

BRISBANE VALLEY FLYER

FEBRUARY 2013



**Watts Bridge
Memorial Airfield,
Silverleaves Road
via Toogoolawah,
Qld**

*www.wattsbridge.com.au
www.qva.org.au*

***The Great Eastern Fly-in 2013
Evans Head Airfield***



Evans Head 4th – 6th January

The public were there in their thousands. There were warbirds aplenty with a Trojan T28, two Winjeels, two Wirraways, a Mustang and two or three Yaks. The Grumman Mallard was also out and about, at one stage beating up the main runway at full speed. Australian aerobatic champion, Paul Andronicou was absolutely sensational in his Pitts Special.





Evans Head Airpark finally open for business

On the 20th November 2012, the Richmond Valley Council and Evans Head Airport Pty Ltd executed contracts for the sale of the aerodrome. The company's proposal includes a 70-lot residential airpark, 14 commercial hangars, and light industrial lots for aviation-related businesses. Plans are in place to construct a museum, a boutique hotel and convention centre, as well as camping facilities; and all this just 400 metres from some of the best beaches on the east coast.

On Saturday 5th January, Bill Finlen and I were both presented with copies of Volume 1, Issue 1 of the Evans Head Airpark Gazette, and in return we both sincerely wished the company the very best of luck with their project.

Bill and Jenny Finlen's new life at Boonah

I flew in company with Bill's Tiger Moth on the way home from Evans Head. The route back along the valley, following the railway line up and over the Border Ranges, has to be one of the most spectacularly scenic routes to fly anywhere in the world. Cruising under a low overcast, around occasional showers, only added to the occasion. Tony King wasn't far behind in the Koala, and Bill invited both of us to have afternoon tea with him at his home right next to Boonah airfield.

Bill has built a magnificent hangar next to his home. He stores his aircraft there, as well as his collection of Tiger Moth parts. He and his wife Jenny are very happy with their new situation. Jenny, in particular, is quite taken with the township of Boonah, with its arts and craft culture. Bill, of course, is just happy to be living next to an airfield. He is also into flying radio-controlled models. He has several, some of them flying and some under construction. He has mates in the local RC modeling club, including a nice fellow by the name of Ben, who flew in the front seat with Bill to Evans Head and back.



FTC Decarbonising Fuel Additive

In August last year, I began adding FTC Decarbonising Additive to the fuel used in my Sapphire's Rotax 503 motor (BVF AUG 2012). This product is made and marketed by Cost Effective Maintenance here in Sumner Park, phone 3376 6188 and their website: www.costeffective.com.au. It's not cheap. A one litre bottle costs \$80.00, but it mixes 16mL per 25 litres of fuel. The company told me that they have been selling the stuff for 20 years and have not had any negative issues with it, but, in aviation, using fuel additives is fraught with hazard, so I was careful to write that I was not recommending the product then and I am saying exactly the same now. Basically, USE THIS PRODUCT AT YOUR OWN RISK!

My Sapphire's Rotax 503 motor did its first 100 hours on a fully synthetic oil notorious for carbonisation of rings and pistons. Not long after buying the plane, I made the switch to Penrite and this produced about five hours of very dirty running. Although most of this excess soot abated, I was still having to clean my tail every few hours. When I started adding the FTC decarboniser, nothing noticeable changed for three or four hours, but then several sizable lumps of soft, black graphite-like substance (similar to Molybond, if anyone remembers this product) ended up across the right hand stabilator surface.

I have now been using the FTC product for just on 30 hours flight time. No more lumps of graphite stuff have come out of the engine. Neither am I getting any soot. I haven't had to clean the tail much at all during this period; certainly, nothing like before. The engine is running very smoothly and, overall, I think the product is working well. It is my opinion that the Penrite oil was working slowly on the carbon in the motor and this was why I was getting the soot. The FTC decarboniser, however, appears to have gone through the 503 like a dose of salts and I would say that the motor is now completely clean inside.

If you ever use the product, be careful not to spill in on fabric or composite material. It stains terribly. I use 10ml syringes from FGI (Fibreglass International at Wacol). They are cheap and work really well.

Finally, let me repeat: USE THIS PRODUCT AT YOUR OWN RISK!

Why break your back?

Anyone who has ever tried to shift a Drifter knows that pusher aircraft are much heavier on the tail than tractor aircraft. Even Sapphires without their pilots have close to 30kg on their tail wheels. I decided to do something about it by making a trolley. It turned out to be very easy. Instead of making one from scratch, I bought a standard one for \$29 from my local hardware store and modified it. It has turned out to be a great success. The cup (an inverted fence post cap) scoops up the tail wheel, and the aircraft is moved about by the tail. (Note that the tail wheel scooping procedure requires a certain rolling resistance and I have not tried to do it on concrete). The tail wheel simply tips out and rolls forward after the aircraft has been moved. If the aircraft is hard to move for some reason, care needs to be taken not to pull the wheel out with the cup raised (which may damage the rudder). This design should work well on any tail dragger, pusher or tractor.



Flying Winnebago from Canada

Louis Grenier and Natalie Mongeau from Montreal are husband and wife (according to Louis, in Montreal the convention is for women not to take their husbands' surnames). They are long time aviators, having owned several previous aircraft. One day a few years ago, they got the idea to tour the world in a flying caravan and they were not thinking of the term in a metaphorical sense. However, there was nothing available that suited their purposes, so Louis decided to design and build from scratch. In fact, to cover costs he decided to build several of them and sell the others. The plane is powered by a big Lycoming, (250hp I seem to remember), and cruises at about 100 knots. It was brought to Australia in a container and assembled for their tour downunder. It is absolutely capacious inside with beds, toilet and everything else you would expect in a Flying Winnebago (that is what Louis and Natalie have called it). I caught up with the plane and the proud owners at the Straddie Aero Club's Xmas Breakfast. The good looking guy in the lower photograph is Louis, by the way.



The Brisbane Valley Flyer has a new editor!

I've been the editor for that last three and a half years and have decided that it's time for a break. My friend and fellow BVSAC member Rob Knight has kindly stepped forward. Rob will take over editorship as of the March edition. Rob is a very experienced GA pilot, an ex-CFI of a New Zealand aero club, and part owner of a very smart, bright yellow GA912 Lightwing, which he and co-owner ex-kiwi, Peter Davies, keep at Boonah. Rob is currently working as a technical writer and photographer, so we really are lucky to have him step into the breach like this at short notice. Many thanks, Rob!

Peter Bugg catches a Virus

You may have recently read Peter Bugg commenting on RA-Aus insurance matters (BVs Nov 12 and BVF Dec 12). Peter is an insurance executive with over 35 years in the industry. He also owns several aircraft. His latest acquisition is Pipistrel Virus powered by the new fuel injected Rotax 912. These photos were taken at the Straddie Aero Club's Xmas Breakfast. This aircraft is not only very stylish, it has quite an amazing performance, cruising well in excess of 130 knots. Incidentally, the "01" on the fin signifies that Peter's actual plane is the world's first LSA to use the fuel-injected 912 motor.



Mr Bugg's bug on the way back from Narromine (the smoke is from bushfires)



Neil and Caroline swim “upstream”
BVSAC President Neil Bowden and his much better half, Caroline, (who did such a wonderful job catering for our Xmas party last year), recently moved into the semi-rural, Upstream Lifestyle Resort on the river bank at Bethania. Neil and Caroline timed this move to occur just a little before Neil's retirement. Neil actually finished work a week or so earlier than planned (a health problem that has since been successfully treated), and they are now making the most of their new situation. I caught up with the happy pair at Paradise Point in mid-January where they were out for the day with some friends in the resort's minibus. They are planning to have a holiday in China in March.

Android AI Apps

CASA has come to sensible conclusions in regard to Electronic Flight Bags (EFBs). They have even made recommendations about a minimum size (A5). Two likely contenders are the Apple iPad Mini and the Google Nexus. These two tablets use different operating systems. Apple, of course, use the Apple iPhone Operating System (iOS) and Google use Android. OzRunways, AvPlan, and some other EFB providers currently only write for iOS. At the moment, as far as I can determine, only Jeppesen support Android and this is only for larger Samsung tablets. Android is, however, extremely popular and it won't be long before maps and flight planning apps are available. Sentient Software Support (see below) were at the Evan's Head Fly-in taking plenty of email addresses from people wanting Android maps.

These two EFB tablets also have attitude indicator hardware and software functions (see BVF Nov 12). Recently, I bought myself a Nexus 7. It cost me \$288 and the Wi-Fi version came with an inbuilt GPS, which is not the case for the more expensive iPad Mini. Wanting to play with AIs, I explored the freebies first and found that absolutely none of them worked. This was very disappointing, because I know that there are several free iOS gyroscope apps that do work. I eventually bought an Android AI app for \$90 and so far it has worked very well. This app is from Germany and is called ixGyro:



Ready for takeoff with ixGyro

ixGyro is the first true-attitude indicating glass cockpit app for Android smartphones. The reliable and robust artificial horizon is created by processing the current data of the smartphone sensors (accelerometer sensor, GPS signal and the gyroscope). Trajectorial accelerations do not influence the true-attitude indicator.

ixGyro provides these instruments on your smartphone:

- Attitude Indicator (Artificial Horizon/Gyro)
- Magnetic compass
- True Course
- Slip Indicator
- Groundspeed
- Vertical Speed
- Altitude MSL

Supported smartphones:

- Google Nexus S
- Samsung Galaxy Tab
- Samsung Galaxy S2
- Acer Iconia Tab A500
- Asus Eee Pad Transformer
- LG Optimus Pad
- and others



Sentient Software Support

At Evans Head, I was given a one month free trial Nav/Flight Planning CD by Sentient Software. I followed this up by writing to Pete Smith, their Sales Support Officer. I told Pete that the market was wide open for a good navigation/flight planning app for the Android Operating System. Pete replied saying that he didn't need me to tell him this, and advised me that Sentient are putting every effort into getting their Android software out into the market place quickly.

"Arthur, I appreciate the feedback and I'm hoping that our Android version will be exactly what you are after; simple planning straight on the charts. I'll be sure to keep in touch and let you know how the project is going."

Stay in touch with Sentient and the development process, by subscribing to their blog <http://airnavvfr.blogspot.com.au/> or catch them on Facebook www.facebook.com/airnavvfr

Richard Sweetapple finally calling it a day. The end of an era!

I had written to let Richard know that Jabiru were looking for someone to service their wooden propellers, and build them when requested (Jabiru will soon be producing their new fiberglass propellers – BVF Dec 12). Richard wrote back to say:

G'day Arthur. I have decided to stop making propellers after my 80th birthday in May this year. I am on the lookout for someone to take over the business and service the needs of the homebuilt fraternity. This person would need experience with light aviation, woodworking experience and an understanding of physics and maths. I am prepared to offer back-up help for up to three months. What is on offer is the profile cutter, moisture content tester, Izod impact tester, glue batching scales and over 100 propeller profiles, warming oven, etc. Other machinery, such as the bandsaw, planer thicknesser and mill drill I would like to keep for my other hobbies. Regards, Richard.

Tough guy Gavin and sidekick Myles: too clever for words

Some people say Australian privacy laws go too far, others say they don't go far enough. Certainly, it is against the law to access personal details from membership databases of organisations like RA-Aus and use them for private political purposes. But it appears that WA Board Member Gavin Thobaven may have done just that, based on his statement that he was sending his propaganda "to **all** WA members". How else could he have obtained ALL their email addresses?

Dear member

I have attempted to send out a message to all WA members but I fear that my email server has let me down somewhat. ... I am asking if you could forward this request to any RAA members with whom you have contact.

Gavin goes on to say:

.... a certain small group of members have undertaken a campaign of misinformation and tactics to undermine the board of the association. ...

I have also been sent a copy of an email that appears to have been written by Myles Breikreutz, RA-Aus Board Member for South Queensland:

... I am working in conjunction with Gavin Thobaven and the WA members and they are getting the same word files as you are....

Unlike Gavin, Myles is not implying that he has used RA-Aus membership records to send out his emails; however, he is working the same clever little game that Gavin is pushing in the West. Basically, the idea is to circumvent the proper functioning of the 9th February General Meeting (as notified to all RA-Aus members per the meeting notice), by collecting proxies that they hope will prevent all motions from the floor. In effect, these two Board members are attempting to gag the meeting; to turn it into a gabfest from which no effective action can be taken. The fact that there could be several hundred members turn up, probably having spent a total well in excess of \$100,000 to get there, means nothing to them.

RA-Aus member Andy Saywell (member 015361) from Coffs Harbour wrote to all Board members to complain:

... it has come to our notice that Myles and Gavin are circulating a request for support for a motion that is at its heart unconstitutional. ... Furthermore, ... doesn't it seem ironic that the motion itself seeks to prevent motions from the floor? ...

Andy then wrote separately to Gavin asking him to "cease and desist" with his defamatory remarks and unconstitutional motion, closing with the remark, "Continue at your peril." Gavin promptly replied:

Well, aren't you scary????? I have had real tough men try to intimidate me before and you fall well short of them I can tell you. ... Your threats won't change that. Shame that, ..., isn't it? Sometimes it doesn't pay to shoot your mouth off does it? ... Bring it on. Gavin

Why are Gavin and Myles trying to turn the General Meeting into a very wasteful non-event? What is it that they don't want to come out at the General Meeting? What action is it that the members in a democratic process might take that Gavin and Myles are so petrified of that they pull this silly stunt? And is it really the case that they do not have the collective wit to realise that their motion is tautological nonsense? Do they not realise that it is both unconstitutional and in conflict with the General Rules of Meetings to try to stop motions from the floor of a General Meeting?

RA-Aus General Meeting : BVSAC unrepresented

The final count of RA-Aus members requesting the Feb 9th General Meeting is more than three times the number required by the Constitution. Perhaps two hundred or more members will turn up for the meeting in Queanbeyan; it is hard to know exactly how many will be there. I have been told that some NSW clubs are hiring buses for the day, and many interstate clubs are sending representatives. The DDSAA are sending three members to the meeting, and the Boonah Flying Tigers are sending two members. Sadly, the BVSAC committee considers such expenditure an inappropriate use of club funds.

Howie Hughes and Australian Lightwing

Two weeks ago I flew down to Ballina with Peter Bugg to meet Howie. The famous Australian aircraft works is situated on the south-west corner of the airport behind a big steel gate. Howie Hughes has been part of the Ultralight/recreational aviation scene almost from its very inception. He is a larger than life character, not just into aircraft, but also keenly interested in environmentally friendly engineering such as electric cars. He has three or four projects on the go at the one time, including an electric car, an SP-6000 six-passenger aircraft (powered by a 450hp Supermarine/Chevy V8), and a flying car similar to the American Terrafugia. In addition to this research and development, the company is producing the Lightwing Speed two-seat light sports aircraft, of which I inspected three examples in their showrooms. A very busy man, Howie still finds time to run around after two cocker spaniels and play guitar at one of the local shopping malls.



Howie grew up in Kew, an inner suburb of Melbourne. His dad worked as an engineer at the Walter and Eliza Hall Institute for Medical Research. Howie studied Architecture at Melbourne University, graduating in 1970 with the likes of comedian turned green activist, Rod Quantok. He has worked as an architect, but much prefers industrial design and engineering. He also had an early interest in boat building and left Melbourne in the late 70s to start a company in Ballina. Boats gave way

to aircraft around 1982, and sometime later he started the Australian Lightwing company. After an initial prototype, he engaged Bill Whitney to assist with the design work for the GR series Lightwing aircraft, more than 150 of which were eventually produced. Also, to date, about 30 slightly higher performance, single strut, narrower chord wing, GA912 models have been built.

Howie is critical of the way CASA handled the certification of the GR912. Even though the exact same plane was flying under CAO 25-25, it took so long (process started 1988, with eventual approval 1998) to gain approval for the GR912 that by the time it was granted, the design was past its use-by-date.

Howie told me, "They were just doing what CASA does, but typical of how autocracy stuffs small business about, and it goes some way towards explaining why we have a very small aircraft manufacturing sector in Australia! If some of these start-up companies like Boomerang and Eagle-X had talked to us here at LightWing, they might not have had to re-invent the wheel with the associated negative consequences!"



Howie & Lightwing (continued)

Howie is a big fan of the glass cockpit. He says that it greatly enhances situational awareness and therefore safety. The Lightwing Speed comes with proprietary (Mountainscope and Fugawaie) software that not only displays horizontal situation and attitude, but also three dimensional terrain. The 12V DC 1400 Nit touch-selective display and track ball are driven by both a GPS and a remote E-Gyro digital attitude sensor. The multi-purpose display incorporates an EMS as well, something that usually requires a separate instrument.



Howie is assisted with the business by son Nick and elder daughter Leena. His younger daughter, Shelly, is also employed part-time looking after IT. Lightwing is definitely a family business.



Howie has been married to Jenny (also a pilot) for nearly 40 years. They live at nearby Lennox Head in a house that, of course, Howie designed. This house was originally built on the airport land, but cleverly planned to be taken apart and shifted to its eventual location (where they have their own airstrip).



Finally, Howie is as much a pilot as he is an aircraft manufacturer, and, coming as he does from the grass roots side of aviation, he has had his share of close scrapes. He told me that, in all, he has had "seventeen stacks!" and one day he is going to write a book about it. Well done, Howie Hughes!



Further innovation from Jabiru

The first thing to realise is that there are two kinds of pilots; those that have had a flat battery and those who are one day going to have one. Secondly, when there aren't enough volts left to start your motor, you quickly realise that aircraft batteries serve two purposes, the first being power, the second being ballast, and, as a result, they are often put in the most inaccessible places. Thirdly, if your Jabiru gets a flat battery, it's no use trying to do a prop start, because the ignition circuits in Jab motors require about 300 rpm to fire (a safety feature aimed at preventing prop accidents).



Fortunately, the good people at Bundaberg airport have been putting some thought into the flat battery scenario, and have introduced (as a standard feature on the J230 and optional on J160s and J170s), an innovation that makes the business of jump starting a Jab extremely simple. Aircraft fitted with the new kit have a socket on the side of the plane just forward of the door. There are also a set of special Jab jumper leads in the tool wallet. These leads have the appropriate plug at one end to go directly into the aircraft socket, and standard alligator clips on the other. All that is required is a battery cart or a conveniently parked car, and ... vroom! You are on your way in just a few short minutes.

On the back of a Tiger

Marie-Laure's first words upon seeing Bill's Tiger Moth were, "But, it hasn't got a roof!" What' ya done with the roof, Bill?



Mike Sheppard's Cessna 140

I caught up with Mike at the Straddie Xmas breakfast. I was with BVSAC member Ken Edwards in his multi award winning Courier 19-7222 that day, and we flew back behind Mike to Boonah where he keeps the classic Cessna in the same hangar that BVSAC members Rob Knight and Peter Davies keep their Lightwing GA912. I took these photos at Boonah.



Next BVSAC meeting at 10am, Saturday 2nd February at the Watts Bridge Clubhouse (BBQ to follow).

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SECRETARY: Richard Faint 0412 317 754 [richard@auav.org]

BVF EDITOR: Arthur Marcel (outgoing) & Rob Knight [kni.rob@bigpond.com] (incoming)