, pulley or swaged end means the cable should be replaced. In other areas two or more strands can be broken, providing there are no more than one in each bundle of strands.



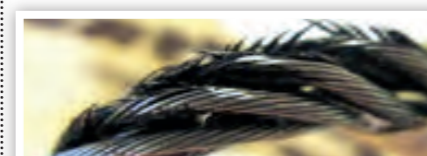
Each Cable is made of a number of strands twisted into a bundle, and then several bundles are twisted together.



1. Is this aircraft cable wear acceptable?



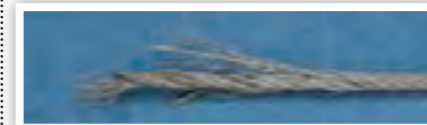
2. Same cable with tension released



3. Same cable tension released and bent

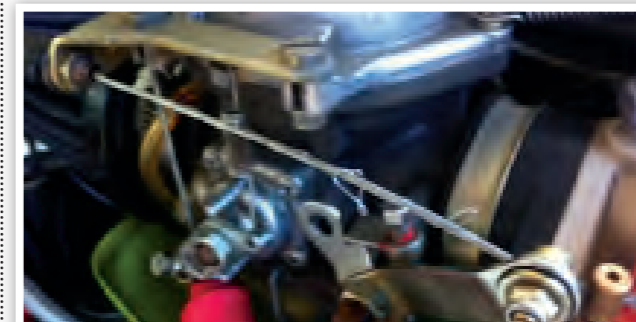
When a cable is seen to be worn, it should be removed and inspected, this will show any broken strands. So the answer to number 1, is no. This is usually done during each 100 hour inspection.

But we don't want this to occur: -



>> Typical (non ball) rod end, notice the locked nut.

Or this in an engine.



Control Rods

Control rods have a rigid section with (normally) ball end at each end. The biggest trap with these is to have one end with little thread showing and the other end just in safe. Most control rods have a small hole drilled just before the threaded portion. If a wire can be pushed through this hole then the rod end is not into the rigid pipe enough and may fall out. Each rod end usually has a ball joint which must be kept clean and lubricated (see the aircraft manufacturer's instructions about what lubricant to use and how to service the rods). Finally the jam nut should be tight and locked.

All cables and rods must be adjusted in such a manner that the control movement will match the cockpit control movement and so that the control movement is precisely what the aircraft manufacturer recommends.

Happy and safe flying and fixing. ✈️



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I have control

SOME years back, two blokes were flying around the outback in a tandem seat aircraft. They were having fun and didn't particularly care that they were illegal because they were flying at treetop level. There was one tree higher than the others and, of course, by tempting providence, it was inevitable this pair would smack into it.

When the noise of ripping and crumbling metal died away, they found themselves sitting with the wreckage of the destroyed aircraft around them. The only sound in the outback wilderness, apart from the ticking of the engine cooling was of a Kookaburra (a Jackass!), chortling from a nearby tree.

The following conversation followed:

- Front seat pilot: 'Didn't you see that tree poking up in front of us? Why didn't you avoid it?'
- Back seat pilot (somewhat annoyed) 'Of course I saw it but I thought you were flying the aircraft!'

Luckily their wounds, although severe, were not life threatening.

I have often wondered if these blokes learnt anything from their experience.

One of the first airmanship points in the syllabus is that of establishing who has command. The British use the very formal 'You have command' with the reply 'I have command', to effect the transfer of control. I have noted that our colloquial 'Handing over', 'Taking over' is more common in Australia.

Whatever form is used, the importance of knowing who is flying the aircraft is critical, regardless of whether it's a rag and tube ultralight or a massive 747.

As in most things in the art of instructing, the procedure for the handing over of control is not as simple as it first may appear.

As flying instructors, we have a responsibility to make the student pilot aware of just what the procedure involves and how to effectively carry it out.

tively carry it out.

Also, as the flying instructor, it's important not to gloss over the explanation of any of the airmanship points.

Procedure for transfer of control of the aircraft

During the pre-flight briefing

- Explain the importance of establishing who has command of the aircraft. There should be no confusion as to who is doing what;

be felt guiding the student's input. It is to be stressed the student should still initiate control input and not assume the instructor has taken over;

- When the student takes command, their hands and feet must be on the controls ready to take over before acknowledging 'Taking over';
- Most importantly, the student has to develop an 'in-command' attitude. The student should be told that all decision making and the consequences of the subsequent actions will be the student's. That student is now 'The Captain' with all the attendant responsibilities of being 'The Captain'.

During the flight

- Take every opportunity to practice the transfer of control. This can happen during the taxiing on the very first lesson;
- If the student does not respond correctly, reinforce the procedure and keep on reinforcing it until the correct response is made;
- Ensure the procedure is fairly formal. There is really no place for 'She's yours' or 'You got 'er'. Remember, the instructor has the responsibility of inculcating a lifetime good habits in the student.

During the debrief

- Reinforce the airmanship point and if the student has complied, congratulate that student, so they are left with a 'feel good feeling' as they wend their way homeward.

During subsequent flights

- Do not accept that the transfer of control goes unacknowledged. Insist on compliance by immediately reminding the student of the correct procedure.

As usual, comments are invited from instructors, pilots and students.



Sometimes an instructor may wish the student to have a "feel" for what is going on. In these circumstances the instructor says "follow me through" and the student places his/her hands and feet lightly on the controls

- Likewise when the student has taken control. The instructor's input may sometimes

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Sonex Waiecx

Airframe: 119 hrs ttis.

The aircraft touched down smoothly and on the final part of the roll out, the bolt securing the axle and wheel assembly to the left hand main gear leg sheared. The wheel assembly rotated, causing the aircraft to veer off the runway. The aircraft received minor damage.

TL Sirius

Pilot experience: 17 hrs, 2 on type

Conditions: Light winds and turbulence.

The student had undergone some dual training on the aircraft and had just completed an uneventful solo circuit. On the subsequent landing the aircraft ballooned, then landed heavily on the nose wheel. The nose gear collapsed and the aircraft came to rest with major damage to the propeller and nose gear. The pilot was not injured.

Rand KR2

Conditions: Light winds, nil turbulence.

Pilot experience: 1500 hrs, 4 on type.

After touchdown, the aircraft bounced lightly

and began to veer off the runway. Despite corrective action, the pilot was unable to prevent it running into very soft ground at the edge of the runway where it came to rest inverted. The pilot and passenger received minor cuts and bruising. The aircraft received major damage to the propeller canopy and airframe.

Festival R40

Pilot experience: 1012 hrs, 11 on type.

The student was side slipping the aircraft on landing and left recovery from the manoeuvre too late. The aircraft struck the ground with its wingtip causing minor damage.

Zenith CH 701

Pilot experience: 1650 hrs, 35 on type.

As the aircraft touched down on a strip which was covered in long grass, the nose wheel hit a hole in the ground, damaging both the nose gear leg and the propeller. It then bounced back into the air before landing heavily and coming to rest. The pilot and passenger exited without injury.

Teenie 2

Pilot experience: 160 hrs, <1 on type.

After doing several taxi runs, the pilot took off and completed a circuit and landing. On the next circuit, the aircraft flared early, ballooned and landed heavily. The pilot braked lightly but the aircraft veered off the runway and into some grass where the right undercarriage leg failed. The aircraft came to rest with further damage to the underside of the wing. The pilot was not injured.

Skyfox CA22

Pilot experience: 200 hrs all on type.

The aircraft was being flown at low level over a large expanse of glassy water. The pilot executed a 180 turn followed shortly after by a similar turn. At the completion of this turn, the port wing and undercarriage struck the surface and the aircraft came to rest in about two metres of water where the pilot exited uninjured. The pilot admitted to having consumed a small amount of alcohol earlier in the day. The aircraft received extensive damage.

DEFECTS

Chinook WT 11

Engine: Rotax 277, 554 hrs ttis.

The engine had just undergone a major overhaul. On the first flight after reinstallation of the engine, it failed due to seizure of the piston, which had been incorrectly installed. The piston rings had entered the exhaust port and the piston was destroyed. Further faults were found in the form of an incorrectly tensioned inlet manifold stud and a deformed crankshaft seal.

Jabiru 2200

Engine: Jabiru 2200, 675 hrs ttis.

The newly zero timed engine exhibited several oil leaks which were cleaned before test flying the aircraft. The leaks reappeared after the test flight and were traced to a crack in the No 4 cylinder base flange.

Tecnam Super Echo

Airframe: 1300 hrs ttis.

A split was noticed in the left hand wheel rim when the aircraft was returned to the hangar after a day's flying. The aircraft had only performed one normal landing since the last pre-flight inspection. 6 ply tyres had been fitted to the aircraft in place of the standard 4 ply units which may have had some bearing on the rim failure.

>> Incorrect ply tyres may cause damage



Dammed

by Dave Tonks

IF YOU DON'T



W If it is not safe for amphibian aircraft, then it is not safe for high speed boats or jet skis either

RECENTLY I became aware of a situation regarding the use of amphibian aircraft on freshwater lakes in South East Queensland. Or, more to the point, the fact that this is not allowed under any circumstances.

This situation came to my notice when I was informed a pilot had landed an amphibian aircraft on Lake Moogerah, situated about 6nm west of Boonah.

The information I have is second hand and sketchy, but I was informed that (a) the pilot was fined, and (b) the attitude of those policing this ruling (Rangers from South East Queensland Water) were far from courteous and professional in the carrying out of their duties.

I contacted Seqwater, the body governing 25 dams in South East Queensland, including the seven dams which are approved for fuel-powered boating. And I contacted the Minister for Energy and Water Utilities, Stephen Robertson.

I received a reply which informed me that policy did not allow for amphibian aircraft to use water controlled by Seqwater for the following reasons:

1. "Paragraph 8.5 of the CASA Guidelines for Aeroplane Landing Areas states that 'Except in an emergency, the consent of the owner/occupier is required before a landing area may be used'.

Seqwater has not given consent to any pilots to use any of our lakes as landing areas". (Please note the use of the term "our lakes" – Seqwater seem to think that the lakes are 'theirs').

2. "Seqwater lakes are subject to fluctuating water levels and there may be submerged hazards at different water levels". Apparently Seqwater believes, somewhat naively in my opinion, that boat and jet-ski operators conduct "slow and close inspections of areas to be used for submerged obstacles before then travelling at speed" and that it is "not possible for amphibious aircraft to conduct such safety surveys to the same level of accuracy". I can just imagine some 18 year old powerboat driv-

surely it should be OK for amphibian aircraft to undertake the same risks? If it is not safe for amphibian aircraft, then it is not safe for high speed boats and jet-skis either.

2. The number of incidents/accidents involving boats on waterways should be compared with those concerning amphibian aircraft so a proper consideration of risk factors can be ascertained, rather than just to make a sweeping statement along the lines of "boats and jet-skis are safe travelling at high speed on waterways and amphibian aircraft are not".

3. The level of training an amphibian pilot receives is immensely different to the basic one hour course required for a boat licence. Am-

all of the above, incensed that a government department could make a decision to exclude one particular category of participant from areas under their control which are available to numerous other categories of participants. To me, it is plain and simply discrimination.

Secondly, I find it concerning the people making this decision have done so without any investigation into whether or not the usage of waterway by amphibian aircraft is, in fact, dangerous.

They have simply decided this is the situation (based, I assume, on pre-conceived ideas and concepts concerning amphibian aircraft).

If the authorities concerned informed me that a suitably qualified person with significant



>> Let us challenge this obvious discrimination

er inspecting the waters of a lake before he/she starts roaring around a dam at high speed with two screaming kids clinging precariously to the rubber tube/s being towed behind.

3. "Seqwater's considered assessment is that allowing amphibious aircraft to use their lakes (again, "their" lakes) would create significant and unacceptable safety issues for other recreational users". In other words, it's OK for every other type of recreational pursuit using the lakes, to the absolute exclusion of amphibian aircraft.

My argument to both Seqwater and Stephen Robertson included the following:

1. If indeed the dams have "fluctuating water levels" and "submerged hazards", why are high speed boats allowed to navigate these 'dangerous' waters? If it is good enough for boats to put up with these hazards, then

phibian training includes the importance of an inspection of any waterway before considering a landing or takeoff, including ensuring that the landing/takeoff will not result in any risk to other waterway users.

4. There is a definite level of discrimination involved in the decision that "allowing amphibious aircraft to use (the) lakes would create significant and unacceptable safety issues for other recreational users". What about considering the statement "allowing other recreational users to use the lakes would create unacceptable safety issues for amphibian aircraft users".

My point is that no user should be singled out for exclusion because of the unsupported opinion that by including them, other users MAY be put at risk.

I am, as one could expect from reading

experience in aviation issues (including the use of public waterways by amphibian aircraft) had investigated the situation and concluded the use of amphibian aircraft posed a real threat to the safety of other users of waterways, I would be inclined to at least listen to their argument.

I am unable to take this matter further. I have taken my argument, which I consider to be a sound one, to both Seqwater and the Minister responsible.

The end result is that no change will be considered to the discriminatory and fundamentally unfair situation regarding the usage of freshwater dams in South East Queensland by amphibian aircraft.

It is now up to others in the aviation arena to take up this fight in order to obtain a fair and just resolution.

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water flying

by Philip Myer

WATER flying is very challenging but immensely rewarding - it is visual flying at its best.

I did my amphibian endorsement in a Cessna 185 with Rod Gunther at Williamstown, Victoria - a very experienced gentleman, high time water pilot and patient instructor.

A newly float-rated pilot will soon discover it is impossible to solo hire a seaplane. If you really want to advance your skills and use your endorsement as 'a ticket to learn', you will have to buy your own aircraft.

I became an RA-Aus pilot after more than 2000 hours of GA flying. After a lot of research, I bought a Foxbat A22LS fitted with amphibious floats from the US.

Rod test flew the aircraft for me, after which I did a couple of hours dual with him and then I was off to learn on my own.

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Light on controls, this aircraft's handling at low and high speed is one of the best you will ever fly. There is no reverse saw, it has lots of feed back at any speed. Designed as a simple build kit, no jigs required. **Call \$11,990** Complete kit with 80hp motor - **\$13,590** Complete kit with 125hp motor **\$16,890**. All kits are + GST and less paint. Many options available.

- Cheetah MICZ Kit 2 seat - \$22,800
- Super Diamond Kit single seat - \$14,900
- Cougar 4 seat complete kit - \$65,500.
- De-rigs in 5-10 mins into a trailer
- 120knts cruise - simple build.
- All prices are + GST

Also available: Props, canopies, parts, repairs, re-builds, fibreglass, timber and metal, GFA Form II inspections.

Contact: Garry Morgan, Morgan Aero Works, Taree Airport, NSW
 Ph (02) 6553 9920 Mob 0418 253 466 Email gkmorgan@ihug.com.au
 Web www.morganaeroworks.com.au

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COUGAR 2 + 2

COUGAR 2 2 H.A.A 4 SEAT VIB
 Complete kit \$68,500 + GST
 Many options available
 De-rig into trailer in 5 - 10 minutes



>> The amphibian is even more stable than the land-bound version

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www.gostneraviation.com.au

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Email oasisf@bigpond.com Website: www.oasisflighttraining.com.au

The Foxbat has some wonderful attributes as a seaplane. It is very stable, even more so than the land bound version because of the pendulum effect of the floats.

The speeds are low, but the stall speed is only slightly higher than the land version. The visibility is outstanding. The liquid cooled Rotax engine keeps the temperature stable at 90°C even after hours of water circuits. Its simple and reliable starting is important on the water, because once you push off the beach or dock, you have to get the motor started quickly. The airframe is simple and easy to wash and maintain, an advantage for a seaplane especially one which operates around salt water.

In the air, the amphibian handles very much like the land version. The drag of the floats slows the cruise speeds down to 80kts at 5200rpm and 75kts at 4800rpm - but who needs speed when you are water flying for the fun of it?

As novices, most pilots start out being 'water shy' when it comes to landing and taking off. The only way to 'cure' this ailment is lots and lots of splash and goes.

Once you are in the groove, you 'land' and remain on 'the step', then reapply power to take off again to only a height of 150ft or so before making another approach.

This way you build up a lot of landings and you

In the air, the amphibian handles very much like the land version

expand your skill base. A full stop landing is when you allow the aircraft to come off the step and settle into displacement mode.

Taking off from the water involves learning to get the aircraft on the step as quickly as possible. You learn to ease the full back pressure as the aircraft climbs up over the step. Then you learn to feel for the sweet spot as the aircraft planes on the top of the water.

Once on the step at full power, the aircraft accelerates to flying speed - which for the Foxbat is 35kts. You don't rotate the aircraft because this will only put the back of the floats in the water and slow you down. Once airborne, you fly in the ground effect until speed builds to 55kts for a safe climb.

When comfortable with 'normal' take offs and landings, you expand into cross wind and glassy water operations.

Glassy water landings are amazing. As the

name implies, when there is no wind, the water becomes mirrorlike and you cannot tell where the surface is, making it very dangerous to flare normally. The approach is made by establishing a stabilised descent, with a fixed attitude and power setting. You fly the aircraft onto the water, not looking for the water, because this would tempt you to flare when it is not safe to do so.

The Foxbat has an engine-out glide speed of 60kts clean and 55kts with flap. I find glide approaches rewarding, requiring good energy management with the need to make a continuous flare to ensure a gentle landing.

Rougher water requires a relaxing of yoke pressure after flaring close to water, to ensure the floats are in a flatter attitude to cut through the water rather than smack on to it.

The environment is always different and challenging and requires your full attention. You have to be alert for changing conditions and traffic on the water.

River landings are the most critical. There is not much room on the water. Most rivers are in valleys, so the area must be thoroughly checked out at a safe level first. That includes the landing, beaching, overshoot and take-off areas - all before you descend to the water.

Landing and taking off from the water needs 100% of your attention but it rewards you with 200% fun.

1886 AVID FLYER, 19-3304



TT 550 hours, Subaru EA81 engine, 80 kts cruise, 2 seats, radio/intercom, 56 litres fuel, luggage space, \$29,500 ono. Ph Ian 03 5127 2476

2280 EVANS VP-1A VOLKSPLANE



VH-EVP for sale. Always hangared Melbourne. Superb condition. 53 hrs TT. VW1600. Cruise 60kts. Empty 236kg Max 348kg. Load 83kg with full fuel. Fuel 39L at 11Lph. VH-EVP experimental but can be RA-Aus registered. Very pleasant and fun to fly, no vices. Cheap flying \$10,000 ono. Ph 0401 388 651 or 0403 849 117

2358 QUAD-CITY CHALLENGER 1 CWS



Clipped Wing Special, Single seat, vg condition, 345hrs, Radio, GPS, elect. start Rotax 503 2-stroke, new tinted windscreen, 4 strobes, flaperons, lambswool seat. Rego to Sep 2011. You-Tube for wonderful flight examples. Unique aircraft, flies itself. The Oaks. \$9,990. John 0400 627 339 or email jdsquared@bigpond.com

2403 X-AIR



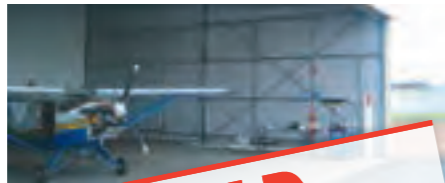
X-AIR, TT 165hrs, 75hrs with Rotax 618, Ultralam skins, Bolly prop & spinner. Spats, wide entry. Hangared at Clifton QLD. \$18,950. For history and more pic's e-mail shirroy@bigpond.com

2464 ZODIAC 601XL-B



Jabiru 3300 TT AF and ENG 104 hours. Recently upgraded. Beautifully built aircraft with superb looks and handling. Full glass cockpit Dynon D100 D120 and Avmap IV. Microair transponder and VHF radio. Suit new buyer. Reluctant sale. Visit www.jodaplanes.com for all build and flying photos. \$75,000 ono. Contact Dave 0407 008 896 email davidg@fnoc.com.au

2476 HANGARS



SOLD
HANGARS For Sale at Airport NSW (YSCO). Brand New Enclosed and Secure. 12m x 12m individual hangars. Sliding Doors 3.6m high. Concrete Floor. Power, light and water. Tarmac Apron and Taxiway. Freehold Title. Ph: 0429 810 008

2509 LIGHTNING AIRCRAFT



(RA-Aus.19 Reg) Excellent condition, suit new buyer, always hangared, low Hrs, Extended Wing Tips, Electric Trim & Flaps, Park Brake, 43 Kts Stall, 136 Kts Cruise. AVIONICS, Dynon D180, Garmin SL 40 VHF, Garmin GTX 327 Transponder, Trio Auto Pilot,

Lowrance 2000c moving map GPS, ASI, Certified Compass, Cabin Heat, Boarding Steps, ELT, Aux Power Plug, Nav & Strobe Lights, Landing Lights, Boarding Steps. Latest Model JABIRU 3300 Eng. \$125,000 inc GST. Ph 08 8767 2145, Mob, 0408 813 501

2515 SONEX AEROVEE



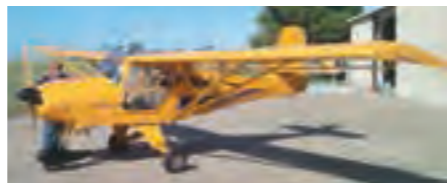
80HP Taildragger, TT 80 Hours, Microair Radio, Grand Rapids EIS, Garmin 196 GPS, Cruise 100kts, Polished Metal. Currently VH registered. Will register RA-Aus for new owner if required. Email sonex386@gmail.com or Ph Shane 0412 537 730 \$50,00 Price reduced.

2523 TECNAM P2004B



RA-Aus 24-4664 Immaculate condition. Always hangared, Lismore area. Rotax 100 HP. 200Hours.120Kts cruise, 18 litres per hour. Strengthened main undercarriage. Airmaster 3 Blade electronic prop and large wheels fitted for short field perf. Separate foot and handbrakes. Dual pole controls with electric trim. Dynon EFIS D100, Garmin GPS Map 296, Garmin SL40 VHF w Intercom, Garmin GTX 320A Transponder w Mode C, Fuel Computer. Strobes, nav lights. Reason for sale - new aircraft arrived. \$130,000 including GST Ph 0412 834 225

2525 SKYFOX GAZELLE



Exc. cond. 1674 hours. Fresh gearbox o'haul. Fresh 100 hrly. Fantastic trainer. Foldable wings for easy trailering or storage. Full maint. history. VHF/UHF radios. Good fun, economical aircraft. Based in Moruya. Delivery options available. \$35,000 Ph. 02 4478 6288/0411 480 393

2570 FACTORY COMPLETED BRUMBY



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2571 JABIRU SK



TT 209hrs, 2200 engine overhauled by Jabiru at 140 hrs. New Prop, Good Panel, includes VSI, DG & EGT, Icom radio, Garmin GPS III Pilot, 2 headsets, Strobe, Custom stripes, Wheel spats. Always kept in hangar. Located Bunbury WA. \$45,000 ono. Hangar also for sale \$15,000. Ph Greg 08 9586 3964 or 0408 746 391

2574 SAVANNAH FOR SALE



Rotax 912 ULS. 3 years old . 285 hours airframe and engine. Regular maintenance by qualified LAME. Warp Drive propeller. Fuel flow meter. XCOM radio/intercom. COMMANT antenna. Original slat-wing for true STOL performance - 26 knot stall. MOGAS used for last 240 hours exclusively. Always hangar stored. Good condition. Reluctant sale. \$64,000 Ph 0417 141 542 Kym

2575 LIGHTNING



TT 55hrs. Jabiru 3300 120hp. Sensenich prop. Dynon EFIS+EMS. GPS AvMap. A/P Trio. Garmin GTX327. Com SL40. Cruise 135Kts, 22Lts. Leather Upholstry and Trim. Always hangared. \$129,000 no GST. Ph. 02 6559 2599. 0408 312 601

2580 TECNAM BRAVO LSA



Immaculate condition only 165 hrs TT. 100hp Rotax 912. Dynon EFIS D100. Garmin Mode C transponder. Garmin radio. AvMap large screen colour GPS. Dual fuel flow meters with electric fuel gauges. Electronic trim. Fully maintained by LAME. Always hangared. \$118,000 + GST. Phone 0411 471 273 for more details.

2584 SKYFOX GAZELLE FUSELAGE

Complete Fuselage for sale. Straight, nil accidents. Includes stainless steel firewall, windscreen and doors. Currently stored near Kingaroy Qld. Photos available on request. \$5,000 ono. Ph John 0427 757 922 or email johnmcbryde@gmail.com

2588 ROBERTSON STOL B1-RD

The ultimate STOL fun machine, this 95-10 built by Robertson Aircraft Corporation using standard aircraft components. Massive 162sqft wing gives stall speed of 15mph and cruise speed 38mph. Website www.ultralightnews.com/antulbg/b1rd_ultralight.htm. Original Cuyuna 30Hp plus spare Rotax 503. \$5,000 John 0427 757 922

2615 HOUSE & HANGAR TEMORA NSW



3 bedrooms, large living area, as new. 2 bathrooms, steel frame. 1000mtr block. A/C double insulation. Town water & gas. Hangar 18 X 12 X 5m. Power on & toilet sewer. \$450,000 Ph 02 6977 4781 or 0418 113 690

2629 ZENITH STOL CH701



Rotax 912 80 hp, 620 hrs A/F & eng.VFR instruments & all standard engine gauges plus dual EGT & fuel computer. VHF radio headsets & coms. Always hangared. Have finished next one. \$45,000 ono. Delivery by air can be arranged. Email. linart@aussiebroadband.com.au Phone 08 9655 3090

2634 CHEETAH SIERRA 19-5473



TTIS 68hrs. Jabiru 2.2 Hydraulic Lifters. Sensenich 60 X 46 Prop 10hrs. Matco brakes ASI, VSI, ALT, TBI, 2 X EGT, 2 X CHT. Icom ICA 200 radio & Flitecom intercom. 2 X Avcomm Headsets. Lowrance C2000 GPS. Located Taree NSW. \$62,500 neg No GST. Ph 02 6552 2383 Mob 0429 954 479

2641 JABIRU J120-C



Reg. 24-7002 Factory Built December 2008. Cruise TAS, 105 Kts on 14 Lph. This aeroplane has always been hangared. Approx 250 Hours Engine/Airframe. Level 2 Maintained. Many extras. Genuine reason for selling. Asking Price \$57,000 ONO. Contact Steve 0457 179 960 Northam WA

2644 JABIRU LSA-55



1600 hrs TTIS. less than 200hrs on factory rebuilt solid lifter engine, with new through bolts, ignition coils & leads. Full GA panel with Bendix King transponder & Icom A200 VHF, Garmin 196 moving map GPS. Recent 2-pack repaint, interior immaculate. Always hangared, one of the neatest around. Flies beautifully, cruise 95-100kts at 13-14 litres/hour. Full L2/LAME history from new. Regularly serviced. Selling to make room for new project. Located near Launceston, Tas. \$39,000 Ph 0419 375 291.

2647 Wanted

Damaged aircraft for repair or parts, or unfinished projects, will consider anything. Ph 0419 476 677 or email planesmaker@gmail.com

2650 GENESIS SLIPSTREAM- 4142



Always Hangared, as new. 100 hp Rotax 912 uls, 120 hrs TT airframe & engine. Warp Drive ground adjustable prop. Stratomaster Digital panel, Garmin 296 GPS, Xcom VHF T2000 transponder. 2 sets of

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2652 AIRBORNE 912 XT



Tundra, SST wing. Helmets, Intercom, Radio. Wing and Base covers. Ballistic Parachute. 14 hrs total time. \$65,000 without BRS. Ph Peter 0418 278 012 or 0418 681 898

2653 SAVAGE CUB 2010



Rotax 912 ULS. 78 hrs. Vortex Generators. VHF/UHF Radios and intercom. Rear Instruments and Controls. As new. Many factory extras. Substantial savings on new aircraft. Superb tail-wheel trainer, runways optional. Phone Peter 0418 681 898

2654 SB DRIFTER



25-0746 Factory built. 700 hours. Full plain complete recovery fabric, new engine, 100 new helmets, new rear cockpit instr. 100 new helmets have been made for ease of dual training. Phone 0418 859 049 or email hastings@bigpond.com, South Australia

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2656 DRIFTER (AUSTFLIGHT)

Not being flown our Drifter needs a new home, wire braced, upright engine mount, Rotax 582, electric start, skins replaced, engine o/haul completed, super aircraft. great to fly, good looking blue with gold trim. Rego 25-0445. Make reasonable offer (03) 94396083 AH, mail@goflying.com.au

2660 THRUSTER 95.10

Built in 1997, always kept in hangar, flown approx 400 hrs Rotax 503 engine, health reason forces sale. At present aircraft is stored under house. All in good condition \$6,000 ono. Qld Ph 07 5496 2116. Mob 0417 626 314

2661 BMW RT100 MOTOR



1000cc 70hp set up for aviation with Rotax reduction drive & twin ignition, 2 spark plugs per cylinder, comes with exhaust manifold \$2,500 Phone Tony 0429 132 128

2662 HIRTH 2004



Model 3701 3 cylinder fuel injected 100 hp 2 stroke with reduction drive, prop, spinner, fuel pump, wiring & computer only 61 hrs since new \$6,000 or \$5,500 without prop Phone Tony on 0429 132 128

2663 AERO PUP



2 seater only flown 30 hrs. Fitted with Jabiru 6 cylinder engine. \$45,000, cost \$55,000 to build. Ph 0412 421 032

2664 FLIGHTSTAR IISC



Brand new, never flown Flightstar IISC, one of the last ones to come from the US. Has been assembled with excellent attention to detail. Plane includes a fully enclosed cabin, dual controls, custom carpet interior, Falcon instruments, in-flight trim, brakes and mylar

coverings. Plane is not fitted with an engine but can be sold with a Rotax 582 with 212 hours, or can be fitted with an engine of buyer's choice. Please call for more details: 0412 506 242

2665 JABIRU J160C



Factory built 2007 Reg 24-4926 Aircraft and engine 230TT. Dual Microair radio and Microair transponder. Garmin Aera GPS. Beautiful condition, well looked after and always hangared. \$65,000. Ph 0438 634 411

2666 EUROPA XS 19-7850



Monowheel 180 hrs. TT. Jabiru 3300 engine. In very good condition, built to high standard, CAO 101- 28

compliant,(recently changed from G.A. reg). Wings are quickly detachable & a reg. trailer is included. \$78,000 Ph. 0428 988 662 email derekr@bigpond.com

2671 JABIRU SP 500/6 19-3717



Well maintained and 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. Will deliver anywhere. \$55,000. 08 9921 8790

2675 LSA LIGHTNING AIRCRAFT



24-7660 Avionics, Grand Rapids Sport EFIS inc Auto Pilot, Garmin SL40 comm, Garmin GTX327 Transponder, 1000ll intercom, EIS 600J eng. Monitor, Kannad 406 ELT, ASI, Cabin heat, Custom upholstery Package, Landing Lights, Nav & Strobe Lights, Dual Brakes, Boarding Steps, AuxPower Plug. JABIRU 3300 Engine. All in EX.cond. \$130,000 inc GST Ph. 08 8767 2145 or 0408 813 501

2676 JABIRU-REBUILD PROJECT

Early model Jabiru damaged in EFOTF accident. Airframe needs fibreglass repairs & repaint. Engine needs repair (not major). 55 registration. Airframe TTIS 2710 hrs. Engine TTIS 358hrs. \$15,500 Located Bowral NSW. For further information & photos email jafborsale@hotmail.com or phone 0417 429 369

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2678 ROTAX 912A 80HP

600 hrs since overhaul. 900 hrs to run. Includes most accessories. \$10,000 +GST. Ph Tony 0411 234 191 or email gypieaircraft@bigpond.com

2679 GAZELLE CA25N



1700hrs ttis. Engine 450hrs since top overhaul. A1 condition, owned by ex skyfox factory chief engineer. \$38,000 no GST. Ph Tony 0411 234 191 or email gypieaircraft@bigpond.com

2680 PIONEER 300



Jabiru 3300 powered, retractable geared, transponder, Garmin 296 GPS, Micro radio & intercom, electric trim, VFR instruments, RA-Aus Registered, fuel miser, 34kts stall, 130kts cruise. All up 260hrs, this aircraft has been hangared, service records up to date. Just a dream to fly, many other extra's \$135,000, call Mark on 0448 387 828, No GST.

2681 AIRBORNE XT912 STREAK



3 wing only done 120 hrs coms radio helmets mostly flown Sundays Hangared Coffs Harbour. \$46,000. Ph. 0428 850 062

2682 JABIRU SP6



19-4198 Factory assist build Nov 2004. 6 cyl engine 440 hrs TTIS Garmin 296, Big tyres, Large Oil cooler, X Com radio, MP3, 85 lt fuel Tank. Full service history, Always hangared. \$54,000. Ph Barry 0418 105 232

2683 LIGHTWING 25-0699



TailDragger G.R. heleview model. Manufactured 1993. 912S Engine fitted new 2004, 600 hrs, VHF & UHF Radios. Lawrence colour G.P.S. Aircraft is in good condition & well maintained. \$44,000 ONO. Ph 07 4039 7897

2684 HANGAR AT GOLD COAST



Individual, secure, lockup hangar for sale at Heckfield (midway between Brisbane and Gold Coast). Suit RV7 or similar sized aircraft. Power, water, security lighting. Caretaker lives on site. \$44,000. Ph 0414 180878.

2685 AIRBORNE XT912



Tundra 2008 model, (red) STREAK 3 with GRS chute, training bars, prop net and mud flap, chatterbox intercom & headsets, V rabbit antenna. Fly's 62kt hands off. Handles beautifully, reluctant sale. TT 560 hrs, nil accidents, complete log books. All services complete. \$45,000. PH 0415 530 939 or lgidiscala@bigpond.com

2686 FOR SALE JABIRU J-170C



Airframe 1400hrs, Engine 08hrs on new factory recon. engine, latest mods carried out by Jabiru factory. Fresh top overhaul, new tyres, Dynon 10 EFIS plus analog instruments, Garmin 296 colour GPS, external charge connector, Lambswool seat covers, spats as new, adjustable rudder pedals, strobe, L2 maintained, always hangared, one owner since new. \$69,000 incl GST. Phone Bill 0429 054 205

2687 CUB CRAFTERS SPORT CUB S2



24-7928, Deluxe panel, O-200 continental 100hp engine, 140 hours total, \$145,000 plus GST call Steve to arrange a test fly 0414 444 971

2688 EUROFOX 24-5052



Purchased Dec 2009, approx 434 hrs TT & 376 hrs AT. One owner/pilot, never used for training or cross hire, condition like new. Rotax 912ULS, 115 Tas at 17 ltr/hr, 88 ltr fuel tank, full glass panel, EKPIV AvMap, EFISD100, Xcom intercom, T2000SFL, Stratus50Digital Headsets, MT410G Beacon, strobe position & landing lights. \$85,000 Ph 0438 506 682

2689 THRUSTER T300 250068



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ERSA and Charts	PCAS Anti Collision	Multi Tools	Cotter Pins	Flight Sim Products
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Rotax 503. Engine, Airframe & Skins all in good conditions. Located in SA. Urgent Sale \$8,500 Urgent sale. Ph 0408 816 556

2690 ZENITH 601 XLB



320hrs TT, Jabiru 3300, Hydraulic lifter with hollow push rod upgrade, all AD's current. Petroni 3 blade prop, Cummins Spinner. Standard instruments and engine gauges. XCOM radio, Micro Air Transponder, Air Gizmo dock for Garmin x96. Electric flaps, Ray Allen aileron/elevator trim controls on the stick. Matco wheels and brakes. Excellent condition, superb to fly. Hangared Cessnock NSW. \$67,400 ono. Full build log available. Contact Work: 02 9925 5032, Mob: 0402 829 966, email: eddie.seve@clarity.com.

2691 LIGHTWING GR 912S



This aircraft is the original Lightwing with a Rotax 912S Total eng time 106 hrs, VSI, ALT, ASI, Oil Pres, EGT, fuel flow mtr, 2 fuel gauges VHF radio, 2 headsets, 80 ltrs fuel capacity, reg till Aug 2012. Hangared Gold Coast \$34,000. Ph 07 32067075 or 0413 101 310.

2692 SAVANNAH VG SERIES 2



Always hangared 560 MTOW, 912 engine, 455 hours engine and airframe, kool prop and tundra tyres, bubble doors give 4" wider, extended luggage bay, 150 ltrs fuel capacity, X-con radio and intercom, Lowerance 2000 GPS, portable beacon, standard instruments with fuel

flow, built late 2005. \$57,000. Email: lern2fly@hotmail.com or Ph Tom 0419 414 031.

2693 AIRPORT SITE COOTAMUNDRA NSW

Vacant commercial hangar site. 2,000sqm, 50m airside frontage. Level block, suit any aviation-related enterprise (STCA). Positive Council support. All services available, sealed Council road access. \$75,000. Ph. 02 6942 2344.

2694 SUPAPUP MK2



Single seat aircraft, 800 hrs, Rotax 503, 114hrs on airframe, always hangared. Excellent condition. Cruises at 75 kts, vhf radio, plenty of instruments. Comes with a registered custom trailer. Ph Steve 0447 331 708. Nth NSW.

2695 ZODIAC 601HDS



Eng: Jabiru 3300. TT173 hrs eng airframe. Cruise 105 kts, endurance 4hrs plus reserves. Currently reg GA experimental. Colour bright blue. Excellent condition inside and out. Located Moruya. \$29,000 ono. No GST applicable. birddog4@gmail.com Contact Sheldon 0427 102 540.

2696 DRUINE TURBULENT AT100



19-4864, built under 101.28, brand new with permit. Single seat wooden, VW 1835cc. Expect 90+kts cruise, stall 32kts. 14 lph, total 401. dual ign. (Bendix mag. + coil), 25A alt. Fifth plans - built by experienced builder. \$19,000ono. Ph: 02 4351 1437 for more pics etc.

2697 JABIRU TRAILER



Warwick, Queensland. Will suit Jabiru aircraft up to J230/430. \$2,600 ono phone 07 4666 1676.

2698 SUPERCAT



19-5408 An award winning aircraft in good condition TT490hr Rotax 503 DCDI electric start 30hrs since overhaul Empty 288kg MTOW 430kg 50L fuel @15L/hr Stall 30kt and cruise 70kt delightful fun aircraft Comes with registered fully enclosed trailer. \$15,000 ono. Located Caboolture QLD. Phone Harry on 0448 461 012.

2699 A22LS FOXBAT AMPHIBIAN



Under 50 hours. Dynon D180 FlightDek with b/u

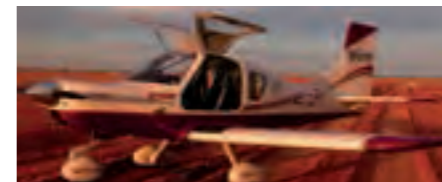
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2700 ZODIAC 601HDS



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Dipstick

by Peter Johnson

WHY don't we have a little talk about dipsticks?

We all think we know something about them. We have all encountered a few dipsticks in our time.

You walk up to your aeroplane in the early morning, pull out the dipstick, see plenty of oil on the stick. You stick it back in and Bob's your uncle (this means everything is OK). But is Bob a cross dresser? Or, perhaps Bob is not your uncle but in fact your aunty.

The plot thickens.

Do you know what? If this sounds like you, you might even be a dipstick. (Stupid person)

I know a dipstick who borrowed a fuel dipstick (piece of timber) from another aircraft to check his fuel level. The problem with this dipstick (piece of timber) was that it came from a different type of aircraft. The dipstick (stupid person) expected to read the litres off the dipstick (piece of timber) but it was calibrated for a different aeroplane.

I have also met a dipstick (stupid person) who borrowed a fuel dipstick (piece of timber) from another aeroplane of the same type which had different tanks fitted.

The consequences of getting this wrong could be very serious indeed.

For example, do you really know the correct procedure for using the engine oil dipstick?

Some are just dipsticks.

A Cessna 150 fitted with a continental engine comes to mind. First thing in the morning after the oil has settled overnight, you might think it safe to read the oil level by pulling out the stick and looking at it.

Guess what? You would be wrong. This engine seems to get some sort of an air / oil lock up the dipstick stem. If you use the correct method, you will get a shock to see the real reading. That involves pulling out the dipstick and wiping it clean on clean rag or tissue before replacing it momentarily and then pulling it out again. The second reading will usually be much lower than the first (false) reading.

Then there is another type of dipstick which is an attachment to the screw in oil cap.

What is the correct procedure to use with this type of dipstick? An O 320 Lycoming engine type dipstick common to the Piper Warrior comes to mind.

I also have one of these fitted to my old BMW motorcycle (these engines have been used in aeroplanes). A Jabiru engine also comes to mind.

Do you screw it right in to get a reading? Or do you only hold it down as far as you can without screwing it in?

For the Jabiru, they don't hold much oil, so if you get this wrong the oil level could be below the minimum allowed. It is either one thing or the other. It is an oil cap or it is a dipstick. Do not screw it down to measure the oil. (Of course do screw it down when you have finished reading the dipstick).

So unscrew the cap, pull out the dipstick, wipe it clean with clean rag or tissue, then use it as a dipstick, (don't screw it into the thread).

Read the level and satisfied you have enough oil, then screw it back into the thread to replace it.

By the way, finger tight is enough. Do not over tighten. I have had to use pliers to undo some of these caps after heavy handed dipsticks (stupid people) have replaced them.

Check with your Instructor (I hope he/she is not a dipstick).

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>> A happy Drifter pilot arriving at the Back to Holbrook Fly-in; The CAB Wasp...one of the pioneers; Jimmy William's immaculate, amphibious L 19

Who else could boast Australia's largest 'rag and tube' brigade?

It's interesting to realise a small seed can grow into a large tree. In a similar vein, it's interesting how a small idea can grow into something much larger.

Holbrook Ultralight Club has had a long association with ultralight aviation and hosted the very first national Fly-in (NatFly), for the AUF (now RA-Aus), in early 1990. It was a discussion during NatFly at Narromine in 2006 which led to the Club hosting a fly-in with a focus on 'rag and tube' aircraft.

The Back to Holbrook Fly-in, has now grown into an annual event.

The last thing the planners of the 2006 Fly-expected was a rag and tube aircraft 54.3 metres (178 feet) long, standing 16.8 metres (55 feet) above the ground and powered by two 180 HP engines. But that was what appeared at the first "Back to Holbrook" Fly-in.

At 4pm, the Holden Airship appeared out of the setting sun to top off what was to be a very successful event. The crew had previously 'overnighted' at Holbrook and considered it to be ideal for their operations, unaware the Club had organised a fly-in that weekend.

The crew generously offered two seats for a flight the following day. They were auctioned off at the dinner in the hangar Saturday night. The funds went to the Australian Ultralight Aircraft Museum, which the Club had set up that year.

Due to the growing popularity, the Club has held the Back to Holbrook Fly-in every year since. In 2007, heavy rain threatened the event. Only one aircraft managed to make it in.

Despite the weather, that Fly-in was also big success because more than 60 enthusiasts drove to Holbrook to see the increasing collection in the

Museum. That collection grows every year.

The Club has also been able to attract speakers willing to recount their often experiences building and flying the early ultralights.

And learning to fly these machines without the formal flight training we enjoy today. In 2006, the Club's own Neville White spoke about how and why he built 16 models of the CAB Wasp in Gunnedah in the early 1980's. Bob Maiden, who donated a Kasperwing to the Museum, described the fun he had flying this unusual aircraft in the early days. On another occasion, Ron Ligeti talked about his ongoing involvement in the futuristic Ligeti Stratos, an aircraft designed by his late father.

In 2010 there was a variation. The "rag and tube" theme was still there in a talk and video on the development of the Free Flight Hornet by David Betteridge. But local pilot Jimmy Williams flew into Holbrook in his immaculate, amphibious Cessna L 19 Bird Dog and spoke about his experiences with this impressive aircraft.

The "Back to Holbrook" Fly-in will be held again on November 5 and 6. While the Club is noted for its enthusiasm for encouraging the lower, slower, simpler end of the range of recreational aircraft, members own and fly diverse types of aircraft. So it was decided to hold a Jabiru Festival in conjunction with the 2011 Fly-in event and it is hoped this will attract a large number of these aircraft. Jabiru Aircraft has donated some trophies for owners and pilots. For more information Bruce Avery 02 6041 6675 or by email avery36@optusnet.com.au.

The usual trophies will also be up for grabs for the rag and tube brigade. There will be a roast dinner Saturday evening in the hangar. Breakfast will be available on Sunday morning. Who'd want to be anywhere else?

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Skygazer

by Nash Petrincic

MY name is Nash and I love flying so much that some days that's all I can think about - I sit in class and stare out the window at the Cumulus cloud formations and wish I was in among them.

When I was 7, I thought about being in the Air Force as a fighter pilot. By the time I was 9, I took a great interest in aircraft and jets and borrowed books from the school library. I was constantly using our flight simulator on the computer. I knew a lot about aeroplanes and could easily recognise them from the sky.

My dad shouted me a joy ride in a glider back in June 2009 and the instructor was amazed how much I actually did know about aeroplanes, flying and the instrument panel.

For my 10th birthday, mum and dad paid for a membership with a gliding school in Bacchus Marsh. I attended every weekend, weather permitting of course, and managed 29 flights in various gliders. At the gliding school, I learnt even more skills and technology and it was great being around the members who had the same passion for flying as myself.

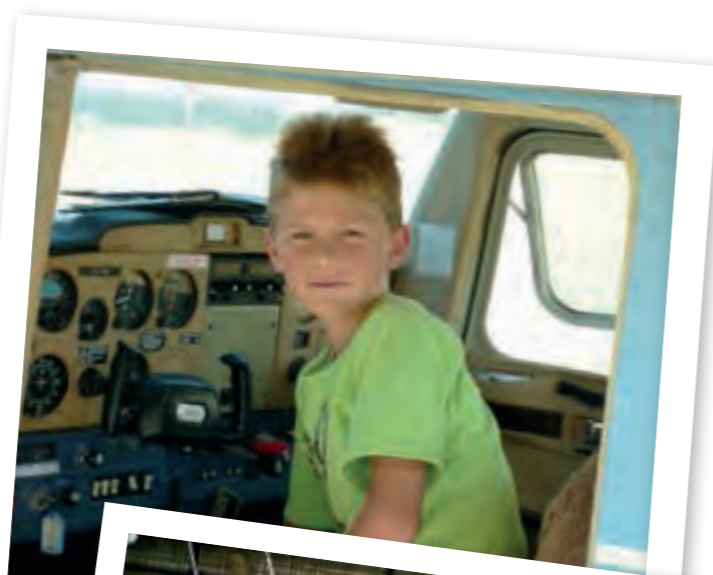
Due to some safety issues with my height and weight - I am a light framed person and not tall for my age - my gliding membership was put on hold. I was only allowed to glide on occasions and my hours were not going to be recorded as valid. I am able to re-join the gliding school when I turn 15 and I am sure by then I should be tall enough and weight more than I do now (I hope!).

Dad was determined for me to keep flying because he didn't want to see me disappointed, so he phoned up some local flying schools and now once a month, I have a one hour flying lesson with Even Reeve at the Melton Flying School.

I really look forward to my lessons. It is so cool to be flying in a motorized plane. Each lesson is different and we cover all the various aspects of flying and the instrument panel.

I now have a total of 9hrs & 30 mins flying.

I look forward to clocking up many more hours when the weather fines up. My initial goal is to join the Air Force cadets and gain as much experience and knowledge possible and eventually become an RAAF pilot.



Nash and his dad Armando



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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