QUEENSLAND ULTRALIGHT ASSOCIATION JULY 2010 NEWSLETTER

Watts Bridge Memorial Airfield, Silverleaves Road via Toogoolawah, Qld

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Pre-80s design, variable geometry wings, retractable u/c, eco-friendly, circuit area Gold Coast.



The new Piper Sport. Photos supplied by Keith Broughton who saw one at Monto.



CXY and SXY, but Keith says also EXY (he had forgotten his cheque book).



Conventional tail surfaces, swept up wing tips. Thanks for the pics, Keith.



The Poker Run

I wasn't there but Mal said it wasn't too bad considering the mist and light drizzle when flying. At least a dozen planes did the circuit of airfields. There were 16 entries in Mal's log. He didn't see any from Caboolture or Jacobs Well. Tony Hanlon flew in from Gympie. It might have been too wet on the coast that morning.

When everyone returned, apparently there was some confusion about what to do with the cards. Finally a winner was declared. There were 26 cards left at each airfield, including two jokers. The same guy got both of them and made three nines. That was Frank Francis from Gatton Park. Bruce Clark was next with a pair of kings. Frank was really happy when we presented the trophy later in the day.

Mal logged 8 flying hours over the weekend, including 5.5 hours in his own two planes. Three Kestrels came for the weekend but did not go in the Poker Run because of the weather.







The winning hand

Three of a kind (Kestrels)



2010 Watts Bridge Festival of Flight



Note: Registration for the Festival of Flight Saturday night dinner closes 22nd Aug.

<u>For Sale</u>: The Professor has 5 litres of Green Slime (Penrite TS 40C two stroke oil) that he wants someone to burn for him. He's open to offers. If you're interested, contact Richard on 32452579

Diesel Aero Motors

These are relatively rare but there is a swing on towards this technology. The Melbourne company, Rotec, is currently researching and developing such a motor. The following letter and photos are from Rotec's Paul Chernikeeff:

G'day all. We are progressing well on the Rotec Aero Diesel. Parts are being machined now. We should have a running engine later this year 2010. See attached photos:





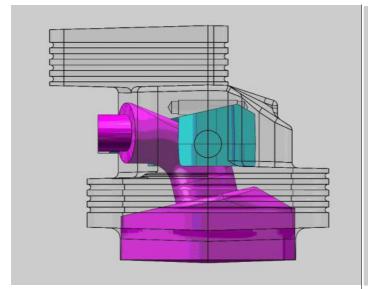


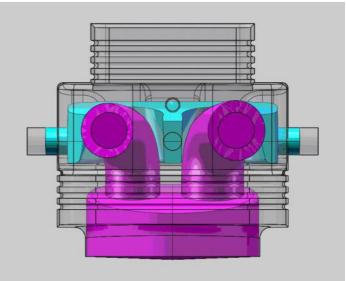
Our 4 cylinder engine is currently weighing on CAD 80kg and at 3200cc is showing to produce between 150-200hp on our simulator, depending on boost, the weight will climb a bit higher once we have the engine fully installed but as it is now it's 80kg! The 8 cylinder job will be around double the HP. We are building the 4 cylinder engine first, then will follow with the 8 cylinder later.

Rotec are 100% committed to taking this engine to market. If all goes well we should have a limited run available for select end users by mid 2011. That's the plan anyhow!!!!

As a point of reference we had the 9 cylinder R3600 engine prototyped and flying in less than 3 months and it was on the market in less than 6 months. The difference here, though, is that we knew what we were doing as petrol radial design is well established. The diesel project will take us a little longer as we are learning the technology as we go. But I suspect it won't take us long to catch on.

We are also working on liquid cooled Jabiru heads (see photos below). This project has loads of promise as Jab heads are chronic over-heaters. This should nail that issue once and for all. The patterns are at the foundry now and we have a six cylinder Jabiru engine in the shop now waiting for the new heads. We will sell a kit that comes with heads, radiator, plumbing and water pump.





Jorge and Ana's outback safari

When Jorge Perez and wife Ana bought their Jabiru, they named the bird "Freedom". Last year, with that wonderful thought in mind, they planned a trip into Australia's geographic heart, to experience life far away from the main cities, to chat with local country folk and to try to absorb real outback culture. Jorge told the newsletter that the actual planning for the trip started the previous year (2008). It turned out to be well worth it. Everything went perfectly.

"When you are far from home, you don't want any surprises," said Jorge, "especially when your better half is the passenger. Any trouble in the outback is sure to be something you will remember for a long, long time."

They departed Kooralbyn in the morning of August 1st 2009. The whole trip took 21 days and they covered 3500 Nm (6482 Km). They saw beautiful scenery, ate great country food, did a lot of bushwalking and a lot of learning. They enjoyed everything, especially the flying. The aeroplane performed faultlessly, there was no serious weather problem and they had good tail winds for most of the journey. They managed to take 8000 photographs, a few of which we are lucky enough to have now before us.

There was only one moment of doubt. Just when they thought they were getting away from all those annoying city folk, they ran into Mal and Gill at the Longreach Museum.

Not much room for dancing



First stop Roma



Pit stop at Emerald



Size definitely does matter at Longreach



Wouldn't yer know it...

The route



Mt Isa Tennant Creek



Wow! Who put that there?



Bond Spring Coober Pedy

The state of the st









What a great trip!



DALBY WINGS & WHEELS SPECTACULAR

21st August 2010 Gates open 10am - till 10pm @ Dalby Aerodrome

- RAAF ROULETTES
- Blair Aerosport Aerial Display
 - Hot Air Balloon Rides
- Warbird & Aircraft Joy Rides
 - Trial Instructional Flights
 - Family Entertainment
 - Dalby Dust Ute Muster
- Car Displays and Night Burnout Comp
 - Balloon Nightglow & Fireworks
 - And much more.

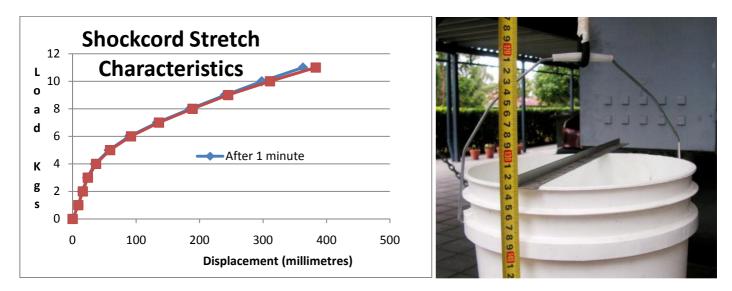
www.dalbywingsandwheels.com.au
Wings & Wheels Coordinator - 0488757005
Wings & Wheels Organiser: Peter - 0416198973

Sapphire stabilator trim modification (continued from the May newsletter)

The original under-the-seat arrangement had two fixed connections on the pushrod and an adjustable one on the airframe. The new behind-the-seat arrangement has one fixed connection on the pushrod, and one fixed and one moveable (a cockpit cleat) on the airframe. Originally, I envisaged one length of shockcord with a knot at each end. However, after testing various brands of cord, I realised that the rear cord needed to be stronger (10mm) than the forward one (8mm). So both cords now attach separately to the pushrod block which is made from a high tensile alloy bicycle neck. It fits exactly around the stainless steel tube and is secured by four 5mm HT bolts.



Shockcord has different stretch qualities to steel springs. Within its yield point, a spring has a constant load/displacement ratio. However, with shockcord, this ratio decreases with stretch (see graph). Shockcord also suffers from creep (blue data), which increases with load.



Re stabilators, both the diameter (force) and the length (force/displacement ratio) of shockcord determine its centring effect, but, from the data above, it is obvious that for a given length, the onset of force is much more rapid at lower displacements. So the cord should not be stretched too far. This is why I chose 10mm for the rear cord. It gives 50% more equivalent force than 8mm, so doesn't need to be stretched as far. Furthermore, only this rear cord needs to be length specific, which is convenient because the forward 8mm cord needed to be routed to the cockpit cleat. Also, that creep factor indicates that shockcord is probably not designed for a constant 24/7 load, so stretching it less would go a long way towards increasing its service life.

The aircraft has not yet been flight tested. Hopefully, I'll be the one to tell you how it went.

DIY Hint: To pull shockcord through the same size hole, peel back the sock, cut the elastic, then use the empty part of the sock as a string to pull the cord through.

Now for the latest from Jimbo and his Karatoo project

Hi Guys. After a fair bit of thought and hours of work, this is what I have come up with for the panel in my J6 Karatoo. Probably a bit out of sequence to work on the panel at this stage of the build, but I was getting a little stale working with all the other less interesting stuff and needed something a bit creatively challenging to get my teeth into. Also, now that it's done, I'll be having a month or so off the project so that I can put some effort into rebuilding Bob's 0-235 to get his RV9 into the air. Yeah, an exciting time ahead for my ol' mates Bob and Robyn. Can't wait..!



Cheers for now, Jim. [Many thanks for sharing your project work with us once again, Jim. Ed.]

Coming aviation events

Jul 23-Aug 8 Darwin, NT, Northern Territory 2010 Safari

Jul 24-25 Watts Bridge, QLD, AAC QLD Practice in the Box

Aug 1-7 Bankstown to Lake Eyre, NSW, Schoies Lake Eyre Safari

Aug 4 Jindabyne, NSW, Casa Safety Briefing

Aug 7 Luskintyre, NSW, LAFM Lunch with the Tiger Moths **CANCELLED**

Aug 7 Temora, NSW, Aircraft Showcase - World War II

Aug 7 North Adelaide, SA, Dine with the Aviators Dinner

Aug 14-15 Luskintyre, NSW, LAFM Amateur Radio Remembrance Day Contest

Aug 15 Yarrawonga, VIC, BBQ at Tocumwal

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Aug 20-30 Bangor, Oth, CANADIAN MARITIMES RALLY

Aug 21 Temora, NSW, Aircraft Showcase - Vietnam

Aug 21 Dalby, QLD, Dalby Wings & Wheels Spectacular

Aug 21 Dunwich, North Stradbroke Island, QLD, Straddie Breakfast Fly-In

The next QUA meeting is on Monday August 2nd at 8pm at the Archerfield Terminal Building. Be there or be square!

This meeting may be our AGM – so more reason to attend.

PRESIDENT: Peter Ratcliffe 0418159429 TREASURER: Ian Ratcliffe 0418728238

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QUA Inc TECHNICAL DIRECTOR: George Perez 0423536

MINUTES OF JULY 5th 2010 GENERAL MEETING

MEETING OPENED 07.57 pm

APOLOGIES Richard & Glenda Faint, Danny Fowler, Bill Oates,

Eleven.

Ivor Parsons, Lloyd & Robin Salisbury, Col Thorpe,

Sandy W, Olaf Weedbrook

MEMBERS PRESENT

PRESIDENT'S REPORT

More work at the clubhouse is being done. Kitchen area has been lined with Gyprock. Mal & helpers have been installing the battens. David & Peter are to continue with kitchen & toilet areas fit out. Purchase & planting of suitable shrubs on the tank side are being planned.

Sandy has mentioned the advantages of installing solar power at the clubhouse using a government

grant to help fund the installation.

Monto Fly In was very good with over 200 aircraft visiting on the Saturday. It was cold at night with

friendly people plus good catering.

TREASURERS REPORT Opening Balance \$ 7,555.87

> Plus deposits \$ 1,782.67 Less withdrawals \$ 142.58 Closing Balance \$ 9,195.96

QUA books have been audited. Audit signing off to be completed when the valuation of the QUA

buildings have been finalized.

Fifteen membership fees are still outstanding.

SECRETARIES REPORT Some emails from Watts Bridge.

WBMA REPORT Shale installed on clubhouse lane roadway by Rod.

> Fence adjacent to the main gate have been cut, Now repaired. Bruce & Peter attended a Safety Management Seminar at Kilcoy. Mike Horniman to prepare a Safety Management System book for Kilcoy and WBMA. Changes in ERSA to be organized by Bruce Clarke. Main changes relate to noise abatement and circuit entry procedures. Over the past few months there have been more people

using WBMA.

SOCIAL REPORT The Poker Run is to commence from 09.00am on July 10th. Tickets will be sold for the tool pouch & tool raffle. Food to include a Sausage Sizzle plus

soup, Glenda's fruitcakes and drinks, tea & coffee.

Richard Sweetapple has donated a Terra Air-band Radio for the clubhouse. This also includes a hand held microphone, outdoor antenna and a power supply. Thank you to Richard for this practical gift. Next QUA Meeting will be on Monday August 2nd

at Archerfield.

THANKS To Peter Ratcliffe for supplying supper again

MEETING CLOSED 09.02 pm.

GENERAL BUSINESS