How to avoid **Aviation** Induced **Divorce** Syndrome

FOR

RECIREATIONAL

P 0 S APR 2012 VOL 11 (4)

Pilots & partners

A drifter in my hangar Reader's story

RECREATIONAL

AUSTRALIA

2012 Board **Elections**

CAGIT travels south Will you go after it?









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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 OUALIFICATIONS 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 Marie Laure, photographed by her partner, Arthur Marcel

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To be a pilot, you are required to suffer, and this suffering is not just financial suffering



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President's Report

STEVE BUNCIMAN

BY the time you read this we will be at NATFLY or it will all be over and planning will have started for next year's event. It only seems like yesterday I found myself at my first NATFLY, vowing to attend as many as I could in the future. A tremendous amount of work has been done by the NATFLY committee, a number of staff members, board members and the many volunteers, to make this happen. Huge thanks must go out to them all. Of particular note is the exceptional work done by Carol Richards and Sue Perakovic in the organisation of the event. Of course, NATFLY would not be possible without the assistance of the many volunteers, some of whom give up a great deal to assist, and others who are able to give a little bit of time during the weekend. This event would not be possible without you all. Thank you all. In recognition of the dedication, commitment and enthusiasm shown by the residents and council of Temora, who host NATFLY, the board recently agreed to keep the event at Temora for another three years.

Another RA-Aus sponsored fly-in to look forward to is the NORRA-Aus, which will again be held at Monto, South East Queensland. This year, however, we will be holding it during the new Qld long weekend break from 29 Sept to 1 Oct. The planning for this event is underway by the committee, under the leadership of Myles Breitkreutz, ager for the drafting of the new Part 61 and the having attended the first planning meeting at Monto with members of the Chamber of Commerce. More to follow on this, so put these dates in your diary and we hope to see you there.

We are already receiving feedback on the new website, both positive and negative. We finally got

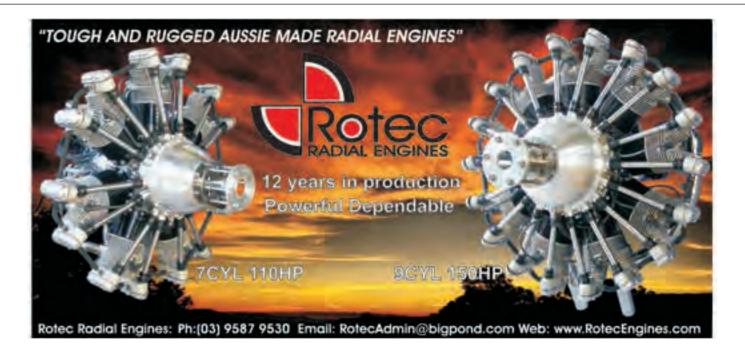
it launched, thanks largely to the efforts of Rod Birrell and the volunteer work of Bas Schaffers (SA RA-Aus member). Remember, this is only stage one of the upgrade with much more to come. Your comments and feedback are always welcome so please feel free to let us know what you think, what you would like to see in the future and where you think we could make improvements.

The on-line shop has undergone a face lift I reported in my last article the board had de-

with improving stock levels and a number of new items introduced. Obviously, as with all areas of RA-Aus, we are interested in feedback from members so if there is something you would like to see you think other members would be interested in buying, please let us know and we will look into it. cided to hold this year's AGM in South Queensland. More discussions have taken place and some good ideas have been put on the table. such as holding it at a local airfield to allow members to fly-in with the possibility of a morning tea or light lunch for all attendees. These ideas are being considered and we will inform you of the detail once confirmed.

The recruitment process for the new Technical Manager continues and we hope to have the replacement soon.

We are in discussions with the project manmanager of the GA Task Force for the Recreational Pilot's Licence. We are trying to work out what effect the introduction of the new licence will have on our organisation and how we can best prepare ourselves for its introduction. We continue to fight the closure of aero-





dromes and airfields. Recently CEO, Steve Tizzard, attended a meeting at Evans Head Memorial Aerodrome, NSW to deliver a presentation as to why this aerodrome should remain open. If you know of aerodromes threatened with closure, please let us know. We will not be able to save all of them, but we will do what we can, when we can, to assist to put the point across.

We are also looking at promoting RA-Aus more and we are looking at sending a representative to other aviation events, including the AUSFLY event in September.

By the time you read this, the GYFTS committee will have assessed the applications and made recommendations for the award of the scholarships. Due to generous donations by members, the funds available to the GYFTS committee award to young people for flight training grows larger by the day. Your assistance and generosity to this very worthwhile cause is very much appreciated - please keep it going.

Unfortunately, it is that time of year again when Mother Nature lets us all know who is boss. I have heard a number of stories where members have been affected by floods and are struggling to cope with the weather events that continue to unfold. I am sure I speak for all RA-Aus members when I say that our thoughts are with you and we wish you all the best during these difficult times.

Remember, whatever your reason for flying, please ensure you do it safely and stick within the rules and regulations. Take your time to double check everything and commit to keeping yourself and others safe while continuing to enjoy your love of aviation.

LETTERS TO THE EDITOR

calendar of events



Tumut Aero Club All Day Lunch 8 April

Why not drop in to Tumut on your return trip from Natfly for an all day lunch? Take the chance to stretch the legs, grab some lunch and enjoy the great social atmosphere of the Tumut Aero Club. For more details www.tumutaeroclub.org.au or contact Simon 0428 472 349 or email president@tumutaeroclub.org.au

"Come Along" MEGA BIG **Fly-In Caboolture** 21-22 April

Poker flight & BBQ dinner & fly-in. Movies & overnight stay & Q&A. Navex & BBQ breakfast. You can do all the events or just do some, walk/drive/fly-in. All profits go to Angel Flight, For more information Sean O'Driscoll ycabevent@gmail.com

Yarrawonga Flight Training BBQ 28 April

Hangar 19, John Duigan Drive - Yarrawonga, Victoria. Lunchtime BBQ. Gold coin donation. A plate of salad or sweets would be gratefully accepted. RSVP (03) 5744 1466 or vft@ yarrawongaflighttraining.com.au

The Childers Wings and Wheels Fly-In

5-7 Mav

Isis Flying Club. Gold Coin entry. Lucky Draws, Entertainment, Stalls & Static Displays. For more information contact President, Bill Brown 0418 724 645 or Vice-President, Ian Laing 0428 714 690.

Wings, Warbirds and Wheels Fly-In 12-13 Mav

The Maryborough Aero Club's Fly-in supports the RFDS and Angel Flight. Warbirds, vintage, and modern aircraft, vintage cars, motorbikes, stationary engines, aero engines, trade stands, model aircraft and more. Camping available and there are many hotels, motels and caravan parks in the region. Spit Roast Dinner Saturday evening. For more information Tony Pope 0408 988 081 info@maryboroughaeroclub.com Register on www.maryboroughaeroclub.com

Wings Over Illawarra 6 Mav

At Illawarra Regional Airport, Albion Park NSW. This major annual air show event features fabulous aircraft including the De Havilland Caribou from the HARS collection, the Connie, Caribou, Catalina and Neptune bomber, and Australian military aircraft including the Roulettes aerobatic team, visiting warbirds and civil aircraft. Vintage and classic cars, motorcycles and farm engines. The co-located Light Rail museum will offer train rides. See woi.org.au for full details.



Barossa Birdmen Fly-In 12-13 Mav

At Truro Flats Airpark. YTFA. Limited accommodation available. Dinner Saturdav Night. Avgas and Mogas available by prior arrangement. Pilots should be aware of restrictions regarding overflying neighbouring properties particularly to the SW of the airfield. For more information Dennis Martin (08) 8263 0553, or Roy rovp@phillipsperformance.com.au

Watts Bridge Memorial Airfield Inc. All-In Fly-In **19 May**

Watts Bridge Memorial Airfield, situated in the Brisbane Valley is the home base for a wide range of aircraft including Vintage. Aerobatic and Recreational Aircraft as well as Gyroplanes, War Birds and a variety of Homebuilt Aircraft. On-field catering and coffee available. Free Entry. No landing fees. For more information Richard Faint 0412 317 754 or www.wattsbridge.com.au

Gatton Airpark Breakfast Fly-In 27 Mav

New menu incl. pancakes and revised facilities. All flyers welcome. \$200 award for longest distance flown. From 0730 Sun. Details in ERSA or contact Martin 0419 368 696.

CASA Safety Seminar. Caboolture

3 June

A day of information and entertainment for all aviation people. Free entry, plus a lunch provided. Donations to Angel Flight. For more information, Sean O'Driscoll ycabevent@gmail.com

Queen's Birthday Fly-In 9-10 June

Sunraysia Sport Aircraft Club will host its annual fly-in and dinner at Wentworth Airport. For more information Brian Middleton (03) 5022 7783, Mobile 0408 690 650 or email brianmiddleton12@ceinternet.com.au

Wings Over Warwick 8 September

Queensland Recreational Aircraft Association incorporating Warwick Aero Club (www.graa.info) hosts the event at Warwick Aerodrome (YWCK) - 1600m, all bitumen, no landing fees. (www. warwickaerodrome.com) All aircraft welcome. Classic cars, motorcycles and model planes. Food and drinks available from 7.00 am. Avgas available. Fundraising for Royal Flying Doctor Service. For more information Kelvin Hutchinson 0407 733 836, Phil Goyne (07) 4666 1676 or Graham Hawthorne 0427 377 603.

Name and shame him!

Our President in his February report made mention of an incident earlier this year where the pilot was without valid membership and his aircraft registration had lapsed.

I believe 'the pilot' is not good enough. This pilot should be 'named and shamed' with any applied penalty noted.

The majority of our members are responsible enough to do the right thing and as such have the right to be informed as to whom the wrong doers are and the consequences of their actions. This could go a long way towards being a deterrent to others. - Roger Hall

Ed- Is there any evidence that naming and shaming would be a deterrent, Roger? Being named in the papers doesn't seem to stop criminals.

Junior members changes

After considerable internal and external debate RA-Aus has again changed Junior Membership and Student Licences with some concessions.

Previously you could obtain a Student Licence at any day from the time you were born. On December 23, 2011, RA-Aus advised Student Licence holders they were null and void, therefore meaning that any hours accrued at great expense were also null and void and not recognised. This also meant a Student Licence would be issued to only those aged 15 years. After considerable outcry, this decision was reversed on January 3, 2012.

At an RA-Aus Board Meeting on February 10, 2012, it was decided this would now be 14 years of age, with the first solo al-

lowed at age 15. As a letter states to Stu-

dent Pilot, Tyler Boyd, the issue of a "Grandfather Clause" was rejected. The idea was to recognise the hours flown prior to the decision to implement age restrictions, however, this was rejected, meaning any hours flown in good faith when the student held a legitimate licence would not be recognised in the future when that student was re-issued a licence at age 14.

Of course, this decision has opened a legal pandora's box,

where RA-Aus could be challenged with success through the judicial (Court) system if parents or carers (or the student) who have paid money toward training "in good faith" because the student held a legitimate licence, felt they have been discriminated against.

Now with the February 10, 2012, Board decision RA-Aus has added some "sweeteners" including:

1. Refunding of current RA-Aus Junior Membership fees:

2. A free subscription to RA-Aus Sport Pilot Magazine until the affected student reaches 14 vears of age

3. Providing one year Student Pilot Membership upon the student re-applying for a new licence. 4. RA-Aus providing \$200 towards RA-Aus flying lessons after the Student Pilot Certificate is re-issued

The possible positive benefits of the Board decision is that it paves the way for possible issue of General Aviation Student Licences at age 14. but this depends on CASA actually streamlining licencing across the spectrum to standardise it across the country.

The issue of medicals is also a little "up in the air" because RA-Aus says only a person who holds a motor vehicle driver's licence is eligible to fly. It makes it hard for 14 year olds who cannot obtain their driving licence, but a Medical Form currently used by RA-Aus should suffice. Depending on whether CASA "standardises" licencing across the board, this could mean that GA bi-annual medicals could be a thing of the past.

Ironically, letters sent to affected Junior Members came with the admission that the whole issue and its handling has been "a bit of a dog's breakfast.".

We will all be watching this space very, very closely. - Halden Boyd and Tyler Boyd

Potholes in the Skv

puddle jumpers over the ocean from Moreton Island to Bribie Island. As you are probably aware: CASA's Office of Airspace Regulation (OAR) will be conducting an Aeronautical Review of the airspace within the Hunter and Macquarie Groups as part of the Legislative requirement that CASA are to conduct regular reviews of Australian-administered airspace. The areas of interest to the airspace Review in-

clude but are not limited to; - Airspace Classification suitability

POTHOLES

IN THE SKY

Brian Bigg

- Accessibility
- Efficiency
- Safety
- Capacity
- Seasonal factors



I agree totally with your piece on the stupidity of sending

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LETTERS TO THE EDITOR

- Limitations
- Charting
- Surveillance

I would like to state that these Reviews are of the airspace only and are not part of any CASA audit. The OAR gathers a wide range of information regarding the subject area and the most important aspect for our office is the availability to sit and discuss any airspace issues stakeholders may have. As you can see the Hunter and Macquarie Groups are part of the airspace that sits along the Western NSW and the Brisbane -Sydney corridor.

Would you be so kind as to forward this information to your respective members. Those members that may wish to provide any issues they may have regarding this airspace are encouraged to send their comments to: oar@casa.gov.au please mark emails with Attn Simon Scott.

- Simon Scott **Office of Airspace** Regulation Airspace and Aerodrome Regulation Group **Civil Aviation Safety Authority**

Red sock v

green sock

Any port in a storm

Professor Avius stated that the terms Port and Starboard are archaic and should not be used in this modern world.

I may appear to be old fashioned, but methinks he doth profess too much! Next it will be miles per hour instead of knots, elevation instead of altitude, and goodness knows what in lieu of cockpit. Take the situation of a student querying the instructor - "Let's get

this right, pick up the left wing, right"? Enough from me, I think I will have a glass of red wine - I think there is some LEFT in the PORT bottle!

PS Excuse a pedantic salty old yachtie. - Orm Grace, Geelong Sports Aviators

Ed- Cheers. Orm

Suck it and See

(To Paul Smith, through the Editor) Thanks Paul, for a most erudite article (E6-B

Something

to say?

Email editor@sportpilot.net.au

Sport Pilot March and April 2012). As an RA-Aus pilot of some experience, but no GA background, I found your explanation very easy to follow and understand.

Another aspect of navigation which has passed right over my head, is the phenomenon of IAS differing from TAS as height increases. I vaguely understand why it happens, but when I am flying from my home in Tasmania to visit the kids and grandies in Queensland, I need a simple 'rule of

figure this change. Whether I should try for a different height and thus different wind component, and what effect this will have on my ultimate TAS and GS as a result of the height changes, is the question. I'm sure many pilots currently adopt my method of 'suck it and see'. Not a good navigational approach but

> by our increasing use of the GPS

Searching for Clubs

I'd like to make a small layout suggestion for the Sport Pilot magazine if I may.

Today, I was trying to remember the name of a flying school I saw a few months ago while travelling. I knew at which airport it was. So I went looking for it in the list in the magazine and found the schools listed in alphabetical order by the name of the school I had to search the entire list and look across each listing for the schools' locations. I think most people, especially potential new students, would be looking for a school at particular airport convenient to them rather

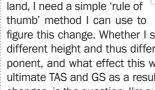
than by school name. Also it means several

In the March edition of Sport Pilot magazine letters column, there was a letter to the editor entitled "A special GYFTS story". This letter was attributed to Peter Gilmore.

***Undo**

The letter should have been attributed to Joe Masters.

And to make matters worse, Peter's name should have been spelt 'Gilmour'. Sincere apologies to both Peter and Joe.





Jim Benn, King Island

Ed- Anyone got a rule of thumb for Jim so he

can give up sucking and seeing? Email editor@ sportpilot.net.au

10 SPORT PILOT . FOR RECREATIONAL PILOTS

headache. Share it with the members have your say. (By the way - the editor and get it off your chest. Maybe it's you and your completely reasonable opinion about the world of

recreational aviation that no one else will listen to.

DON'T hold it in and give yourself a Email editor@sportpilot.net.au and 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.)

schools in the same location (such as the three at Gympie Qld for which I was searching) are often spread throughout the list.

So my suggestion is to make it more user friendly. List schools in each state in order of airport name, rather than school name. More than one school at an airport could appear under the same heading. I realise RA-Aus probably supplied the list to you in this format, because it is the same on their website. It has probably always been listed this way, but I've just never had occasion to look

at it before. Thanks for the great work you and Kreisha have been doing on the mag. - Peter

Ed- Great suggestion, Peter. We will pass it on to RA-Aus HQ (which does supply us with the clubs information) and see if it can be changed. How about a searchable database where you type in your postcode or town name and the search generates the clubs and schools nearest to you? Thanks also for the nice words on the magazine. It's a hard slog sometimes

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NEWS

Keeping Kokoda alive

AM a paramedic with the NSW Ambulance money for the Royal Flying Doctors Service, Service. Approximately five years ago, I Angel Flight or a scholarship for a student pilot. completed the Kokoda Track and raised It's a way of remembering those men who lost over \$20,000 for our local hospital to walk in their lives.

the footsteps of a relative who served in the John Jackson, after whom the Port Moresby Kokoda Campaign. international airport is named, was killed taking

I then took it upon myself to talk to count- on Japanese Zeroes. He was a true Aussie hero. less Diggers of the Kokoda Campaign and to go 30 and 31 Beaufighters Squadrons (Whisperout to schools and teach their story. Since then, ing Death) conducted countless missions and

I have conducted over 33 crossings of the Track and have never had anyone fail to complete the journey.

During m١ trips, I have supported orphanages in New Guinea and treated countless Indigenous people with malaria and other illnesses.

Last year, I decided to start my own company to journeys, I have seen countless aircraft wreckraise awareness, not only for what the soldiers age from these confrontations.

did, but also what our aviators achieved. in the skies over New Guinea.

who walks the track, to charity organisations.

This year marks the 70th anniversary of the Our pilots were often outnumbered 10 to 1 Kokoda Campaign and I believe every Australian should understand and know what these I donate \$1 per kilometre for every person Diggers achieved.

bombings on the

Japanese around

Lae and also had

a decisive vic-

tory in the battle

of the Bismarck

Sea. 75 and

76 Kittyhawk

Squadrons, sta-

tioned at Milne

Bay, conducted

bombing raids on

Japanese troops,

disrupting their

During my

supply routes.

For more information www.kokodacam-As a member of RA-Aus with over 400 hours paigntours.com.au

flying experience. I am also planning to raise - Bob Brown

RA-Aus school on GA turf

A NEW flying school has gained RA-Aus approval at Bankstown.

Chieftain Recreational Aviation, has begun operations. It was foundered by John & Miles Hey, with John Lyon as CFI.

Chieftain operates Jabiru's and has two J160s 'glass cockpits' on the line with a 230 due for delivery from Bundaberg in the near future

The flving school has been established in the old Sydney Aerobatics/Red Baron building, next door to AOPA at 6 Prentice Street..

John Hev was the founding Principal for Bankstown Grammar (now Georges River Grammar School) and will continue his interest in education and aviation through 'Chieftain'. John intends establishing a 'schools aviation' program similar to that which he earlier created while principal

Miles Hey, John's son, has long held an active interest in Aviation. Miles already



has his GFPT and Pilot Certificate and intends gaining his RA-Aus Instructor Rating.

chanical & Structural Engineer is a grade 1 GA instructor and holds CFI approval for 'Chieftain' from RA-Aus. John has been instructing for just on 20 years and has managed aviation companies in the past.

The facility at Bankstown has many attractive features including male and female showers, a kitchenette, lounge/ recreation area, good sized briefing room and even a 'crew' rest area.





Aerochute roaring along

HE team at Aerochute Industries has and the Hummerchute 582 cc engine. ance to stone chips.

new fully elliptical canopy, a replacement 60hp released a new propeller for the Aero- A new trim is also available and is now stand- engine for the 503cc engine, a new single seat chute range which gives greater thrust. ard on all Aerochute canopies. It improves lift Aerochute with a 2 or 4 stroke engine and a It also comes with a rubber leading edge and increases turn speed. It also makes the new paramotor for people who want to fly this insert which gives the propellers greater resist- aircraft very responsive to small adjustments. style of aircraft. Pilots should also keep an eye out for a new Lots of new toys to look out for. For more It's available for the Aerochute dual 503 cc 80hp 4 stroke motor coming soon, as well as a information: www.aerochute.com.au.

Clifton cancelled

ins began in 1982, the organising committee was forced to cancel the 2012 event because of a flooded airfield. As the organisor, Trevor Bange, commented, 30 uninterrupted years was not a bad record. During early March, the Clifton region experienced a very local storm which dumped 33mm of rain on the runway and surroundings, resulting in flood water washing over the runway. This water then lay around pooled on the centre line about half way along the runway, about 50 mm deep.

During the big floods in December 2010, a dam burst upstream of the

FOR the first time since the Clifton Fly- runway, which put about 100 mm of silt on the middle point of the strip and changed the water flow. With the continuing wet weather over the past year, the Darling Downs club has been unable to right the problem, but is hopeful it can get repairs started in the next few months

> It was a shame, too. The strip had been in perfect condition and the club all set up and ready to go.

Trevor says pilots should book in their calendar the next Clifton Fly-in on March 9 and 10, 2013

For more information trevorbange@bigpond.com











IBIS Magic GS 700

Editor's choice

Brian Bigg

A BRAKE WITH THE PAST

N the March edition of Sport Pilot Magazine, I reported about how, while preparing to go L for a flight, I had discovered a problem with the brakes on my aircraft.

The Zephyr has hydraulic disc brakes, operated via a hand operated lever attached to the joystick, and as I reported, they have been a bit of an ongoing problem.

I've replaced both disks over the past four years after they cracked under load and I've had to bleed the brake system a dozen times, because there appeared to be a pinprick sized hole somewhere in the tube. I thought I'd solved that problem by replacing the tube.

But the more immediate question I was faced with, while sitting in the cockpit with the engine running was, "could I still go flying even though I had no brakes?"

The only reference in the RA-Aus Technical Manual I could see which was applicable was under Section 4.2. It states 'The pilot-in-command of an aircraft must ensure that the aircraft is fit for flight.' That's all well and good, but did that mean it was up to me to work out if my aircraft was actually fit for this particular flight?

My own view was that because I was taking off and landing from a large airport it should not have been a problem, because there was a lot of room to pull up in the event of an emergency. Also it should have been fine if I stayed away from builtup areas or regions of tiger country. I would not have wanted to be in a situation of trying to make (As an aside, have you noticed how any pilot

an emergency landing in a suburban street and trying to stop before hitting a crowded preschool. who is forced to make an emergency landing in a built up area is always a hero because he or she managed to avoid hitting something important, such as a school or playground? It's a way for those of us in the media who fly, to try and ease the fears of the general public about light aircraft dropping on their heads. Luckily, there's always a school or church or a shopping centre nearby we can use in order to paint the pilot as a hero.)

Anyway, with my fuel burning off rapidly as I contemplated my options, I decided to take the conservative route and not go flying until I had a definite answer.

As promised. I turned to RA-Aus headquarters for an answer.

CEO, Steve Tizzard offered this solution. "There are a couple of safety messages missed by the author. Reference to the Technical Manual about the aircraft being fit for flight is certainly appropriate, but when you look to a 'higher authority', there is more to consider.

RA-Aus pilots are given certain exemptions from "However, we are not exempt from Civil Avia-

regulations, as set out in each of our 95 series CAOs. tion Regulation (CAR) 138 (1), which requires compliance with the flight manual. What does the manual say for this particular aircraft? Procedures after entering cockpit - check brakes function, brakes on,



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"CAR 233 (g) requires that the aircraft "is safe for flight in all respects", which clearly is not the case with failed brakes and we do not have an exemption from this regulation.

"This pilot made the right choice by not flying his aircraft because of the brake problem."

RA-Aus Assistant Operations Manager, Jill Bailey, was much tougher on the editor.

"While I understand the point Brian was trying to make in this article, the tongue in cheek way it is made dilutes the safety message.

To find the correct answer to the question of whether not the aircraft is airworthy, the pilot should reference the Pilot Operating Handbook (POH).

"The tongue in cheek reference to calling the office next week for an answer also dilutes the safety message.

"Also, a 19 registered aircraft should not be over a built up area "suburban street" and reference to a "hitting the crowded preschool" was inappropriate.

"Brakes are used for more than stopping after landing. Considerations include taxiing and avoiding other aircraft, obstacles on the airport, etc."

So there is your answer.

When I pulled the brake system apart that week, I found out the problem was a seized brake master cylinder. It's now been fixed and the issue of no brakes resolved. Hopefully that solves the problem once and for all.

(Note to self - continue to avoid crowded preschools.) 🐲

GUESS THE STRIP

GUESS THE STRIP

From time to time we feature a different aerial shot of an air strip. Can you guess where it is?

February's strip: Dixon's Creek









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THE ARMCHAIR PILOT

by Dave Tonks

ways been interested in flight simulators for home computers. And as a Drifter owner/pilot, I have always been looking for quality ultralights and LSAs to 'fly' on my home computer with Microsoft Flight Simulator FSX.

S an aviation enthusiast, I have al-

Initially, good quality LSAs were very hard to come by - these days, there are quite a few good ones from which to choose. One developer in particular has chosen ultralight aircraft as his genre, and the results of his labours are nothing short of amazing. In fact,

he hasn't only developed aircraft for flight simulation; he's produced some stunning scenery packages as well. The developer in question is Anthony Lynch, of Ant's Airplanes.

Anthony initially produced a freeware Tiger Moth for FSX, and followed it up with three excellent payware aircraft, namely: the Drifter, the Tecnam P2002 Sierra, and his latest release, the Tecnam P92 Eaglet. As a flight simulation reviewer with many reviews under my belt, I can assure you that all three of these payware aircraft from Anthony are of superb quality, easily as good as some of the aircraft also happen to be absolute bargains, as well, is the icing on the cake.

As one would expect, the Drifter is my favourite - Anthony took all the photos for the Drifter project of my aircraft (25-0455) and the bloke in the red helmet is, of course, Moi. The level of detail in this project is exceptional, as are the flight dynamics - testers spent a lot of time checking things like stall features, glide performance and handling characteristics, relating all the data to Ant so he could fine tune not only pilot and passenger details, but also the add-on.

The two Tecnams are brilliant little add-ons. with lots of nice touches - in the Sierra, the bubble-style canopy is lower at the front than

from the major developers. The fact that they the top of the crew's heads. So Anthony has included a nice little head dip from both crew members as the canopy passes over their heads, along with the totally accurate sound of the canopy sliding in the runners and clicking open/shut. It is this attention to detail that makes Ant's aircraft a cut above the rest.

Latest aircraft in the collection is the Eaglet, and it naturally includes one of Ant's specialities, a popup Animation Manager. This little box gives you the opportunity to choose aircraft details like tiedowns, wheel chocks, and Pitot tube cover. Wheel spats and nose fairings can also be varied so you can tailor the look of the aircraft you want to fly.







As mentioned above, Anthony has also produced some stunning scenery add-ons (all freeware, I might add). He has produced a brilliant version of Boonah Airfield (YBOA) and, something that fills me with pride, the little airfield where I keep my Drifter, Roadvale. With the combination of these two airfields and the Orbx FTX scenery package, the level of detail is staggering - I can recognise every single road between Roadvale and Boonah, and the surrounding mountain scenery is exactly what I see when I am in the air in this area.

Anthony's aircraft can be purchased for \$19.95 each from The FlightSim Store, and you can see all of his addons at his website at www.antsairplanes.com.



Aeroprakt A22LS Foxbat

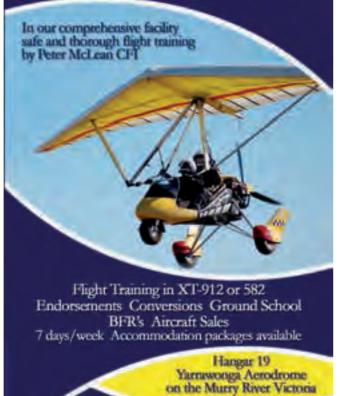
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by Lawrie Barton-Johnson

laser le

T was Wednesday in late was nad with a group of es. So I decided after reading the February Pilot magazine, the Come and Get It Trophy (CAG-IT) was tantalisingly close enough to pick up, so I did what we enjoy best - go flying.

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The story noted that the trophy resided in the Latrobe Valley. I thought that would fit nicely with my plans to visit my step daughter and son in law in Melbourne. Finding no contact details for Kevin Young, I phoned RA-Aus who said they would get the Trophy's custodian to contact me. The phone rang an hour later. Expecting a Kevin voice, I was surprised to hear Heather Ford, who introduced herself and informed me the trophy was in Ballarat. That put the cat among the pigeons a bit, so out came the computer and a new flight plan was organised to include Ballarat; a small diversion from Bacchus Marsh – my original destination.

The following day the weather was clear, wind predicted 10-15kts north westerly warm; not bad I thought. So at 09.20 with great expectation, life vest, EPIRB and maps packed, I pointed the big fan upfront north, to my first stop on the top edge of Tasmania - George Town, 99nm straight up the centre.

One hour twenty five minutes usually completes this leg. Usually. But the predicted 10-15kts strengthened to 20kts gusting to 35kts. George Town lazily appeared below, 17 minutes behind schedule, and it resembled a ghost strip, wind-swept and abandoned; not even the cat ventured out.

George, the resident caretaker/ refueller, pilot, PR rep and all round good guy, was painting a caravan down the road and CFI. Eugene. was in Hobart, so refuelling for my next leg meant further delay to proceedings, but George said he would drop everything to help; he's like that. With fuel out of the way, the consideration turned to the wind; by then 30kts and gusting to cvclonic, directly on the nose for a Bass Strait crossing. I made a cup of tea and waited.

1300 turned into 1500, which evaporated into 1600, and like the constant price rise in fuel, it persisted.

George and partner, Mez, arrived back and took pity on me. Mez whipped up a super meal for dinner, then left for her darts night allowing Eugene (who flew in in his Cessna), George and I to cure the state of the nation over a glass of red.

The next morning dawned clear, a light mist lay like a feather doona

blanketing runway 24. indicating clear air. Only barely awake at 6am, I threw two pieces of toast and coffee down, then shattered the morning peace to again experience the freedom of Bernoulli's principle.

Northern

I lifted Zodiac 1601 effortlessly. turned north into the slight 5kt headwind, and lazily, almost mesmerised, observed Low Head slide away behind. It was about then I gathered my wits and realised I had things to attend to, the least of which was over-water scheds. Buttoning onto 126.5 mhz (Melbourne Centre), I waited for a break in transmissions, stabbed the tx button, only to find I had been overlaved again by a more powerful station, so I again waited and waited. It seemed every aircraft known to

N a light mist lay like a feather doona blanketing runway 24

man was exploiting the calm morning air.

I was 20nm out, with Tassie's coast rapidly merging into the morning mist before Melbourne came back.

"Zodiac 1601, go ahead" - now I was awake. The wind influence and fuel management dominated my attention for some time, as the 5kts increased to 10kts, dictating a slow 70kt progress, and a rethink of my fuel options.

Lurking ghost-like way off in the haze, Wilsons Prom became distinguishable from clouds and their shadows, as I began fuel transfer, which would ensure a safety margin tracking into Tooradin. Cancelling over water scheds at Cape Liptrap, I observed one of the magnificent cruise liners powering east, just off the coast. A stark white island city moving majestically leaving a dead straight wake behind - spectacular from my perch. More importantly for me, my air to ground speed had diametrically reversed, indicating my head wind had now become a tail wind, increasing my ground advantage to 90kts. Yes!. Again rethinking time fuel and distance, I decided Tooradin could be an overfly if I fol-





>> Wilsons Prom. Lurked ghost like way of in the haze.(below the arrow)

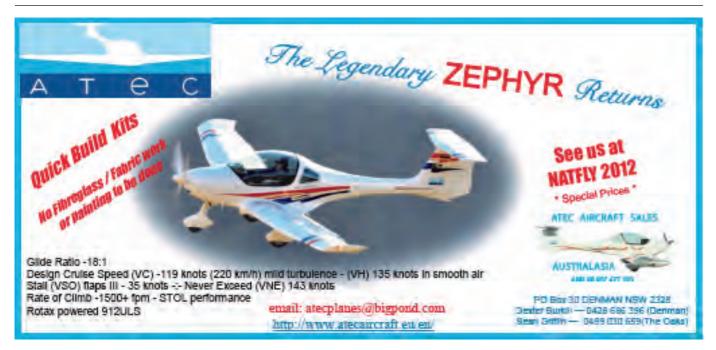


>> My pride and joy and its trophy



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lowed the VFR route up Port Phillip Bay, then across just north of Moorabbin, missing Avalon control zone over Werribee into Bacchus Marsh; my overnight stop. Tracking west across the head of Port Phillip Bay,

sadly Melbourne CBD was all but lost in a hot soup of smog, dashing my photographic opportunity and forcing somewhat more intense pilot input.

Safely on the ground at Bacchus Marsh, with the paperwork done, I cracked open the canopy to be significantly hit by a very hot 36 degree strong 35kt gale. A bit like being observed too closely by a dinosaur, I thought "that figures"; I've flown my pretty little plane into a furnace and now we'll both cook.

The following day the forecast proved less than inspiring for my last 30 odd nautical mile push to Ballarat. Mark, my SSIL (step son in law) decided I needed moral support, so he offered to assist in this last push. So even with the wind trying to help gravity keep us on the ground, we took off for Ballarat. Not much inspires me to include about that 39 minute flight...we wobbled, bucked and arrived with dubious dignity, to tie my pride and joy to terra firma for fear of the elements taking it for a fly without me/us.

I set off to the club rooms, only to find Mark heading off in the opposite direction towards a huge Sikorsky (or was it an Ericson sky crane helicopter "Elvis" parked looking like the skeleton of a mammoth with its huge trunk tucked under one arm).

Twenty metres long and over six metres high, it over-shadowed my pride and joy and instilled a distinct inferiority complex. We stood admiring the two

Pratt and Whitney 4500 hp turbo shaft engines, and reflected on the 42,000 pound take-off weight compared to my 1320 pounds or 600kg.

After confiscating Mark's camera, for fear of him using a complete sim card on the thing, we set off for the club room, where Heather (she matched the description of the voice on the phone), took time from flight training to deliver the CAGI trophy, record the event on camera, and have a guick word with us.

The weather the following day was the same and considering the long range forecast was worse, I decided to cut my visit short and return south. This meant 30kts full on the tail. So I packed my trophy, bid Mark and Pia farewell and pointed the fan south east. Bass Strait air was again dead smooth, (no hills to disturb the currents). The only change from my northward track, apart from my heading, was my speed.

I called my overwater sched and settled to watch the ground speed top 112kts, with the average 109; rocketing me home in 3 hours 58 minutes direct in to Campania, much to George's chagrin at George Town, who was keen to see the trophy. Next trip George. 🐌

Then we were off: not because we didn't want to stop and chat, but Heather's student was tapping his foot on the tarmac in the background, (hope he wasn't paying for the full time, Heather).

With the mercury again pushing 34 degrees, Mark and I sat melting as several aircraft landed on runway 36, before we departed back to Bacchus Marsh, a flight which now took only 16 minutes.

The "Come and Get It" trophy now resides at: Campania private cross-strip, north-south 450mtr grass, east-west 400mtr grass 42.40.60S; 14.24.84E

Distance flown: 712nm

Legs: Campania/GeorgeTown GeorgeTown/Bacchus Marsh Bacchus Marsh/Ballarat

Story of the month

Before I could walk or talk I was making aeroplanes out of clothes pegs and piloting them around the house

> Send in your stories and photos in. Email editor@sportpilot.net.au

A drifter in my hangar by David Mason

VIATION is at the very heart of my being, it is what gets me up in the morning. For as long as I can remember aeroplanes, birds and flight have been the cornerstone of every thought and dream that has ever entered my head.

Before I could walk or talk, I was making aeroplanes out of clothes pegs and piloting them around the house with military precision. I had to have every flying toy and every aeroplane book ever published.

My family travelled around Australia when I was young and, not only did we have to stop at every airfield, I also had a book in which I wrote down every type of aircraft I saw, and if I saw one I didn't recognise, I moved heaven and earth to find out.

I was lucky in that aviation was in the family. My Grandpa; Keith Mason, started the Southport Flying Club on the Gold Coast in the early 1970's. He owned a beautiful Cessna 182Q, which he flew off the production line at the Cessna factory in Wichita all the way home to Mason field.

I spent my school holidays in the right hand seat of VH-KJI. perched on a booster seat flying all over the country. This is where the passion for flying grabbed me and didn't let go.

I grew up in the small town of Boonah in south east Queensland. The stories of kids clinging to airport fences to catch glimpses of a plane rumbling overhead? I lived that everv weekend.

I would spend six or seven hours every Saturday or Sunday watching the Piper Pawnee drag another glider skyward in search of a thermal, or stare in awe as fluoro coloured Drifters buzzed around the rolling countryside of the Scenic Rim. I was in heaven.

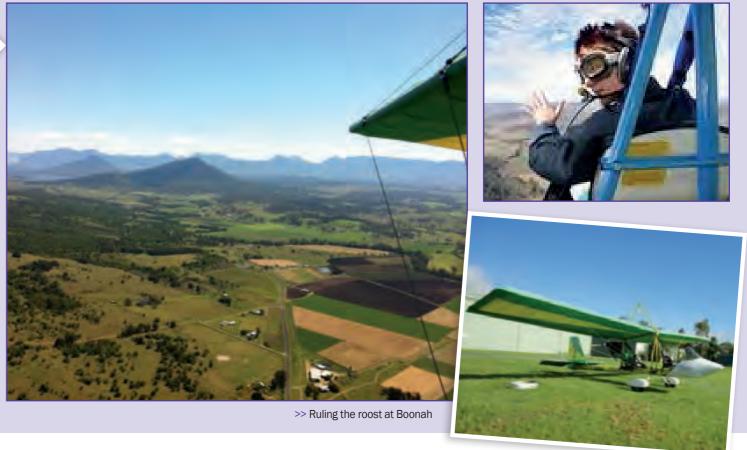
It wasn't long before I was sitting in the dickie seat of the Pawnee with John Ball as we circled higher and higher searching for that perfect thermal, so we could cut ties and send the glider off on its silent adventure. I remember John banking the big rumbling Pawnee right past vertical to see my reaction and I remember thinking 'come on John is that all ya got?'

I worked every weekend at Scenic Rim Aviation, mowing their lawns and cleaning aircraft until I had earned enough flying lessons to pass my Pilot Certificate at 16. It was there I met Peter Stanton. an inspirational instructor and lifelong friend.

We also shared many aerial adventures and his words of wisdom still echo in my mind every time I fly. Pete is a true rag and tube airman and instructor.

He would often tell stories about the adventures of yesteryear when





Drifters ruled the roost at Boonah and Austflight Aviation was in production mode. Boonah Sport Aviation Centre churned out Drifter pilots and the Flying Tigers Ultralight club was spawned, a club still going strong with its own hangar and squadron of members who have flown the length and breadth of Australia.

My fascination with Drifter aircraft has grown since those days and it was always a dream of mine to have my very own one day, however it seemed so far out of reach

I have met many fascinating characters at Boonah airfield and although many have come and gone, it is true to say Boonah will always be the spiritual home of the Drifter. I believe that when the other machines retire for the day, off in the distance the low drone of the rainbow coloured, open cockpit taildragger made of tubes and cloth will always float on the air currents and cumulus around the valleys of the Scenic Rim.

In June last year I finally bought a beautiful Maxair XP503 Drifter. After some tweaking by 'Mr Drifter' aka Wayne Fisher. I now fly 'Baby Southern Cross' (Yes I am a Kingsford-Smith fan) to my heart's content. The Maxair Drifter never ceases to amaze me. I learned on a big fat SB582 so it was like hopping onto a magic carpet. I regularly take it for trips over to Mason Field where it is often parked between a Grand Caravan and a Bonanza or Cirrus.

I would love more than anything to gain a Commercial Licence and earn money for flying,

fecting the art of stick and rudder flying every time I take 'Baby Southern Cross' for an adventure, is reward enough for me. I have completed my GFPT and if I can come up with the funds, : I will definitely get my Commercial Licence but make no mistake, There will ALWAYS be a Drifter in my hangar. 🐌

Wangaratta Formation by Peter & Anne McLean

SATURDAY morning turned out to be a beautiful crisp day with light winds, just perfect for a formation flight to Wangaratta. With pilots David, Kel, Willem, and Peter and Jennifer who flew as crew with Kel, we set off in a Diamond Formation flight to Wangaratta. After warming up and taxiing to the holding point, the formation aircraft entered the runway and began a stream take-off.

Within minutes, the group of four aircraft were on the correct radio frequency, and the join up had started.

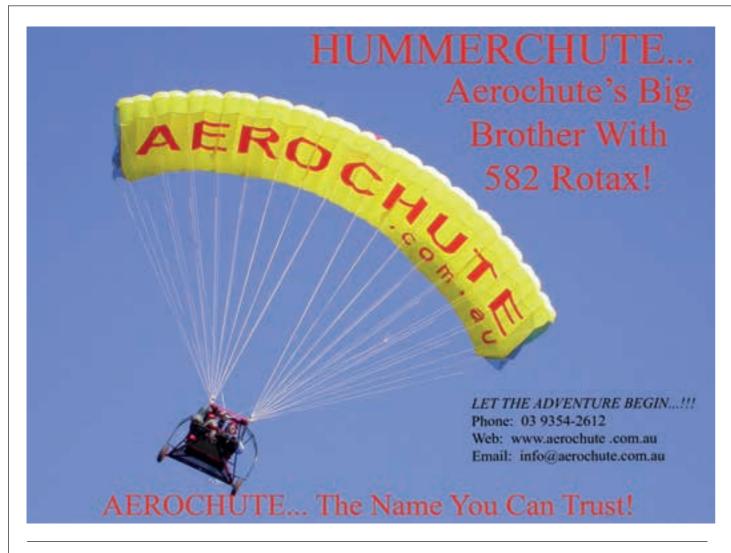
David, one of the most experienced formation pilots, moved into the lead, Willem moved into right echelon as number three. Kel and Jen moved into left echelon as number two, and Peter, the CFI, pulled into slot position as number four. The formation was complete. The aircraft climbed to 3500ft and turned for Wangaratta. There was a lot of smoke haze which made it hard to get good photos.

As the final aircraft crossed the holding point the flight leader gave the call. "Wangaratta Traf-Peter, the CFI and flight leader, gave small fic, X-Ray Tango Flight of four, down and clear all but the truth is that the pure challenge of per- i commands to the formation, or to an individual i runways". It was now time for a coffee.

READERS' STORIES

member, and the formation staved 'looking good', even in the rough air over the Warby Ranges. The flight leader made the inbound call and then gave a small correction to David (number one) so the formation would fly over the town and be able to line up and descend on runway heading. This manoeuvre was completed with perfection and the formation arrived over the runway centre line and at the right altitude when it was needed. The formation then conducted a pitch and recover landing. This is the easiest way to get a number of aircraft safely on the ground in a short time. Two of the formation pilots had never done this manoeuvre before, however the formation was structured to have an experienced pilot with each "not so experienced" one. The pitch and recover started over runway 18 with the call "number two pitch out now". Number two, Kel and Jen, started to make a descending left hand turn onto the runway. Five seconds later number four would pitch out, and then five seconds after, number three would pitch out, and then number one would pitch out. This sequence, although with only five seconds between each pitch out, gave each aircraft enough time and space to make a safe landing. The entry, pitch and recover went off flawlessly and with the entire landing complete. the aircraft exited the runway and made their way to the parking area.

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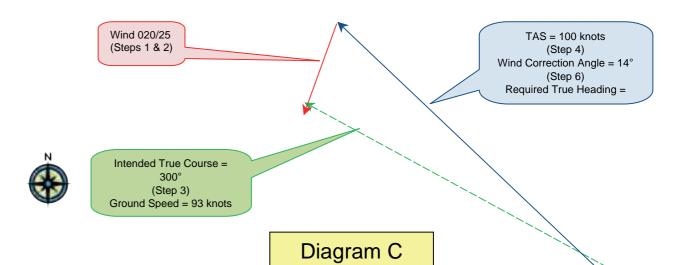
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the E6-B

In the second of a two-part article, senior instructor, Paul Smith, comes to terms with the most important computer pilots use



AST edition Paul set out to design his own in 1940. Hundreds of thousands of the devices Flight Computer from first principles, on graph paper then with scales and protractors. He explained that despite the age of GPS, and because students will always need to do their cross country endorsements with slide

According to Wikipedia, the E-6B was devel-

oped in the US by Naval Lt. Philip Dalton in the late

1930s. Dalton didn't name it, though. That was

the US Army Air Corps in World War 2 which merely

gave it an official part number. But that's what its

been called ever since. Dalton was a university

graduate who signed up for the war as an artillery

officer, then became a Naval Reserve pilot. He was

killed with a student in 1941 while practicing spins.

He invented and marketed a number of flight com-

puters, including the 1933 Model B, which showed

True Airspeed (TAS) and Altitude corrections. Three

years later he put a double-drift diagram on the

In 1937. Dalton added a simple wind slide to his

Model B circular slide rule which the Army called

back to create the E-1. E-1A and E-1B.

the Flight Computer rules, maps, pencils and protractors, there may just be a few others out there who would benefit as he did from knowing just how an E6B works. Who Invented it?

In part 1, we calculated what the wind does to our heading, but that's not how we navigate to our destination. We actually start with our desired track and have to work backwards knowing our forecast wind velocity (speed and direction) to determine on which heading to aim the aircraft. Note that everything on the computer is ex-

pressed in Degrees True, not Magnetic, so we'll do all the calculations using our True bearings measured off the paper maps (WAC, VNC or VTC) then apply the magnetic variation as the final step. Some text books suggest applying the magnetic variation to both your intended track and to the wind direction before using the computer, but I believe there are four very good reasons not to start this way.

1. All the instructions on the computer are expressed in True terms, which is confusing if you have converted everything to Magnetic first - you could mix up your values guite easily. the E-6A. A year later, it asked him to make some I know I have done. Embarrassing on your navimore small changes, which then became the E6B : gational test flights with the instructor!







were made and distributed during the war. Hundreds of thousands more have been sold since.

Apply the weather to

2. You have to add (West) or subtract (East) magnetic variations twice, to both Wind and to Track, instead of just once to your final True Heading - double the room for errors here.

3. It seems more logical to apply the Magnetic Variation to your calculated True Heading at the end of the process because that's when you move your thought process from tabletop paper and pencil to the reality of the cockpit, namely your compass.

4. Most importantly, the answer is the same because the geometry is the same.

There are other computer designs out there, and at least one other iterative technique for the E6-B described in some texts, but the instructions printed on its face are the most straightforward, especially once you understand what it's constructing for you. Let's follow the instructions on the top of the computer and relate each step to Diagrams C and D.

For Ground Speed and True Heading

Example 3 - Wind Direction/Speed = 020°/25kts, Intended Course (Track) = 300°, TAS = 100kts.

What is our required True Heading and resultant



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30 SPORT PILOT . FOR RECREATIONAL PILOTS

Ground Speed?

Diagram C represents the final vector geometry to an approximate scale and Diagram D shows how it's constructed together with portions of the Flight Computer's linework (arcs of speed circles and radials of headings). The relevant instructions listed on the face of the computer are noted as sequential Steps 1 - 6.

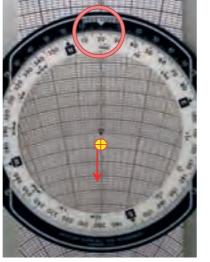
Computer Instructions

Index Turn compass rose so that 020° shows under the True Index

Step 2 Mark Wind Velocity up from Centre Point. It doesn't matter where the Centre Point (or grommet) is on the graph

lines, but normally you would position the grommet on one of the velocity circles to make it easy to measure wind velocity up the centre line. I've chosen the 150kt circle, ⊕ so the wind velocity mark will be made at the 175kt position, 25kts up. You have effectively drawn the Wind Vector of 25kts from 020° to the grommet. Step 3 Set True Course under True Index. Turn compass rose till 300° shows

under the True Index. As you do this the wind velocity mark rotates to the right. You have now created the course vector (green)



intersecting the wind vector (red) at the centre point (grommet).

Step 4 Slide Wind Velocity mark to True Air Speed. By sliding the circular compass section of the computer up or down the inner rectangular section, you can see that the red Wind vector is moving up or down the green True Course vector. In order to complete the triangular geometry you just move the red Wind vector until the Velocity mark intersects the TAS circle of 100. In



Wind 020/25 (Steps 1 & 2) Various Wind Speed Circles centred at our Starting Point 110 100 90

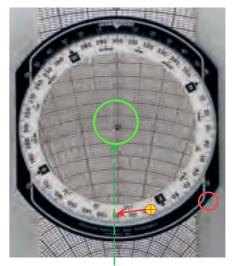
our case that is in a downwards direction. If our TAS was 200 then we would move it upwards to that circle.

Step 5 Ground Speed reads under the Centre. The GS now can be read under the tip of the red Wind vector where the grommet is, namely 93kts. This makes sense because the wind has a slight headwind component.

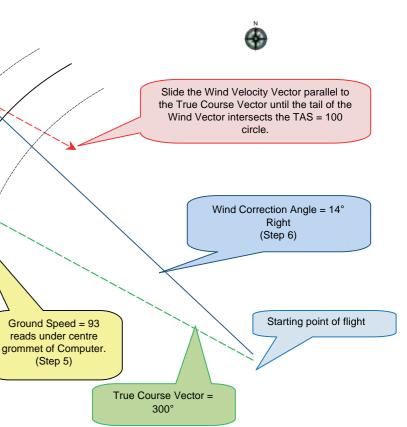
Step 6 Wind Correction Angle reads between Centre Line and Wind Velocity Mark. The Wind Correction Angle lies between the intended True Course (green vector up the centerline), and the Wind Velocity Mark. The angle reads 14° to the right of the centreline. This also makes sense because we come to know instinctively that we need to aim slightly into the wind coming from our right in order to make good our intended course – "laying off the drift". Consequently our True Heading (blue vector) will be 300° + 14° = 314° in order to track 300° over the ground. This simple sum can also be read off the top compass scale.

Step 7 Convert True Heading to Magnetic Heading by adjusting for Magnetic Variation. This final step isn't directly listed on your com-

puter as a numbered step other than somewhere on its face as an equation. This is the moment we convert our navigation from paper based True values to compass based Magnetic values for cockpit use during flight. In my local area the magnetic variation is around 8° East so I would subtract this value from 314° and get 306° to use as my compass heading. Due to turbulence and relatively small compass faces, it's highly unlikely you'll be able to hold a heading any better than ±3° but your calculations should carry through to this point to the nearest degree in any case. Your navigation technique should always refer from ground to map and back again as you fly, thus confirming your intended track.







TECH FEATURE



Summary

You'll note that the vector diagram overlaid on the computer face is identical in shape to Diagrams C and D but rotated with the course vector up the page. The computer has been ingeniously designed so that the rotating compass face is just like rotating your paper map with your course pointing "up" the page.

The concentric circular lines of TAS values from 30 knots to 260 knots and the radial lines of compass bearings are all centred at a point off the bottom of the computer, and the extent of correction angle is limited left and right of the centreline. You'll notice that the correction angle reduces from as little as 10° near the top of your computer to as much as 40° near the base. This reflects the ratio of wind speed to TAS increasing in the same direction. Refer back to Diagrams B and D. The device represents a limited window of all the possible speeds and correction angles which cover most flying conditions the average pilot will experience, cleverly superimposed with a rotational compass which allows for any course you may wish to fly. Genius!

I trust this article has been as illuminating for you in the reading as it has been for me in the making!

Blue skies, enjoyable flying and may you always find your way safely home!

Reference: How do Manual Flight Computers Work? The E6-B, (V9-Jan 2012) Pages1-7 Paul Smith SI, RAAus #13297

If you would like a copy of this article emailed to you for personal or flying school use, contact Paul directly at scottsmith@caithness.com.au

FEATURE

Cyril Brock's

YRIL is a Queensland country boy, originally from Stanthorpe. He started flying in 1955 when the Australian government was offering a deal to pay half the flying fees for all student pilots (they were definitely the good old days). The Darling Downs Aero Club used to come up from Toowoomba once a fortnight. Cyril started on Tiger Moths, but also flew Piper Tripacers and Chip-

by **Arthur** Marcel

munks. In fact, most of his flying was conducted in Chipmunks, and he has very fond memories of this aircraft. He became addicted to aerobatics and still believes the Chipmunk is the finest light aircraft ever made.

Cyril was a fitter and turner by trade and arrived to work in Brisbane in 1970. He started flying out of Archerfield. Eventually, he became interested in owning his own aircraft and when, in about





plane for two years before selling it.

But having been bitten by the aircraft-owning bug, it wasn't long (about 1986) before he bought another one; this time a single-seat Volksplane. It also lacked a Certificate of Airworthiness and required some rebuilding work. Cyril soon got it and passenger sit side-by-side and access to going and conducted a great deal of flying in it. the cockpit is via a one-piece, forward opening However, he found it difficult to find LAMEs certi- (hinged), perspex canopy. fied for wooden aircraft to complete the registration inspection every year. These were the bad old days when even simple aircraft, like singleone night and asked him if he wanted to sell the castoring tailwheel. plane, he accepted their offer.

Sometime after this, in 1999, Cvril's brother, John, also a pilot, offered him the Minicab for a very reasonable price. John had bought the plane ten years before from its builder and first owner, David Fels. David, who lived in Springwood, Brisfirst flight, under VH registration, in 1982.

The Minicab was not a new design, even

French design by Yves Gardan - a conventional two-seat light aircraft with a low cantilever wing and fixed tailwheel undercarriage. The GY-20 was a scaled-down version of another Gardan design, the SIPA S90. The pilot

From the outset, the aircraft was intended to be low-cost, easy to fly and easy to maintain. It was also designed with the potential seat Volksplanes cost an arm and leg for their for homebuilding in mind. The GY-201 is a registration requirements every 12 months. So. more refined and complicated version with a when two school teachers knocked on his door strengthened undercarriage, split flaps and

The Minicab has a record-breaking history. The prototype made its maiden flight from Pau-Idron in France on February 1, 1949 with Max Fischl at the controls. Type certification was obtained in mid-April of that year. By the end of 1950, a Minicab had won the Coupe de Vitesse bane, started building the plane in 1974 and the de Deauville (Deauville Cup for speed), and the project took him eight years. The plane had its Grand Prix Aérien de Vichy (Vichy Aerial Prize). That year, a Minicab broke the world air distance record for its class (1,825 km, 1,138 miles) and

LOT . FOR RECREATIONAL PILOTS

in 1952 it grabbed the world airspeed record for its class over a 2,000 km circuit, with an average speed of (183 km/h, 114 mph).

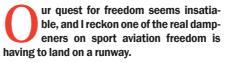
In all, CAB manufactured 22 Minicabs. However this was quickly followed by a much larger number of amateur-built versions in France and other countries. Early Minicabs used a Continental A65 horizontally-opposed, four-cylinder, air-cooled engine (65hp), but Cvril's aircraft, now with RA-Aus registration 28-4325, has a Rolls Royce Continental 0200A (100hp) under the cowling. Cyril says he would not like less power in this plane.

Cyril, now retired, has had his pilot's licence for a total of 56 years. He flies just about every week out of Forest Hill near Laidley, west of Brisbane. Forest Hill is not the easiest of strips, having a bit of a slope with tall trees at one end and an electricity cable across the threshold at the other. But I've seen Cyril doing cross-wind landings there with much finesse. He describes the Minicab as a safe aeroplane but, like all aircraft, it has its own peculiarities. It flies very well but can be tricky in some situations. 🐌





THE BEST OF both worlds?



Oh, for the freedom enjoyed by helicopters and gyrocopters. But then again, the rotary winged types are so slow, (or if they are not slow, they are incredibly complex and expensive) Can we enjoy the best of both worlds?

This article is written in the hope that some constructive and lively discussion might result from a proposal that combines the two 'types' for a fast, go anywhere, machine.

What is this machine? Start with a gyrocopter, remove the skinny high aspect rotor and replace with a fat long chord symmetrical aerofoil rotor. This rotor must be strong enough to support the aircraft in flight when not rotating. Retain the 'teetering' rotor hub, and add differential collective pitch control (the ability to angle each blade individually). Now we have the basics of a new type of gyroplane. Add an engine powered pre-rotator with brake and add a clutch to the forward facing propeller and we're ready to go.

What is the big idea? The big idea is to take off and land like a gyrocopter yet fly like a plane, a process that requires major in-flight reconfiguration of the rotor - this being the nub of the idea. Let's go through the flight process. Firstly, the machine is taxied out to a suitable take off area - which is really a small patch of ground with low obstructions in the windward direction. Taxi-

ing requires the forward facing propeller, rudder and wheels, to be used in a coordinated fashion, just like a fixed wing aircraft.

Once in position, with wheel brakes on and forward propeller disengaged, the rotor is set at zero lift, which also corresponds with minimum drag. The pre-rotator is engaged, 'winding up' the rotor as fast as possible, effectively storing kinetic energy. To take off, the collective pitch is simultaneously increased while the propeller





by Mike **Richardson**





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aerodynamic center line behind and swept back from blade angling axis wing direction wing direction Rotary wing configuration wing direction wing direction aerodynamic center line. behind and swept back from Fixed wing blade angling axis configuration FEATURE

is engaged. The machine 'jumps' off the ground and moves away, gathering forward momentum as the rotor sheds some of its kinetic energy and pitch is adjusted for autorotation.

Now airborne, the gyroplane climbs away to a safe altitude, where the transition to fixed wing occurs. To make this transition, the collective pitch is increased beyond the autorotation angle which initially gives high lift, but more importantly slows the rotor down causing air to flow backward over the rotor blades.

With an aerodynamic center of lift behind the blade angling axis, each blade will want to align with the air flow, but the controls are held until the rotor has stopped, then the blades are allowed to 'flip' over.

Has the rotor stopped perpendicular to the fuselage? There is nothing to guarantee this, however creased to 90° then one blade is flipped back (the other forward) to their autorotating angles, this time the machine's descent is arrested by the rotor as rotation speed increases. In line with standard gyrocopter practice, autorotation can be artificially increased to build up kinetic energy for use just prior to touchdown giving a gentle landing with near zero landing roll.

That's the basics of the proposal. Obviously, the most challenging aspect is the change of mode from rotary wing to fixed wing and back again. The symmetrical aerofoil section is important because one of the blades is required to work 'up side down' when it flips over during mode change. The rotor hub itself, while simpler than a helicopter, is more complex than a gyrocopter.

Firstly, it has the teetering hub to



a slight sweep back on each blade ensures that when rotor pitch control is relaxed and the blades flip over, they will automatically take up a position that is normal to the air flow roughly perpendicular to the fuselage.

The rotor brake (or perhaps a soft action centraliser) can then be applied to ensure no further rotation. By now the machine is losing altitude rapidly, descent is arrested by the normal fixed wing action of the non rotating (braked) rotor.

Our gyroplane has now converted to fixed wing configuration. Differential collective pitch is used for roll control, the fuselage hanging under the wing due to the teetering hub somewhat like a hang glider.

To land without a runway, the process is reversed. Setting up a trajectory that is like the tail slide manoeuvre, yet with a relatively level fuselage the gyroplane reaches a near zero G apogee.

The rotor angle of attack is in-

accommodate blade flapping due to forward speed. Secondly, a rotor brake (or centraliser) stops the rotor perpendicular to the fuselage. Thirdly, the rotor disk can be angled forward or backward. Finally, differential pitch control, geared at the rotor root, gives the wide angle of attack range required. The traditional swash plate solution is not necessary - instead two sliding collars concentric to the rotor's main axis convert linear control to pitch control, acting independently for each rotor blade. (the details of this being beyond the scope of this article).

Of course mode change is not necessary at all, the gyroplane can take off and land as a fixed wing aircraft or as a full time gyrocopter, however with mode change the landing possibilities and potential for speed dramatically increase.

But is it feasible? 🐞

What do you think? Email editor@ sportpilot.net.au with your view

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Pilots

How to avoid Aviation Induced Divorce Syndrome

by Arthur Marcel

EGARDLESS if you are into cars, bikes, boats or planes, it is mostly a case of boys and their toys, (although there are exceptions to the rule, Kreisha). Of all these boy toys, however, it is planes which require the most dedication from their owners. Cars, bikes and boats can take you (and your companion) from one salubrious location to another; to parks, cafés, restaurants, jetties, lagoons and glorious beaches; a seemingly endless progression of pleasantly comfortable adventures. With cars, bikes and boats, you don't really need to be into the sport all that much for its own sake. These machines can simply be your chosen manner of conveyance, conveniently and reliably at your disposal regardless of the weather, to be driven with confidence from one good memory to the next. Your partner requires no more commitment to your sport than the ability to pack a good esky.

Aircraft, on the other hand, only take you (and your spouse if she's equally demented) from one hot, dusty, isolated airfield to the next hot, dusty, isolated airfield (or in winter from one wet, freezing, isolated airfield to the next). Highlights include avgas bowsers which don't require carnets, cross strips, recently mown grass and tie down points which aren't too far apart. More upmarket features include sealed runways and security fences. With aircraft, you have to forget life's more mundane luxuries. Don't even dream of shade. If you are lucky enough to own a high wing aircraft, this will be all you have. And if you need something to eat or drink,, in most cases, either you've brought it with you or you have a long walk into town.

Honestly, aircraft require more than dedication. To be a pilot, you are required to suffer, and this suffering is not just financial suffering (although that can be severe enough). To be into aircraft, you really have to be into aircraft, hook, line and sinker. You need to dream aircraft. You need to be to-

tally passionate about them. You have to be fully committed to ideas aeronautical. You read aviation books; you browse pilot gear catalogues; you hang out every month for your copy of Sport Pilot and the Members Market, etc. Aviation has to be more than just an activity that happens at the airfield. It has to happen in your head twenty-four seven. And, even if you never leave the ground, even if your passion only extends to building your own plane, those dreams need to be constantly there, pushing you on. Probably more than any other pursuit, especially for baby boomer blokes like me coming out of the golden era of aviation, flying is as much a fantasy as it is a here and now activity.

And it takes its toll. A standing joke at every airfield is the one about the pilot and his wife suffering from AIDS, that is, Aviation Induced Divorce Syndrome. Unfortunately, this is also the reality. In my hangar, for instance, three out of the six of us have experienced this financially debilitating affliction. Survivors describe the situation as one in which they were forced to choose between the wife and the aircraft. Without exception they chose the plane. Two of them even gave up the house to keep the plane. They were

flying is as much a fantasy as it is a here and now activity

unable to have it any other way even if they had wanted to. They were simply too far gone. Of course, this is not to say that there aren't a few ex-pilots out there who went the other way for the sake of the kids, but aviation induced divorce too often seems to be the outcome of this addiction to aeroplanes.

Does it have to be this way? How can blokes seriously and irrecoverably involved with flying protect themselves and their spouses from its insidious effects on their relationships? I am not claiming to be an expert in the field, but I want to

partners



suggest three strategies which might help. I shall list these strategies in the order of their importance (as I see them).

Firstly, there is the question of balance. Unfortunately, given the all consuming and ever more demanding nature of the aviation addiction, this strategy is easier to suggest than to apply. However, efforts made to balance the time spent on one's flying activities with more mutually rewarding, family-oriented pastimes have immense potential. The idea is that the spouse is never made to feel like a widow before her time has come. Of course, like everyone else, she needs some moments to herself, but should not be made to feel abandoned, neglected or, most importantly, jealous of that other woman in your life, the plane.

This includes being psychologically present during those intimate occasions, especially when, as is most often the case, she is doing the talking. True, it can sometimes be difficult, but autopilot will only take you so far. You can get away with "Yes, Dear", or even an irregular "No, Dear", but there will be times when you will have to at least fake genuine interaction. Remember, as a pilot you know about simulators. You have to appear to be at home in the







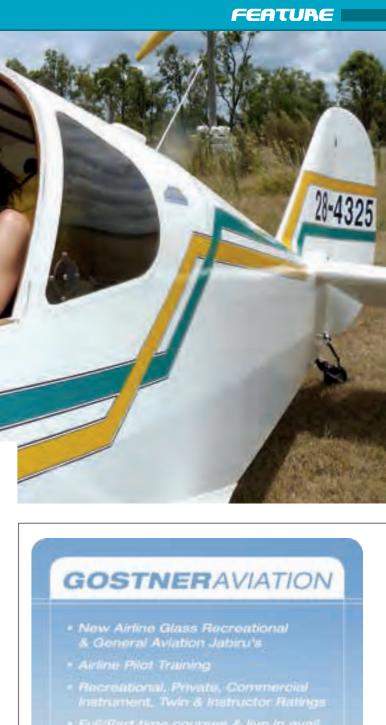
head, even if you are actually thinking about how to mount that second GPS on the instrument panel.

Secondly, try to involve her in aviation culture. Take her out to the airfield on special occasions, but only for periods of time within her range of tolerance. Do not have anything critical planned for these days. Make sure you stop at a café either on the way there or on the way home. Do not be impatient. Instead, be indulgent. Never allow her to get bored. At the airfield, introduce her to the other guys. Show her their planes and explain the differences. Most importantly, try to get her involved with your plane. Give her a sense of ownership. Even if you only have a single-seater, sit her in it and show her where the accelerator and brake pedals are. Take photos of her in the plane. Go to great lengths to make these photos flattering. Buy her some special pilot gear even. Every woman likes wearing hats. If you don't have a good camera, invest in one (far cheaper than a new house). Put the photos on your desktop at work and, more importantly, on your desktop at home.

Try sitting her in your mate's plane. If you play your cards right, she will be the one who suggests the purchase of a two-seater. However, weigh up this proposal carefully. It usually costs at least twice the money for that extra seat, but you don't get much more aeroplane. And while these days most recreational aircraft have two seats, most of the time, they only fly one person around. It might be a better arrangement to occasionally hire a two-seater to take her flying. But then, taking your nearest and dearest aloft in a plane you are not so familiar with might not be the best idea either. Indeed, having two lives totally dependent on one (ageing?) heartbeat in any plane is perhaps not the ideal state of affairs. Maybe you could suggest a lesson or two at a school with a very experienced instructor. This would give her a reasonable chance of locating an airfield and landing the plane in an emergency.

Finally, enculturation goes handin-hand with socialisation, particularly pleasant socialisation. So join a flying club. Get involved in their social activities. Attend club days, meetings, flyins and Christmas parties and other social events together. Involve your spouse with other pilots' spouses. She will hopefully begin to empathise with them and realise that she does not need to suffer alone.

These strategies are more in the realm of prevention than cure, and, while it is preferable to implement them during the honeymoon period, they may have beneficial effects at any stage during the deterioration of the marriage. By the way, the honeymoon period I am referring to here is not that blissful interlude after the wedding, but the more momentous stage in one's life that follows the purchase of an aircraft; those delightfully dreamy days when your partner still has delusions of status from being the only woman in the street whose husband owns his own personal aircraft; in other words, that all too brief moment of happiness before the penny drops, 🐌



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The library

A man should keep his little brain attic stocked with all the furniture that he is likely to use, and the rest he can put away in the lumber room of his library, where he can get it if he wants it.

Quote from 'The Five Pips', a Sherlock Holmes story (1892) by Sir Arthur Conan Doyle

Now, some 120 years on, we have a similar recommendation, this time from the FAA 'Flight Instructor Manual'. This manual recommends that a 'Personal Reference Library' should be developed and maintained by the Flight Instructor so that relevant material is 'where he can get it if he wants it'.

The Flight Instructor is seen as an authority on aviation matters and the student pilot will look up to that person as the 'Go To' person on matters, not only dealing with the flying training, but on aviation in general. An instructor who does not keep up knowledge levels will quickly lose a student's confidence and lessen the impact of the flight lessons. Similarly, a poorly presented lesson due to lack of knowledge, will soon be recognised by the student and reflect poorly on the credibility of the instructor.

To keep up the level of knowledge and the ever changing techniques and procedures, the 'Personal Reference Library' will contain textbooks, periodicals, magazines, CASA, Airservices and ATSB publications, flight manuals, operation manuals, GPS manuals, and other manuals on all sorts of things that may be useful.

I thought I would offer an insight into some of the contents of my bookshelf as an indication of what any flying instructor might choose to have.

THE MANDATORY STUFF

• ALL THE PUBLICATIONS AS SHOWN IN OUR OPS MAN 3.01-2 (7-8-9)

Some of these documents are expensive and it is acceptable to have some of them as downloadable sections. However, from an operational inspection viewpoint, an instructor who chooses to download these must be able to demonstrate the ability to access them.

REFERENCE BOOKS

- MECHANICS OF FLIGHT (Kermode 1972) An excellent text on aerodynamics.
- FLYING INSTRUCTOR'S PATTER MANUAL (Phillips & Cole 2006)
- Flying exercises as spoken in the air. • MANUAL OF FLYING AND GROUND
- TRAINING (Blac 1973) A textbook detailing all air and ground exercises. Out of print but probably available on the internet used book sites.
- FLIGHT INSTRUCTOR'S MANUAL (Campbell 1994) This text replaced the BLAC manual.
- MANUAL OF FLIGHT (Cessna Pilot Centre) 1986) Out of print, but probably available from the web
- MANUAL OF AVIATION METEOROLOGY (BOM 2003) Excellent text with terrific cloud recognition photos.
- GENERAL METEOROLOGY (BOM 1981)
- AVIATION METEOROLOGY (BOM 1981)
- THE WONDERS OF THE WEATHER (BOM (Crowder) 1995)
- PLANE SIMPLE TRUTH (Thomas/Noris/ Forbes-Smith/Creedy/Pepper 2008) A must have book that clears the air on the
- myth of aviation's environmental impact. SPIN MANAGEMENT AND RECOVERY (Love
- 1996) • FACTS ABOUT SPINS (DeLacerda 2002)
- ONLY SECONDS TO LIVE PILOT TALES OF
- STALLS AND SPINS (Hadley 1997) Excellent historical review spinning right from Parkes Dive to the present time.
- RA-AUS PILOT CERTIFICATE GROUND TRAINING MANUALS (Val Dyson-Holland (DH) Current year) Stand alone text, study manuals based on the RA-Aus syllabus.

Highly recommended for student study and as reference for the instructor.

 THE SAVVY FLIGHT INSTRUCTOR (Brown 1997)

- NOTES FOR A SEAPLANE INSTRUCTOR (Meek 1997)
- HOW TO FLY FLOATS (Frey 1972)

 THE SAFETY PILOTS TRAINING MANUAL (BRUFORD 1993) This book sets out how to go about teaching a person how to save themselves (and the pilot!) in the event of pilot incapacitation.

- FORMATION FLYING (Keedy 1987)
- AIRCRAFT HUMAN PERFORMANCE LIMITATIONS (Wilson 1993)

 HUMAN FACTORS FOR AVIATION (Transport) Canada 1995)

Titles marked with a red circle are recommended as worthwhile additions to the flight instructor library.

There are all sorts of other flying type books dealing with Human Factors. Weather. Aerodynamics and Handling Techniques.

Because we frequently become involved in community affairs and clubs, I also have heaps of books on meeting procedures, constitutions, etc.

One special section of my library is devoted to the Adventures of Ding Duck and the Swamp characters by Gary Clark. And I am not going to elaborate on my nearly complete collection of **Biggles** books!

Another section comprises books on how to write and speak better, dictionaries and on how to communicate with students.

One word of warning; Do not lend your books unless you have a foolproof system of getting them back. I don't know how many valuable books in my collection have never been returned to me. Another thing is to keep them accessible but safe from pilfering fingers.

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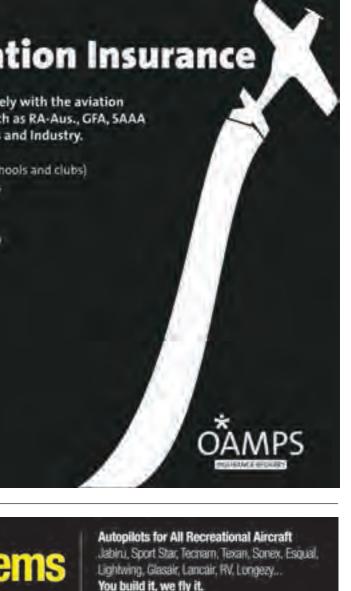
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PILOT **NOTES**

ICP Savannah Bingo

Conditions: Nil wind, moderate turbulence.

THE aircraft struck the top of a tree while approaching a short strip. It stalled and struck the ground in a nose down attitude and was destroyed. Both pilot and passenger suffered severe injuries. The submitter of the report stated that the aircraft was heavily laden and could have been affected by a tail wind combined with turbulence above the trees.

Ramphos Trident

Engine: Rotax 912. 30 hrs ttis. THE engine failed without warning while the aircraft was on cruise at approximately 1000'. The pilot attempted a restart without success so a forced landing was carried out onto a grassy area without further incident. The aircraft was not damaged and the pilot suffered no injuries but shortly after it landed the aircraft was blown over by an emergency services helicopter which landed nearby.

Aeroprakt Foxbat

Airframe: 474 hrs ttis. Conditions: Light wind and turbulence. ON returning to the airfield the aircraft

touched down slightly harder than usual on all three wheels and the nose wheel broke off. The pilot held the nose up until the aircraft came to rest and both occupants exited the aircraft without injury. The aircraft sustained damage to the nose leg, propeller, firewall, floor and empennage.

Airborne Edge Classic

Conditions: Light wind and turbulence. Pilot experience: 107 hrs, all on type. THE pilot had not flown the aircraft for a considerable amount of time. As he approached to land he realise that he was too high and too close and made a second approach. This was also too high causing the aircraft to float along the runway. Thinking that he was too close to a fence at the end of the runway he applied power but the rear wheels and propeller struck the fence and

the aircraft came to rest with major damage to the wing, mast, propeller and windscreen. The pilot suffered minor abrasions.

Jabiru J170

Pilot experience: 1680 hrs, 1168 on type. THE aircraft departed for a flight of one hour duration with an indicated 30 litres of fuel on board. After 45 minutes the engine began to lose power and run roughly so the pilot shut it down and made a glide approach into a racecourse. Once on the ground the fuel was checked again and the gauges now indicated 4 litres in one tank and none in the other. A fuel drain check showed that one tank contained a small quantity of fuel but that the other was empty.

Jabiru LSA

Airframe: 6072 hrs ttis. AS the aircraft touched down the nose wheel strut broke away from the firewall. The aircraft skidded on the grass for approximately 25 metres before coming to rest with damage to the propeller and cowl.

Flight Star 11

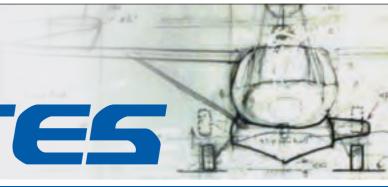
Conditions: Light wind and turbulence. Pilot experience: 878 hrs, 3 on type. A STRONG thermal was encountered as the aircraft approached to land. Power was reduced and the pilot lowered the nose but the aircraft then encountered sink. He applied power but the engine failed to respond and the aircraft landed heavily. The right hand main wheel broke off at the stub axle weld and the aircraft came to rest with no further damage or injury to the crew.

Airborne XT 912 SST

Conditions: Light wind, nil turbulence, AN instructor and student were carrying out a flight for the purpose of a Biennial Flight Review (BFR). As the aircraft approached to land between trees the aircraft drifted off line, the sink rate increased and it landed heavily while drifting sideways. The aircraft sustained substantial damage to its wing and both crew suffered serious injuries.

International: +61 2 8003 3130

PILOT NOTES



DEFECTS

Aeroprakt A22LS

Engine: Rotax 912 ULS. 575 hrs ttis.

WHILE determining the cause of rough running it was found that the constant depression diaphragm plunger was binding in one carburettor.

Some residue build up was found on the plungers and after removal of the residue they operated normally.

TL 2000

AFTER noticing that the aircraft needed an unusual amount of pressure on the right rudder pedal in all phases of flight, the pilot landed and inspected the rudder cables and springs. During the inspection he noticed that the trim tab had been bent in an "S" shape to the right, and suspects that the aircraft might have been tampered with.

Tecnam Echo Airframe: 2729 hrs ttis.

THE reporter noticed movement in the vertical fin spar during a daily inspection.

Closer inspection showed that the spar was cracked right through at the position of the two upper mounting bolts and that four rivets had sheared on the lower RHS spar cap.

Spar cracking in this area was addressed by Tecnam in service bulletins in 2008 and later models were modified to correct the problem.

All operators' attention is therefore drawn to the relevant inspection and repair service bulletins.

These are Tecnam SB 08-UL and Tecnam SB 011-UL which describe detection and repair respectively. They can be found on the RA-Aus website on the "Airworthiness Directives and Service bulletins" pages.

BERT FLOOD IMPORTS ROTAX



4-cylinder, 4-stroke liquid air cooled engine with opposed cylinders. 914 SERIES 115 h.p with turbo charger with automatic waste-gate control, dry sump forced lubrication with separate 3 litre oil tank, automatic adjustment by hydraulic valve tappet, 2 CD carburettors, electronic dual ignition. airintake system, electric starter, integrated reduction gear i=2.43. Weight 70kg including exhaust system and engine truss assembly. 912 S SERIES 100 h.p 914 UL 3 - DCDI with options 4-cylinder, 4-stroke liquid/air cooled engine with opposed cylinders, dry sump forced lubrication with separate 3 lifte oil tank, automatic adjustment by hydraulic valve tappet, 2 CD. carburettors, mechanical fuel pump, electronic dual ignition, electric starter, integrated reduction gear i=2.43. Weight 62.6kg " The Sky Is The Limit ! " including exhaust system and engine truss assembly. 912 ULS 3 - DCDI with options 582 UL DCDI 65 h.p 2-cylinder. 2-stroke liquid cooled engine with rotary valve inlet. electronic dual ignition, integrated water pump and thermostal. exhaust system, carburctions, rewind starter. Weight 47.2kg including exhaust, gearbox with integrated electric start. 582 UL - DCDI with options Also available: 912 UL DCDI (80 h.p) See our website for more info: www.bertfloodimports.com.au DISTRIBUTED IN AUSTRALIA, NEW ZEALAND, SOUTH EAST ASIA AND TAIWAN BY:

BERT FLOOD IMPORTS PTY. LTD 17-18 CHRIS DRIVE LILYDALE VICTORIA 3140. PHONE (03) 9735 5655 FAX: (03) 9735 5699 EMAIL: garya bertfloodomports com.au

Lets play hypothetical

YOU may recall the ABC TV program years ago with Geoffrey Robinson called "Hypothetical", where Geoffrey would give a scenario to participants and ask for their responses.

- **PILOT** TALK

Assistant Operations Manager

Jill Bailey

Let's do something similar regarding flying, now you have achieved your Pilot Certificate.

Scenario 1: The engine has begun to run roughly, splutter or decrease in RPM. What to do? The most immediate checks would be fuel pump on, carburettor heat selected on, fuel tap/s set correctly, maintain safe speed and plan an out landing. In reality, what may happen? A pregnant pause, cold sweats, thinking is the engine really running rough, why is it doing that, what's next? Precious seconds tick by, altitude may be lost, speed may decrease, potential landing areas disappear, etc.

Scenario 2: A pilot is in the circuit when the engine stops. What to do? Immediate checks would be fuel pump on, carburettor heat selected on, fuel tap/s correct, adopt best glide speed and turn in to glide to the runway. In reality, what may happen? A pregnant pause, cold sweats, thinking..... is the engine really stopped, why did it do that, what's next? Precious seconds tick by, altitude may be lost, speed may decrease, safe landing areas may disappear, etc.

Scenario 3: On a cross country flight, the weather has begun to close in ahead. Did the weather forecast show deteriorating weather? What to do? By recognising the situation early, a plan can be enacted, diverting to an alternate aerodrome where a safe landing can be performed to wait for conditions to improve. In reality, what may happen? Increased stress levels, cold sweats, thinking.....if I press on the conditions might improve, because no weather forecast was obtained. Visibility decreases and clouds form behind until...trapped. Even worse, if vigilant lookout and scanning is not performed, possible precautionary landing sites may be over flown. If no suitable paddock is selected for a precautionary landing, there will be no "get out of jail free card". Precious seconds have ticked by, altitude may be lost, it's too late, and there may be nowhere to go?

Final scenario: The pilot has his or her Pilot Certificate and goes off to fly on a weekend or evening after work. The aircraft is taken for a emergency safety brief prior to takeoff, after

flight over favourite scenic landmarks and put away again. Combinations of circuits and landings are rarely practiced, forced landings are rarely practiced and as for stalls?

There is one common theme with all of the above scenarios...a fading of familiarity of checks and procedures. The intent of emphasising the training of pilots to conduct checks and procedures is to ensure they become automatic. Using checklists or acronyms ensures the process flows effortlessly, thoroughly, quickly and most importantly, so as to minimise the possibility of the pilot forgetting anything. The reason practicing checks is so important is because we can't to pull over to the side of the road during a crisis to sort out what has gone wrong . Hopefully, the importance of familiarising oneself with checks and procedures is becoming obvious. So to the regularity of conducting checks the same way and in the same places, assists the pilot to remember the checks

Why do pesky instructors pull back the throttle and simulate an engine failure in a difficult spot? Why do they do it during a BFR? Is it to remind pilots of the exercises they undertook when learning to fly, or is it because instructors want to liven up their day?

As a CFI conducting BFR's, I generally found pilots to be good at handling the aircraft, maintaining speeds and handling the controls. However, like most examiners, I knew the area in which many pilots were likely to be complacent, and would focus the flight review around these areas. I could almost lay bets on the pilot not initiating checks or following standard emergency procedures in the event of an emergency. Sometimes the pre-takeoff checks were forgotten, or only partially completed, because the pilot either didn't remember or didn't use a checklist. Airline pilots don't try to remember their checks, but use a written checklist every time. It may be argued the aircraft they fly are more complex than ours, but checklists are used to reduce forgetfulness.

The types of checks I am talking about: Are the pre-flight checks done (often just a glance at the aircraft as the pilot removes it from the hangar), pre take off safety checks, the pilot's

Why do you think instructors work so hard to embed procedures and checks into a newly fledged pilot's brain?

> takeoff checks, pre-landing checks, engine failure checks, en-route checks, HASEL checks etc.

> Have a think about which area of flight training your instructor spent a considerable portion doing? Which activities do many pilots not undertake when flying? Finally, why do you think instructors work so hard to embed all of these procedures and checks into a newly fledged pilot's brain?

> There is only one answer for all these questions - to reduce the potential of something unexpected happening by having a plan and executing the plan, resulting in the safest series of actions.

> So what answer am I looking for here? I believe that as pilots we have a responsibility to ourselves and our passengers to practice dealing with emergency situations (try not to frighten your passengers, practice by yourself or with an instructor). We should all have a regularly rehearsed and practiced plan and response, to assist us to react better to changing situations and to give ourselves a valuable leg up on dealing with emergencies.

> Practice your action plans, checks and acronyms and not just in the aircraft. They can also be rehearsed at other times. The mark of a good pilot is not how well they fly to the training area and back on a weekend, but rather how well they perform in the event of an emergency. So, step outside your comfort zone and practice circuits on the weekend instead of flying around your favourite scenic spots. Set yourself a target to fly as accurately around the circuit as possible, with altitudes +/- 50 feet, speeds+/- 5 knots and glide distance maintained on every possible leg, or practice forced landings (to a safe and legal height). Practice an occasional engine failure or, better still, don't wait two years before you fly with an instructor. Allocate some time to fly with one more regularly. It does not need to be a full hour. Any of these actions might just help to save your life or your passengers (preferably both).

> Just about anyone can be taught to drive an aeroplane. We only find out what sort of pilot we are in an emergency, when we need to perform under high pressure and achieve a safe outcome. Which would you rather be - a driver or a pilot? 📷

members' market Selling your Aircraft?

RA-Aus head office & Members' Market enquiries Ph: (02) 6280 4700 Fax : (02) 6280 4775 E-mail: admin@raa.asn.au Website: www.raa.asn.au

2020 OUICKSILVER GT 400



Single seat, 285hrs TT, Rotax 447. ALT, ASI (mph), digital RPM CHT. 60L fuel 14-15LPH, 60mph cruise, stall 27mph, Vertex 220 radio. Aircraft in good condition. \$8,000 Ph 08 8753 4048. Located SE of SA.

2432 FISHER YOUNGSTER BIPLANE



19-4436. 280 hours Jabiru 80hp. A unique aircraft, twice winner of best single seater at Narromine and best homebuilt at AAAA 2010 awards. Full panel 75-80 kt cruise 1000 FPM climb 4 hours range. Excellent condition. \$24,000. Ph:03 5579 3204.

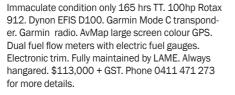
2439 FOR SALE JABIRU J-170C



24-5281 Airframe 1700hrs, Engine 300hrs on new factory recon. engine, latest mods carried out by Jabiru factory. 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. \$67,000 incl GST. Phone Bill 0429 054 205.

2580 TECNAM BRAVO LSA





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. \$4,500ono. John 0427 757 922

2644 JABIRU LSA-55-1059



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. \$38,500 Ph 0419 375 291.

2645 JABIRU J200A 19-4165



Manufactured 2004, TT480, engine Jabiru 6 cyl. 120HP. Mechanical lifters Jab prop. Stalls 43kt, cruise 115-120 MTOW 600kg, Three strobes, 2 radios, 1 transponder, auto pilot, Intercom EFIS-D10 System IK2000. Flight & engine monitor, GPS MAP Garmin 296. Cabin heat, manual flaps serviced every 25hrs. Nil accidents. 138lt. Hangared L.T.V. \$65,000 Ph George 03 9707 3238



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Text - \$15 (50 words maximum - text will be edited when it exceeds

maximum limit). Text and photos - \$30 (include stamped addressed envelope for return). Neither RA-Aus nor Stampils Publishing accepts responsibility for any errors or omissions. The Members Market is subsidised by members and is for non-commercial sales only. RA-Aus and Stampils Publishing reserve the right to withdraw from publication, without refund, any ad deemed unsuitable, including low quality or faulty images.

2671 JABIRU SP 500/6 19-3717



Well maintained and hangared. 449.5 hrs. 123kts @19ltrs hr. Sweetapple cruise prop, custom extractors, 10 ply mains, 85ltr tank. STD gauges + electric turn coordinator, volt meter, fuel flow meter. XCom VHF & headsets, + UHF & 2xGPS. Grim voltage regulator, Anderson jump start plug. Will deliver anywhere. \$55,000. 08 9921 8790

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.

2696 DRUINE TURBULENT AT100



19-4864, built under 101.28, brand new with permit. Ohrs.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.



LSA MTOW 600kg Engine 273 TTIS since factory overhaul Exterior & Interior 9.5 out of 10 Hangared always. Micro Air VHF & Transponder Garmin GPS 296, colour moving map. Maintenance Release Expiry 08/06/12, 86 hours to run, Factory built 2007. TT 1306.\$63.000 inc GST.O.N.O. Contact Tony:tonypete2@bigpond.com or 0412 474 016.

2750 JABIRU SP-6 19-3485



Regd to 27/6/12, TTIS A/F 449hrs, Engine 14.4hrs (new), 3300 (120hp) Hydraulic Lifter. Garmin 126/8 GPS, Icom A200 Radio/Intercom, ASI, ALT, RPM, EGT, Turn Co-ord, Oil Pressure & Light, VSI, CHT, Oil Temp, Volts, Elec Fuel Pump, Compass, Throttle Lock, Wheel pants to mains, Hyd Brakes, 80lt Tank, Cockpit cover, Build Books, Extras. VNE 132, Cruise 110-120Kts. Asking \$60,000ono for quick sale. East Gippsland. Ph Ray 03 5155 5181 or 0411 956 734. rjwheels@ gmail.com

2760 JABIRU J230C



Factory built, Natfly 2008 winner, 24-4937. Excellent condition, Flies "Hands Off". Always hangared, TT420hrs, Microair radio, transponder, Fuelscan 450 (couples to GPS),. Low fuel light, new battery, dual stobes, heater, 10ply tyres. Serviced every 20hrs. Many extras. Ph: 0418 930 100. \$81,000 includes GST. Will be at Natfly this Easter.

2765 THRUSTER T 500



25-0780 2 seater T/T 1165 hrs, 582 Rotax 225 hrs since overhaul, UHF and ICom VHF Radio. New tubeless tailwheel. Long range fuel tank. Flies great and well maintained. \$15,000 Hangered in Helidon/Toowoomba area. Complete spare engine and gearbox also available. For more info ph Paul 0427 622 176

2768 EVEKTOR SPORTSTAR



24-4467 2005 model. Bendix/King VHF and Transponder. Rotax 912ULS, 1100 hrs, 2000 TBO. Always hangared and L2/LAME maintained. Located at Gawler. \$75,000 Bas: 040 5011 330 bas@scheffers.net

2775 PIONEER 200 XL, 24-5118



Factory custom built, Long range tanks, Lawrence GPS,SL40 Garmin radio, JPI FS fuel flow monitor, standard gauges, electric aileron trim, electric elevator trim, flaps, metallic blue paint, blue tint canopy, landing & strobe lights, cabin heat, wheel spats.Privately owned & only flown by owner. Excellent Condition. Always kept in fully enclosed hanger Nill accident. Magnificent to fly 231 Hrs. \$75,000 Plus GST Ph. 0429 457 759

2776 SAVANNAH ROTAX 912



Always hangared. Local WA delivery arranged. \$50,000, Ph. 0418,932,756.

2783 PARADISE P1



In immaculate condition. Airmaster Constant Speed Propeller, Dynon D180 plus all standard gauges. Dual axis auto pilot HDG & ALT hold. Large screen Garmin GDU 370 coupled GPS Transponder with Mode C, ready for entry into Class C airspace. 142Ltr long range fuel tanks. Low hours suit new plane buver. PH: 0412-834 225.

2793 MUST SELL NEW PRICE



914 turbo 2000hr TBO. Autopilot, VHF and UHF radios. GPS, AOA, transponder, in flight adjustable prop. Fuel mizer, computer aided navigation (Fagawi and Mountain Scope) and 120L/500+nm fuel capacity at 110kt. Located Warwick QLD \$87,000 Ph 0407 733 836.



19-5106. Very low kms, rarely used. Slat wings.



24 Rego, Aug 07, Airframe and engine 460hrs, Rotax

2800 SPORTSTAR SL



Immaculate low hour Sportstar SL, private use, 210 hours approx TTIS. Dynon D10A EFIS, Almost new Varia 2-blade in-flight adjustable prop. Garmin GPS495 AirGizmo dock, electric t&b, Whelen LED landing light and external power socket. 600kgs MTOW. L2 maintained, RA-Aus registered. \$120,000 - no GST. Please call Mark 0414 642 340.

2801 SUPA PUP MK 4

19-3572 49 Hrs TT Single Seat, Jabiru powered, superbly built and very nice to fly. Fold wings in 2 minutes for easy storage. Radio, fuel flow, GPS, all standard instruments. Cruise 85 kts, \$18,000 ONO, Sydney area, Phone Robert 0433 833 946 or missyc140@hotmail.com for photos

2809 JABIRU J160 2200A



95% complete. Built by experienced builders. Extras include VSI, dual strobe (not fitted), upholstery kit, interior finished in speckle paint. For further info contact John (02) 9351 7137 or Duncan on (02) 9351 2459 between 8.30 AM & 5.00 PM email john.todhunter@ sydney.edu.au \$49,900 or \$39,000 less engine.



Immaculate aircraft, 200h tt, 912S, cruise 105 knots, stall 32 knots, all instruments, GPS, Icom Radio, transponder, extended 116 | fuel tanks, reluctant sale \$83.000 negotiable. Rick 0431 914 652 or mothard@yahoo.com

2813 JABIRU J160C



24-4478 TT 801 Built 05. Private use only, Garman 296.Microair T2000 transponder, all major engine services by LAME & L2.Up grade cyl heads.new pistons,rings,Conrod bearings,fuel pump.Up grade through bolts.New main landing gear whell bearings and rubbers, bolts. Have spare prop, tyres & tubes. Sale to make way for upgrade. Always hangared.

MEMBERS' MARKET

Asking price \$50,500. Contact Taz 0401 367 785. Busselton WA

2814 SUPAPUP

Single seat. 2200 Jabiru, 90k cruise. \$18,500. Ph: 07 4665 3255 or 0407 750 325.

2815 DRIFTER

Certified wire brace, 582. \$18,500. Ph: 07 4665 3255 or 0407 750 325.

2816 TRIKE

2002 Executive.295h, 582, \$18,500. Ph: 07 4665 3255 or 0407 750 325.

2823 XT912 - AIRBORNE TRIKE



New sst wing with only 45hrs, base 450hrs, excellent condition, no incidents, always hangared and covered. Set up for touring. c/w covers, pylon bag, o/ night covers, landing light, bar mitts, engine cover. Trailer available. For further info please phone 0419 518 353. Making way for new aircraft."

2837 BREEZY 19-906



Built 1994, 420 hours total time. Ground up rebuild finished mid 2011. Comprehensive receipts for \$37K of work and new equipment. Engine Rolls Royce 0200 - 100HP with 1680 hours to run. This is a sweet aircraft in like new condition, you can expect years of trouble free economical fun flying. \$50,000. PH. John 0418 727 575

2840 DRIFTER ULTRALIGHT



Rotax 582 wire braced, rego 25-0355, 845h total airframe, new upholstery, electric start, UHF, VHF, always hangared. 4 blade brolga prop, assorted extras including air seeder, helmets, jackets, spare parts, \$24,000, Phone Doug 0458170470,

2841 AIRBORNE EDGE X 582 CLASSIC



32-7815 Streak II B wing 40 hours. Engine 270 hours TT. Microair M760 Transceiver. Raptor Headsets with intercom. Custom-made trailer (Regd.). Tundra tyres and large windscreen. Always hangared, BEAUTIFUL

BIRD. \$27,000 the lot neg. Phone Nigel 03 6383 9452 (Tasmania)

2856 ZENITH 601 XLB



350hrs 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, Canopy Cover. Excellent condition, superb to fly. Hangared Cessnock NSW. \$59,900 ono. Full build log available. Contact Work: 02 9925 5032, Mob: 0402 829 966. email: eddie.seve@clarity.com

2857 JABIRU 2.2 SK 19-3521



Total airframe and engine 180 hrs engine.Service every 25 hours, Large Wheel & Spats included but not fitted,65ltr tank with new electric fuel gauge.Tank Relined, New Odyssey battery 625.Cruise 90kts @ 12/15ltr per hour. All necessary instruments. Always in a hangar. Beautiful aircraft to fly, Climbs at 1200 to 1500 feet p/m. Also has a photo bay on pilots side, Adelaide SA. \$37,000 (\$41,850) REDUCED !! Email:Adelphiptl@yahoo.com.au Inspections welcome at any time.Contact Nick Ph 0415 835 149.

2858 JODEL D18



Project for sale. Wooden aircraft, 2 seat, 87-knot cruiser on 65-80HP.Empennage and ailerons completed and ready for covering. Fuselage 90% completed, includes 2 Fuel tanks, new Sliding bubble canop,wing ribs completed...Wing spar completed and signed off by LAME.U/C 75% complete, numerous hardware items, all ply and 4130 to complete aircraft included. Asking cost of materials...\$7,800 Ph: 08 8242 12 75

2859 KT76A TANSPONDER

With mounting tray and an A30-2 altitude encoder. Both items were working at time of removable, aerial not included, some wiring for encoder to transponder. Removed to fit an efis & nav/com in my RV4. \$680. Ph: Ray 0428 409 107.

2861 COLYAER MARTIN 3 LSA



As seen at Natfly 2009/10. Excellent condition, 252hrs TT, Rotax 912ULS 100hp, AirMaster fully featherable CS prop, Dynon 180, Garmin 296 GPS, electric trim.Glide ratio better than 23:1.Cruise 97kt. 130L fuel, 600kg MTOW.Great visibility. \$110,000. Will deliver. Phone or email for more details. WA 08 9851 4147, jandshoward@westnet.com.au

2864 SLEPCEV STORCH



Factory build, as new 200hrs,rotax,100hp uls,ideal shortfield aircraft, always hangared. \$60,000. No tyre kickers. Ring Joe 0419 255 746.

2865 WANTED

2 seater BIPE like Fisher Classic or mono like Pietenpohl air-camper. Please send details to rolf.gerste@ gotosage.com Mob. 0417 837 933

2867 NIEUPORT ELEVEN, 10-1968



7/8th scale WW1 replica fighting scout. Cruise 63knts, VNE 100knts, stall 25knts, Rotax 503 SCDI, ASI, ALT, TACHO, dual EGT, 'machine gun' Absolutely Best in OZ. Multi award winner, Fantastic fun, great at dogfighting birds and the 'archibald' blues. Watch out Von Richtofen it's only \$22,250!!. MIKE 0422 231 520 (8am-8pm) or nieuporthappy@y7mail.com

2868 JABIRU J170



2010 Factory built Jabiru J170. Always hangared and professionally maintained. No accidents. Complete with headsets and spats. Fuselage has 1,100 in service. Has just had a 0 hour factory reconditioned engine fitted. This is an ideal aircraft for a private owner and it will be available late April, 2012. The Committee of the Adelaide Soaring Club has decided to purchase a new aircraft and is offering 24-7314 for sale at a very reasonable price of \$66,500 o.n.o. For enquiries contact: Karl Faeth. kfaeth@chariot.net.au 0414 701 019.

2869 EVEKTOR SPORTSTAR



2007 Only 138 hours TTIS -owner upgrading to 4 Seat IFR. Fresh 100 hrly, level 2 maintained, always hangared. 3 blade Woodcomp in-flight adjustable prop. Bendix/King Xpdr and VHF. Garmin Aera 500 GPS. Tru Track ADI.Electric trim.Full covers. Awesome STOL

performance. Approx 23L/hr All A/D's complete. Townsville, QLD. Text Chris with email address for info and photos. 0419 668 743. \$115,000 ono-no GST

2870 ZENAIR STOL CH 701



Rotax 912s 100 H.P T.T 412hrs. 3 Blade Kool Prop 65 hrs. Standard Eng. Gauges plus Elec. Fuel pump, Air Switch, Carb Heat, Fuel Flow, New Front Wheel Bungee, New Main Wheels and Tyres, Radio Headsets. New Aircraft Coming. \$46,000 O.N.O Ph: 02 6684 2174.

2871 CHEETAH

Part kit form Morgan Aeroworks, fuselage, seat belts and fuel tank, \$5,000, 0423 419 464

2873 SONEX



Taildragger. Aerovee 80HP. Polished metal. Dual

A65 CONTINENTAL 0-170, 420 TT, currently installed in operating aircraft, can view running. Wooden Sensenich

2875 ENGINES



MEMBERS' MARKET

controls. Garmin 196 GPS. New tinted canopy. Microair Radio. Grand Rapids EIS. 60 litres fuel capacity. 18 litres / hour. Cruise 100kts. Aerobatic. TT 90 hour \$49,000 OBO Contact Shane Fewings. Phone 0412 537 730 Email: sonex386@gmail.com

2874 SAVANNAH FOR SALE



Original slat wing. True STOL performance. 26 knot stall. 290 hours airframe & engine - last 240 on premium 98 octane MOGAS LAME maintained Always hanger stored Good condition COMMANT antenna XCOM radio/ intercom Fuelflow meter Warp Drive propellor Rotax 912 ULS 100 hp engine. Asking \$58,000. Contact: 0417 141 542 or email kym_trewin@hotmail.com



prop also available, \$9,000 Ph 0418 459 147

2877 THRUSTER



582 rotax t/t frame and motor 357hrs skins good. \$12,500. Ring Brad 0449 798 809.

2885 Quicksilver GT500

Two place-dual controls. Airframe 330 hrs. Rotax 582 engine only 90hrs since rebuild, 2 X ASI, 2 X ALT, VSI, 2 X EGT, water, fuel, volts, taco, hour, radio, intercom, 2 X headsets GPS 55. 64lts wing tanks. Flaps. 1000 FPM climb, 70 knots cruise. New 18"X 8" balloon tyres (Tundra). New brake pads. Tail boom ground support foot. Video camera mount. Good Condition. Reduced to sell to buy a car \$18,000 O.N.O. Melbourne Ph/Fax 03 9737 9155

2889 FOXBAT A22LS



MEMBERS' MARKET

24-7229, manufactured 2009, 140 hrs. Rotax 912, Microair transponder and radio, GNE UHF, strobes. Set up for BRS, but no shute. Y stick, heater, oil thermostat, Zulu and DC headsets, Avmap GPSSoft-lined fuselage cover. Reg. til Oct. 2012. Always hangered. Located Cooma NSW. \$100,000. Ph Peter: 02 6458 5271.

2891 JABIRU J160-C

Factory built.Dual radios, transponder, Garmin colour GPS & E.L.B. 780hrs TT with recent top overhaul and 100 hrly by LAME. Service every 25hrs by L2. \$56,000 o.n.o. Ph: 0412 857 107

2892 JABIRU SP470



Hangared at Strathalbyn S.A. <650 hours TTIS. Solid lifter 2200 engine. 85 litre tank. Lamb's wool seat covers. Icom A-200 radio/intercom, Garmin GPS, GME MT4106 beacon, Garmin GTX327 transponder, two headsets (pilot's with ANR). Wheel spats, L2 maintained. \$43,000 neg. Phone John (08)8388 4572 or 0417 402 926. Suit private syndicate ownership.

2893 JABIRU SP6



19-3481 Family built and owned with low 160 hours total time on 3300 solid lifter engine and airframe. Upgrades to starter and oil cooler including remodelled lower cowl. Standard panel. ICOM A-200 radio. 406Mhz beacon with GPS. Always hangared. L2 maintenance supported. \$47,000. Ring Dave on 0466 288 050.

2894 ROTAX 912 ULS ENGINE

Rotax 912 ULS 100hp engine. 980hrs year 2006. Carefully maintained by owner L2. Still in aircraft, can be seen running. \$8,500. Ph: 0407 424 607.

2895 JABIRU J160C



ABN: 65 007 339 451

Now Importing THE EUROFOX AIRCRAFT:

HORSHAM AVIATION SERVICES

• Ouick folding wing design

• Short take-off & landing

• Audible alarm capability

Email: info@horshamaviation.com.au

And DYNON AVIONICS Products:

Solid state sensors

Checklists

PH: 03 5381 1727

Glider Tow certified to 750Kg

· Now with Autopilot capability

• Quality Factory Built

2007 Model, Factory Built, 1 Owner, LAME 2 Maintained, Always Hangered, Never been damaged, in excellent condition. Has Microair VHF and Mode C Transponder. Comes with Wheel Spats Not shown in Photos. Located near Yalgoo W.A. call 08 99637993. \$63,000.

2896 JABIRL

Jabiru liquid cooled heads . New valves inserted, radiator manifold. All there and ready to install. Cost over \$7.000 sell \$6.000. Ph: 08 8682 6551 or 0428 826 551

2897 ZODIAC 601XL-B



Jabiru 3300 TT AF and ENG 115 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

2898 JABIRU J160C



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2899 RANS S17 STINGER KIT



TT 16 hours ex USA - needs assembly, single seat high wing aircraft kit with as new Rotax 503 DCDI engine, all instruments and ready to go, trailerable but no trailer.

\$79.50 plus post and packing



19-7617 Single seat all metal aircraft designed by builder.Fitted with 1835 VW, electric start,34 hours.



Not registered. Located Brisbane asking \$11,000. Photo of completed Stinger. Rick 0431 914 652.

2900 LIGHTWING GR 582 25-0155



Factory built, always hangared. Blue head oil-injected 582, Large bush tyres, UHF & VHF radio. Bolly prop. Looks great & flys true. Located Gippsland. \$27,000 ph 043 812 5079

2901 ESOUAL VM1 EUROPA



6cyl Jabiru 3300 engine (125hp) - 178hrs only. Excellent Condition - Leather Interior. Always hangered in Twba. Garmin GPS. Rego 19.3839 / till 2012 \$100,000 + Gst. Ph: 0407 768 701.

2902 TECNAM P92 ECHO SUPER

TTIS 65 hours. Long range tanks, Garmin 196, icom radio, UHF, fuel flow meter, G meter. As new. \$120,000. Call Steve 03 5385 7216.

2903 THRUSTER 500

With trailer. Fully reconditioned motor. Not yet weighed or registered. \$18,000. Ph: 02 6567 8239

2904 AIRBORNE EDGE X

Microlight. Streak wing. 582 Blue Head Rotax, 25 hours since Bert Flood recon. Helmets, headsets, radio, covers. W.A registered custom trailer. Excellent condition. Ready to fly. \$20,000. Ph: 08 9450 5953 W.A.



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2906 SAPPHIRE 95-10



10-0293. Rotax 377 Engine, 3 Blade Ivo Prop. Great little aircraft. Spare 447 Rotax Engine. Enclosed trailer, all rego. Located at the Oaks Sydney. \$12,000. Phone Errol 02 9878 4877. Also BD 5 parts.

2907 TRAILER FOR TRIKE



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2908 GEMINI X



Rotax 503 DCDI. Zero time after factory re-build. New wing & aileron skins. Dual EGT & CHT guages, 3 blade prop, B gear box. Nil accidents. Registered in 19 category. Aircraft & engine owners manual from factory delivery. TT approx 260hrs. Good original condition. Partially dismantled for inspection in carport. Genuine collector aircraft, one of only 1/2 dozen left in existence. \$7,700. Ph: 0412 751 823. Located central QLD.

2909 KITFOX



Model - Classic 4. Rego 28-4494. Total hours: 144. Rotax 582 engine. Reason for sale: Old age - owner not aircraft. \$35,000. Ph: 03 5762 4684.

2910 SABRE RVX



100. TT 410 Hrs. Rotax 912S, Kaspar inflight variable pitch prop. Two stage Fowler flaps, retractable UC, Electric trim. Cruise (110kts@15Lph). Stall 28 kts .

VFR flight and full engine instruments, Navman GPS with fuel flow, Microair comms. Striking aircraft with outstanding handling and performance. Always hangared, professionally maintained and in excellent condition. No reasonable offer refused. For full details call 0417 362 844

2911 LIGHTWING GR582



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2912 SONEX



19-4647 Sonex for sale, 152 TTIS, Aerovee 80 hp engine. All metal construction, cruises 110kts at 15 lph. Always hangared.\$44,000. Ph Maurie 03 5197 7420.

2913 THRUSTER T500



25.0808. TT 927hrs, new crankshaft etc at 571hrs. UHF & VHF Radios fully optioned. 10ply mains. New heavy duty tail wheel. Skins 99%. Excellent condition. Located Mildura area. \$16,000. Phone Ross 0418502270

2914 J 160 REGO 19-4540



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2915 JABIRU LSA 55



MEMBERS' MARKET

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2918 SIERRA 100



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2919 TECNAM P92



Echo Super 2007 Mod. Rego 24-5420 430 hrs TTIS. Excellent Condition. Always Hangared. No accidents. Garmin 296 GPS, Transponder, UHF, siren, 6x600 main wheels. \$105 000 plus GST ono. PH: 07 4984 4578

2920 TRIKE XT912



Blue(3/07 472 hrs base) with blue streak 3 wing (88 hrs) HD covers, belly bag, Excom radio and headsets, bar mitts, large screen, training bars, spare tyres. Always hangared. Nowra NSW \$43,000. Ph Ian 0412 429 689.

2921 JABIRU J120

24-5485 07 factory built 400 hours tt air frame & eng, standard panel + vsi, 296 garmin, cabin heat, spare prop, new tyres, cruise 100 + kt @ 14 lt/hr. always hangared, only flown by two experienced pilots, excellent condition \$ 49,000 gst inc. Ph: 0428 954 262 or 0408 504 531

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2923 SUBARU E81

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2924 ROTAX 912ULS

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2925 BUCCANEER ULTRALIGHT



Amphibious 2 seater with Rotax 682 75HP. Dual controls, retractable undercarraige, Icom A210 with intercom & dualwatch, two noise cancelling headsets, alum fuel tank, EPIRB. Great fun aircraft, excellent condition, TT 150 hours, Regrettable sale, \$31,000 ONCO. Email hydelotter@hotmail or call 0488 791 175

2926 JABIRU SP-6 19-3627

Jabiru 3300 engine [solid lifters] 781 hours total time. Lowrance 2000 color Gps 5". Reg till 12/12. Level 2 maintained. Microair radio/intercom, 2 Blackhawk Headsets, ASI, ALT, RPM, Electric Turn Co-ordinator, Oil Press, Oil Temp, VSI, CHT, Volts, Elec Fuel Pump, Compass, outside temp gauge, Throttle lock, Spats x 3, 85lt Fuel Tank, Aircraft Covers, external power supply, A lot of hours were added to the build to make the door fit and fairings better than Jabiru, professionally painted 2 pack, Cruise 115 kts 19 lt hr. Asking \$47500 . Ararat/ Geelong area. Ph. Doug 0352552971 or 0409084589. dpark221@gmail.com

2000C

2929 TEAM MINI MAX



Rotax 277 Engine. Low hours, wheel brakes & bearings. Engine mount for R447 if required. \$4,500. Trailer \$400. Ph: S.A 08 8258 2724







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MEMBERS' MARKET

2927 SENSENICH PROP & AIRMAP

This Jabiru 3300 Sensenich propeller has only 100 hours use and is therefore in near new condition. Priced at \$1.600. The AirMap 2000c GPS has never left the house and is priced at \$850. Both plus postage and handling. Please contact Ross on (02) 6342 5150 or e-mail: ross mcrae@ webone.com.au"



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2932 EVANS VP-1A VOLKSPLANE



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2933 ENGINE ROTAX 912 + C/S PROP

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2012 RA-AUS BOARD ELECTION

Please note the election is for half the members of the Board, each Board Member having a two-year term. The Board elections called this year are for Group A which consists of:

- One (No.2) representative for South Queensland
- Two (No.1 & No. 3) representatives for New South Wales
- One (No.2) representative for Victoria
- · One representative for Tasmania
- One representative for Northern Territory
- One representative for North Queensland

Board Members (term expires at the RA-Aus 2012 Annual General Meeting)

South Queensland Nick Sigley New South Wales Paul Middleton New South Wales Michael Apps Victoria Rod Birrell Northern Territory Vacant North Queensland Steve Runciman Tasmania Eugene Reid

BOARD MEMBER DUTY STATEMENT

Notice under Rule 20 (vi) of the Recreational Aviation Australia Inc. Constitution and rules.

BY-LAW No. 10

1. Represent the Members of RA-Aus as a whole and the Members of the Region specifically. 2. Actively promote and encourage the ultralight movement through liaison with government and other organisations in the Region, on behalf of RA-Aus.

- 3. Attend all Board meetings or arrange alternate delegate or proxy.
- 4. Perform all tasks and duties agreed by the Board, as far as possible within the Member's power.
- 5. Delegate tasks as required but remain responsible for all actions and decisions of delegates.
- 6. Action matters as directed by the Board.
- 7. Carry out all duties described in the Constitution & Rules.
- 8. Forward reports on all matters of relevance to the RA-Aus Office in a timely manner.

Extracts from the RA-Aus Constitution and Rules

- 13. Election of Board Members.
 - i. The Board shall be elected by the membership on a one Member one vote system. ii. The Members of each region with Representative(s) in:

a. Group A (Appendix B) shall elect their Board Representative(s) prior to the annual general meeting of the Association in each even numbered year. The names of the Members elected shall be forwarded to the Executive Director prior to the annual general meeting of that year and the results of the elections shall be announced at the beginning of that annual general meeting. The Members so elected shall hold office from the beginning of the annual general meeting at which their election is announced, until the beginning of the annual general meeting of the Association following the group elections pertaining to Group A.

b. Group B (Appendix B) shall elect their Board Representative(s) prior to the annual general meeting of the Association in each odd numbered year. The names of the Members elected shall be forwarded to the Executive Director prior to the annual general meeting of that year and the results of the elections shall be announced at the beginning of that annual general meeting. The Members so elected shall hold office from the beginning of the annual general meeting at which their election was announced, until the beginning of the annual general meeting of the Association following the group elections pertaining to Group B.

Regional Definitions	Representatives
North Queensland (North of latitude 22° S)	1
South Queensland (South of latitude 22°S)	3
New South Wales	3
Victoria	2
Tasmania	1
South Australia	1
Western Australia	1
Northern Territory	1





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RECREATIONAL AVIATION AUSTRALIA INC.

BOARD ELECTIONS 2012 NOMINATION FOR BOARD MEMBER

NOMINATIONS CLOSE - 4.00 PM EST FRIDAY 25 MAY 2012

Under the constitution and Rules of the Association the members of each Region shall elect Board Member(s) in accordance with Rule 13

Proposer: I nominate.. for election as Board Member representing the Region detailed above

Proposer... ..RA-Aus Membership No.. (Printed name & signature)

Seconder... ...RA-Aus Membership No..... (Printed name & signature)

Candidate:

I consent to this nomination for the position of Board Member of Recreational Aviation Australia Inc.

Candidate's Signature..... ...Date: /2012

Candidate's Electoral Statement: Please read the statement conditions in By-Law 4

Notes:

1. In accordance with by-law 4 a member standing for office must state their commercial interests and involvement in the recreational aviation industry for the information of voters.

BY-LAW 4: Election Statements by Candidates

Candidates for positions as Board Members of Recreational Aviation Australia Inc. shall be entitled to submit an election statement of their own choice for insertion in the Recreational Aviation Inc. magazine (Sport Pilot) at no cost to the candidate.

The statement must be prepared in black ink on one side only of one sheet, of white A4 size paper at the candidate's own cost, and shall be forwarded with the candidate's nomination paper to the Association's office prior to the nomination close at 4pm EST 25 May 2012.

The statement must include a statement of all positions of income, remuneration or honorarium in an organisation with aviation related interests. Such organisations shall include those of sole trader, partnership, unincorporated association, incorporated association or limited liability company. After close of nominations, all statements received shall be printed in the Recreational Aviation magazine (SportPilot) in alphabetical order by surname in each position nominated for.

RA-Aus board election

FORREGION

....RA-Aus Membership No.....

Another Mode than Ultralights

In February we ran a poem about ultralights by member, **Don Briggs,** which included some unkind comments about motorcycles. That inspired member, Arnold Miller to respond in kind. Poetry fighting at 10 paces. Gentlemen start your engines.



Dear Mr Briggs, your poetry Brings me close to tears. I ride a motorcycle Have done for fifty years

I also fly a microlight, I also owned a chopper. I've trained in autogyros And never came a cropper.

Why damn a motorcycle Since you obviously don't ride. You just don't understand them, I wonder if you've tried.

It is true that there are bikers That make you shake your head. There also are some pilots Who are lucky they're not dead.

To live a life in fear of death Is not to live at all. You cannot climb a mountain Terrified that you might fall.

When talking of my microlight, I often like to say It's a motorcycle in the air, With no cars in the way.

To hone your skills on motorcycles Keeps you fit to fly On anticipation, calmness And judgment you rely.

A little fear is stimulating, Keeps you on your toes. When you get complacent Your judgement often goes.

If you want the world to see us In a rational, friendly way, We must treat those Who ride motorbikes In a much more tolerant way.







FLY-INS AND SPECIAL EVENTS

To ensure your aviation event is included in the Calendar of Events, give us at least six weeks notice and, preferably attach a jpeg picture to illustrate it. Send information to editor@sportpilot.net.au

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FK12 -A \$ 106,000



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HAPPY LANDINGS

New Rotax on the way

XCITING news from Deputy Editor, Kreisha Ballayntine, who was sent to Austria in March to cover a big announcement by BRP, the makers of Rotax engines (they paid for the trip).

The company announced the launch of the new Rotax 912 iS engine. It's an evolution of the Rotax 912 engine and the company says it delivers 38% to 70% better fuel efficiency than comparable engines.

The new engine has a modern fuel injection system and digital engine control unit (ECU) to ensure optimal fuel and air mixture at any altitude for longer flight range, lower operating costs and CO2 emission reduction. The new Rotax 912 iS engine also provides a time of 2.000 hours between overhauls (TBO); the same TBO as the 912 engine. Mass production of the engines will start in May 2012.

Expect a fuller report when Kreisha swans home from Europe. For more information www. rotax-aircraft-engines.com. 🐲



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