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In this Newsletter...

Wheels and tyres
Fly like a bird
Pacific Flyer magazine article
Wireless headsets
Tyres again

Wheels and tyres



The A22 Foxbat, like most if not all other sport and recreational aircraft, is supplied as standard with relatively inexpensive tyres. Many of these tyre types have a 'shoulder' profile, which makes for untidy cross-wind landings unless you get them exactly right - the 'shoulder' can dig in to the runway if you are travelling even slightly sideways. OK on grass or gravel but a bit more stressful on bitumen.

As a result, as the original tyres wear out, some owners have upgraded to more expensive aviation spec tyres (and tubes) which typically have a more rounded shoulder. Although the tyres are as much as 4 or 5 times the cost of originals, they have some important benefits - longer life and more comfortable/forgiving landings being two of them.

A22L Foxbat owner, Peter Driscoll reports: "I have fitted AirTrac aviation tyres (rounded profile), nose and mains - 15x6.00x6 - and there is enough space at the front in the nose fork. I imported them directly from the USA - 3x tyres with tubes \$AUD408 and postage about \$AUD250: expensive - but cheaper than anything I could source here of the same quality. All going well. Attached is a photo with the



new tyres. I flew to the Kimberleys in May for 2 weeks and will be flying the NT coastline in October."

Other manufacturers of suitable size tyres include Michelin and Goodyear. AirTrac tyres are sometimes marketed as McCreary tyres. Suppliers in Australia include SkyShop in Brisbane.

Fly like a bird



There's increasing news coverage of the development (if not yet availability) of electric powered aircraft. I think in the future, this will be a huge growth area of aviation. If your immediate reaction is 'never' then just think back less than 25 years to see what light aircraft were like back then - ultralights with (very) unreliable engines, big clunky spam cans which swallowed fuel in ocean tanker quantities, and no sleek and hi-tech light sport/ultralight aircraft anything like we have today. Things move quickly when there is a market for them....

Battery capacities and re-charge times are clearly critical in electric power and almost every day there are reports of new research into battery capacity and charging technology. In California (where else?) one research project team is predicting 5-10 minute recharge times within 10 years, based on completely different charging technologies. Another group in Germany is reporting amazing results in increased battery capacity by adding other ingredients to Lithium Polymer batteries, extending their power storage by more than 5 times.

Enough of all this talk - I'm just trying to justify these clips of world hang glider champion Manfred Ruhmer having some fun in an electric powered trike with a folding propeller. About as close to being a bird as you can get, I suppose. He clearly knows what he's doing when it comes to flex-wing flying. I'm a bit envious...based on these videos, I might even take a visit to the dark side and go for a fly in a trike....

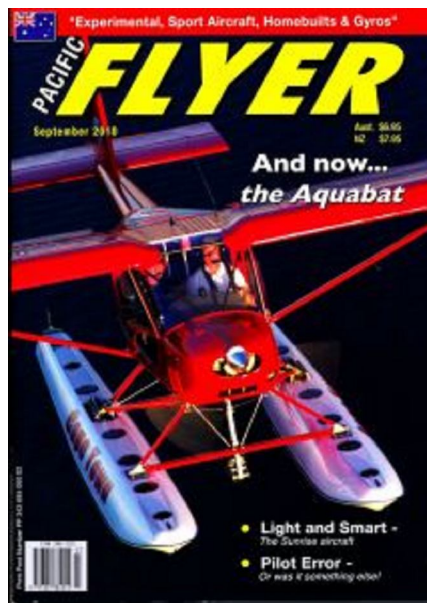


Have a look at these two clips:

http://www.youtube.com/watch?v=UhZKChzNjfM&feature=player_embedded

<http://www.youtube.com/watch?v=UwMSFd7ANA4&NR=1&feature=fvwp>

Pacific Flyer highlights Foxbat Amphib



The September issue of Pacific Flyer magazine has a great article and photos about the A22LS Foxbat Amphibian, known as the Cape Town over in USA where the floats are made for the aircraft (OK, I admit it, I wrote it...). In addition to the Foxbat article there is an excellent feature on a German amateur-built aircraft powered by an R-series horizontal twin BMW motorcycle engine. Plus all the usual Pacific Flyer regulars.



Wireless headsets



For the last year or so I have been doing most of my flying using some ANR wireless headsets.

For the uninitiated, ANR stands for Active Noise Reduction - an ingenious bit of electronic circuitry 'listens' to the noise inside your aircraft and in response, generates an exactly 'negative' noise through a tiny pair of speakers in the ear cups. The net effect of the 'positive' aircraft noise and the 'negative' noise generated by the headset is a very much reduced level of background noise in your ears - making incoming transmissions much easier to hear and reducing the chance of hearing damage over a long period.

There are now quite a few manufacturers making ANR headsets to supplement their PNR (Passive Noise Reduction) sets. But as far as I am aware, there is still only one manufacturer of wireless ANR headsets - and they are right here in Australia. The company is SkySports Innovations based near Perth.

And wireless indeed are they - no physical connection at all to the aircraft. Each headset includes a built-in rechargeable battery, which they say is good for up to 23 hours of use. The headsets connect to the aircraft radio via a wireless base station, which is custom wired to the radio. SkySports will provide a variety of custom looms which make radio connection simplicity itself.

I have been using the headsets with a MicroAir 760 radio - I simply plugged in the base station to the radio and secured it behind the instrument panel. Then the



aircraft loom just plugged into the SkySports adapter. Both PTT buttons operate exactly as before. The headsets talk to each other, even when the radio is off. And of course you have clear communications with the outside world in the normal way.

The first real trip for these headsets was from Melbourne up around Lake Eyre and back over about 10 days. During that trip, my wife said they are the most comfortable headsets she's ever worn. I took the mains charger with me (it will charge 2 pairs of headsets at the same time) but in the event, it wasn't needed. We flew about 23 hours altogether, and the sets were telling me there was about 2 hours of power left at the end.

Since then, the headsets have been moved from one demo Foxbat to another and have worked flawlessly over about 200 hours flying. SkySports seem to emphasise the ANR aspect of the sets - which is undoubtedly very effective - but for me personally, the wireless connection is the business - no messy wires trailing everywhere getting all tangled up and dangerous

In fact, I have got so used to them that when test flying a SportStar the other day without them, for a moment I thought the radio wasn't working. I really missed that EQ-1 welcome when you switch them on: "Headset On. Aircraft Detected. Seventeen point six hours remaining."

Can't recommend them highly enough!

See here for more details:

http://www.skysportsinnovations.com.au/innovations_index.htm#INSTALATION

Tyres again





Aeropakt are currently testing some over-size tyres for the A22. these tyres fit on the same size rims as the standard tyres but are about 2-3 inches wider and 4-5 inches bigger in diameter. The tyres fit the main gear without any need for adaptation but the nose fork has to be modified to take the extra width and height. In addition, to keep the aircraft on an even keel, the nose leg itself has to be shortened.

At the moment there are no plans for extra-large wheel spats to cover these wheels, although some crescent moon-shaped mudguards, similar to the existing standard mudguard, are on the drawing board.

Factory testing began while I was visiting in July this year. If all goes well and they are approved, the tyres should be available to order early next year.