SAAA e-news 9th June 2014

Hello again SAAA members. Here is the current edition of our newsletter. I've experimented this time with some longer articles and more pictures – is this too much?

All contributions and comments welcome at comms@saaa.com

Shirley

What builders are doing

RE-COVERING THE JODEL

Some years ago the late Bob Furness was forced to sell the Jodel D150 Skyprince he had built as he had lost his medical and persuaded me to buy it.

The Jodel is a delightful aeroplane to fly. This model, called "Mascaret" in its native France, was the designer's favourite. It is a 2 seater but has a large fuselage tank as well as a cuff tank in each wing root thus giving it the sort of endurance that I previously enjoyed in the Comanche 260B I had shared with Jon Johanson and which had about a 9 hour endurance.

I knew Bob, who was a LAME, had made a good job of building this aircraft but nevertheless its appearance and finish was its weak point. Bob wanted to keep the empty weight as low as possible to help fulfil his dream of flying it to England, something the plane is capable of but neither the political situation nor Bob's health eventually allowed.

I knew I had to do something as the weave on the light cloth Bob had used was not properly filled with the too little paint he had applied and water was getting in when the hangar roof leaked.

So, under the watchful eye and hands on guidance of Denis Beahan at Charters Towers I dismantled the aircraft, applied several coats of polyurethane varnish, re-covered and repainted her. As she is registered as "Experimental" I used the Hipec system. This reduced the work very considerably as it bonds the covering to the structure saving the huge amount of work of rib stitching as well as giving a very smooth surface. I believe that the Hipec system may now be certified. It would be worth checking this out if you are about to re-cover a certified aircraft. Apart from the work of rib stitching, the Auster with which I share a hangar has just been found to have had its rib stitching eaten by mice!

I have remained very happy with this system. Note that all systems use the same cloth, ceconite, but IT IS ESSENTIAL TO FOLLOW THROUGH USING THE SAME FINISHING SYSTEM! Most systems use glue which has considerable strength in shear but will peel very easily. The Hipec system, produced by Chris Falconar in Canada however produces a very strong bond. To underline this point, a man as

experienced as Steve Wittman died when his aircraft suffered aileron flutter due to separation of the fabric, so if you don't use Hipec, use rib stitching!

As an aeromodeller from way back I found the wooden structure of the Jodel to be just a big model and if anything even easier to cover than most models. I did a good job of the covering but of course made some mistakes and had no choice but to learn spray painting on the job. A bit of prior experience would have been a good thing.

Dismantled, stripped, ready for a light sanding and varnish as soon as the wheels are off

Bottom covering done. Two panels on top surface covered and shrunk, one covered and awaiting shrinking, one about to be covered

First coat of sun barrier, a single pack polyurethane, brushed on over the framework to bond the cloth to the frame

Full coat of sun barrier applied, awaiting top coat

Tailplane all done!

Peter Kraus

A more detailed version of this article will appear in Airsport in the future, and be archived on our website, saaa.com

Chapter 21 News

At the recent Chapter Meeting members had the privilege of speaker Bevan Anderson from Avsoft talking about their Avplan EFB (electronic flight bag). This product is being introduced to the United States market so Bevan had put off his talk for a number of meetings due to his US promotions.

Bevan showed how simple it was to set up the application on an iPad and then proceeded to run through several flight scenarios demonstrating not only the flexibility of Avplan but also how easy it was to use. Ease of use is especially important in the confined space of the small aircraft most members fly.

The minutes of the meeting stated "I [the secretary] was gob-smacked at the power and sheer volume of information available to a pilot using an EFB – particularly for the subscription fee of the price of a tank of fuel."

Members took the opportunity to ask a number of "what if" questions that Bevan was able to answer with a real time demonstration. Topics ranged from the initial flight planning, submitting flight plans, updating data whilst airborne, terminal information and SARTIME warnings. For the less computer literate Bevan flagged a new basic product being developed.

Several members reported having iPAD's overheat in flight and shut down, with obvious dire consequences. Bevan's tips to avoid this are to keep the iPAD shaded and with cool air moving over it; take the iPAD out of any protective cover, these act as insulation, trapping heat; and use iPAD 4 onwards, iPAD 3 and earlier have temperature issues, the later the version, the better.

Bevan said that the Australian Army have AVPLAN in 60 helicopters and have not reported any overheating problems.

At the end of the evening several members opened their wallets and became the proud owners of the Avplan EFB.

To supplement the electronic instrumentation in his RV Chapter 21 member Ray Smart now has Avplan EFB to add to the enjoyment of flying his aircraft.

For a future Chapter 21 meeting a visit to the Oxford Flying Academy at Moorabbin is planned.

More information about the chapter can be found at

https://sites.google.com/site/saaachapter21/home

Chapter 38 had its bi monthly meeting at Peter Huish's place at Mudgee. The

gathering was to assist Peter to attach the wings to his RV9. In hindsight I made two observations. First was the outstanding workmanship on Peter's RV9, it is a real credit to him. His workmanship is almost as good as mine! Second observation was to never invite Mark Rowe to assist putting wings on. I and the others took the delicate job of sliding the wings into the centre spar, while Mark took up with a hammer and flogged the daylights out of something in the cab floor. I watched in amazement expecting Peter to kill Mark any second if Mark missed what he was belting and put the hammer through the instrument panel. Mark is also a slow learner as he did exactly the same thing on the second wing. I fully expected to see both wings twisted like a propeller after the beating inflicted by Mark, but surprise--- Both wings turned out true in all respects. A real credit to Peter's expert workmanship. Then to rub salt in, a tour of Peter's workshop just made me sick. He has a lathe, a mill/drill, a guillotine, and every conceivable machine that I cannot afford. Not only that, but everything has digital readouts fitted. Jealous? Me?? Not at all, I have a screwdriver set, and hammer and cold chisel in my workshop that is the envy of the district! My apologies for the Photo, but some stupid idiot about my size showed up with a camera that just happened to have a flat battery! So I had to use president Dan Compton's phone camera, with which I took roughly 800 photos trying to learn how to use it. Complicated aren't they? When I rang Dan for some pics, he tried to blame young Brigalow for deleting them all, rather than having to tell me the truth that he had obviously deleted the lot due to my rotten photography. Not my fault, it was his stupid phone! Peter had booked our assistance to help mount his engine later in the year. What a brave man!

Neil Unger.

From left, David Ecclestone, Chapter President Dan Compton, Peter Huish, and Mark Rowe

Chapter 21 Moorabbin

The next meeting of Chapter 21 on Wednesday June 25th will include a visit to the Oxford Flying Academy at Moorabbin Airport. We will meet for dinner at the Royal Victorian Aero Club between 6 and 6.30pm and after dinner and a short meeting will wander up to Oxford. Any non-chapter members are welcome to join us for the visit and/or dinner."

Many thanks

John K

Safety

5 Hazardous Attitudes that cause aircraft accidents. Do you recognise any of these in yourself? (adapted from FAA AC 60-22, Aeronautical Decision Making 12/13/91)

Anti-authority: "Don't tell me" This hazardous attitude is found in someone who does not like to be told what to do. They may either be resentful of having someone tell them what to do or may just disregard rules and procedures. An assertive person will question authority if warranted.	Antidote: Follow the rules, they are usually right
Impulsivity: "Do something quickly" Someone who does not stop and think about what they are about to do. They do not select the best alternative, they do the first thing that comes to mind.	Antidote: not so fast – think first
Invulnerability: "It won't happen to me" Many people feel that accidents will happen to others but not to them. People who think this way are more likely to be risk takers beyond acceptable levels.	Antidote: It could happen to me
Macho: "I can do it" People who are always trying to prove themselves take risks to try and impress others. Both men and women are susceptible.	Antidote: Taking chances is foolish
Resignation: "What's the use" People who have this hazardous attitude do not see themselves as making a great deal of difference in what happens to them. They attribute events to either good or bad luck; they leave actions to others. They can go along with unreasonable requests to be a "nice-guy."	Antidote: I'm not helpless – I can make a difference.

Shirley

Technical

Why do we make mistakes during maintenance?

Pilot, aircraft engineer and aviation writer Mike Busch writes a regular column for Avweb, covering a wide range of topics of interest to pilots and aircraft owners.

The article at the following link gives an excellent overview of what can go wrong when we are performing maintenance on our aircraft.
As you would know from the MPC, human factors come into play in professional maintenance workshops and cause mistakes that can lead to aircraft failures. How much more likely is it that you, as an amateur maintainer without the set up and support of a maintenance organisation, might make mistakes during maintenance?

Mike's article talks about professionals making mistakes due to shift changes, and distractions such as spare parts deliveries. We are probably not subject to those conditions, but we do sometimes have to stop work before completing a procedure, or we are distracted by a phone call or a hangar visitor. These things can lead to the same kinds of mistakes.

Errors of omission seem to be the most prevalent kind of maintenance errors. An analysis of 122 maintenance errors detected by a major airline over a three-year period revealed the following breakdown:

- Omissions: 56 percent
- Incorrect installation: 30 percent
- Wrong parts installed: 8 percent
- Other errors: 6 percent

When the 56 percent of errors attributed to omissions was further examined, the breakdown was:

- Fasteners left undone or incomplete: 22 percent
- Items left locked or pins not removed: 13 percent
- Filter/breather caps loose or missing: 11 percent
- Items left loose or disconnected: 10 percent
- Spacers, washers, etc., missing: 10 percent
- Tools, spare fasteners, etc., not removed: 10 percent
- Lack of lubrication: 7 percent
- Access panels left off: 3 percent
- Miscellaneous: 11 percent

To guard against these errors, Mike advises the aircraft owner to conduct an extensive ground inspection and test before the first flight after maintenance. We would do well to do the same.

Read the entire article here:

http://www.avweb.com/news/savvyaviator/savvy_aviator_58_why_mechanics_make_mistakes198000-1.html

With thanks to Mike Busch

Shirley
There are many more excellent articles on www.avweb.com by Mike Busch, who has kindly given me permission to use his articles in Airsport. Take a look at this one:

http://www.avweb.com/news/savvyaviator/189857-1.html?redirected=1 Thwarting Corrosion

From HQ:

We hope you all had a very safe and relaxing long weekend! HQ is forging ahead with the onset of the winter season. The sun is currently shining in Narromine as preparation for Ausfly is in full swing.

Things for your consideration:

CofA Phase 2 – For those of you approaching your Phase 2, please remember you **MUST** finalise payment before your AP can issue you your Phase 2 Annex.

Ausfly Maintenance Procedures Course/refresher – The Ausfly MPC will be held on 10-11 September. Places are filling fast so if you're interested in this course, please finalise payment now to avoid disappointment.

Facebook – Please go over and like our Facebook Page!

Classifieds – NEW PROCESS: When you submit an item into the classifieds on the website. Your item is them published in our magazine Airsport. Your add will now run for 1 edition(3 months) and it will then be removed from the Website **AND** Magazine. If your item has not been sold, you are welcome to re-submit it again on the website for further publication. Hopefully this will prevent us running sold items and you receiving annoying phone calls.

Renewals/Fuel – Please remember that our Fuel and Memberships will be processed on the 15th of this month. Please let us know if you have changed your details.

SAAA Staff love a good laugh; here are some funnies to get you through the week!

Thank you for taking the time to read!

As always, Safe skies for all!

SAAA HQ