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Message from the editor.

Trevor Lane.

I feel saddened that Jon felt he had to resign his position of editor after just one edition. I personally felt that Jon was a good fit for the role and had done a great job with his first newsletter. I know that other members of the committee feel the same. The committee also feels however that we need to shoulder the burden of the modern information age and all that goes with it, including political correctness. Every issue of the newsletter is recorded for posterity on the internet; and we have learned from past mistakes what that means. The newsletter can also play a far more important role in the club than it has done before. Whilst it is recognised that Kel has done a marvellous job in the past, it is also recognised that more often than not, he had no contributions from members. The newsletter was at times, through no fault of his own, a little divorced from the activities of the club.

We want the newsletter to better represent the club; which means the committee along with the editor; need to develop adequate guidelines and direction. This relationship between the editor and the committee is new and just like any other relationship, will have to be nurtured. Whosoever fulfils the role will be part of what will sometimes be infuriating, sometimes be rewarding and such is life will almost always be thankless. As with anything new we will get some things right, some things wrong, and will learn from our experiences.

I have volunteered to fill the position of editor until we find another more suitable candidate. I hope to do well, but recognise that I have fallen into this role as a result of a good person resigning. I do not profess to be the right person for the job. Until the role is filled however, I will give it my best shot.

Life Membership

You will all by now have received a ballot paper asking for your vote on a new category of membership. Life Membership is one way we can recognise the valuable contribution made by members of the club. If you have not already cast your vote, can I remind you to do so before the next meeting?

If you have any queries please contact Steve Bell
secretary@southernmicrolightclub.com.au

Readers Pictures

Late Final for Runway 21L at Latrobe Valley by Rick Parker.



Tip of the month

Trevor Lane

In a recent Pilot Information Session put on by Airservices Australia, I asked if they monitor the emergency channel. The response was No; if you are talking on the emergency frequency then you are talking to exactly no-one. In an emergency you should talk to anyone who can hear. In short, if you have been talking to someone on CTAF or chat then do not change frequency, keep talking to them. If you cannot raise anyone on the channel you are tuned to, then retune to the area frequency and contact ATC.

“If you are talking on the emergency frequency then you are talking to exactly no-one”

It is far preferable to stay on a frequency that you know someone is hearing, than it is to play with your radio and possibly find no-one on the other end.

On a Wing & a Chair Round Australia Flight

Do you want a once in a lifetime adventure?

On a Wing and a Chair Ltd is a not-for-profit organization that aims to raise the public's expectations of what people with disabilities can achieve, and provide inspiration to all.

To achieve the mission of *On a Wing and a Chair*, commencing on April 29, 2013, Dave Jacka will attempt to become the first person with quadriplegia to fly solo around the coastline of Australia, achieving a world first. The flight will showcase how innovation and determination can overcome challenges. The flight will take approximately four and a half weeks to complete and be supported by a team of seven, with two support planes.

We are looking for a volunteer to be part of the small support team and fulfil the role of co-ordinator for the *On a Wing & a Chair Round Australia Flight*. Do you have what it takes? We are searching for someone who wants to experience a once-in-a-lifetime adventure and make a difference in other people's lives.

The trip will be hard work, no pay (you may even have to pay part of the way), potentially dangerous, long hours, flying in small aircraft in remote areas, no fixed completion date (flying depends on weather conditions) - but it will be an amazing life experience that you'll never forget. For this position, we need someone with good management and communication skills, and experience in media including social media.

Contact me at djacka@onawingandachair.org.au to find out more about this challenging adventure.

Kind regards,

Dave Jacka

Executive Director

On a Wing & a Chair Ltd

www.onawingandachair.org.au

Caution when using Inox products

Kev MacNally

During one of our courses we were told that although Airborne recommend Inox - it is **not** suitable for rubber. Please be aware it has completely perished someone's rubber hoses after he sprayed it all over his engine.

Checking their website

<http://www.inox-mx3.com/inox.htm>

and looking through the various items it shows that Inox MX5 Plus does **not** mention **rubber** however Lanox MX4 does (made by Inox)

Both Inox MX3 and Inox MX5 both state the following:

“CAUTION: INOX MX5 PLUS MAY EFFECT SOME NATURAL RUBBER PRODUCTS WITH CONTINUAL LONG TERM USE (REFER TO LANOX)”

So beware, read the can, or check the items website before usage and if unsure whether it is suitable for what you require, send them an email to verify.

Megafauna Flyaway

Source: www.yarrawongaflytraining.com.au

The Megafauna Flyaway to Bathurst 2013 is ready for bookings.

Contact Peter or Anne on 03 5744 1466 or email yft@yarrawongaflytraining.com.au

19th May 2013 – 25th May 2013

19th Sun Yarrowonga to Wagga

20th Mon Wagga to Cowra

21st Tue Cowra to Bathurst

22nd Wed Lay day

23rd Thu Bathurst to Parkes

24th Fri Parkes to Narrandera

25th Sat Narrandera to Yarrowonga

Grampians Cup Weekend fly away

Tony Batson

The Grampians always conjure thoughts of mountains, dry bushland and kangaroos for me. Having spent some time there over various trips I have never left the Grampians without feeling some satisfaction of being out in the Australian bush. The last time I was there was in February 2012. I had low flying hours and had come along with the club to gain extra hours for my upcoming trip to Goolwa South Australia from Yarrowonga Victoria. The Grampians was a great experience for me as I had an opportunity to do some cross country flying and experience landing at some new country strips. The experience greatly improved my flying and I have since managed to get a number of hours added to my log book. With my previous visit in mind I was keen to get back to the Grampians to fly over areas I had previously not flown.

Steve Bell and I made our way up to the Grampians (Asses Ears Wilderness Park) on the Friday of the Melbourne Cup weekend. Steve had only just got his propeller back from Bolley Props for maintenance and he had just fitted it on the Thursday night in Latrobe when he picked up his trike for the trailer ride to the Grampians. We both left Melbourne at 10.30am for the 4 hour drive. After stopping for an early lunch in Ballarat we made good time. Whilst driving along I thought it would have made more sense if we had a trailer for 2 trikes, rather than both of us trundling up the highway separately to the same location. Apparently, there are trailers for 2 trikes around, but I have never seen one. Within 30 minutes of our destination I had my first ever flat tyre on the trike trailer. I felt a small shudder on the trailer and looked in the rear vision mirror to see rubber flying into the air. So that's how that rubber I have been seeing on the side of the road all this time gets there. Amazingly the tyre stayed up and only went flat after pulling over onto the side of the road. The tyre was a re-tread and the whole tread had delaminated from

the base. Wow! Steve pulled over and assisted in the tyre change. I am glad I had the spare on the trailer and was glad I had pumped it up prior to leaving. Whilst changing the tyre a brown cylindrical body passed by. Thankfully it was only a large blue tongue lizard. My thoughts wondered. Is this number one incident of the weekend to come?



We pulled into our destination and the weather was sunny with a bit of a strong breeze blowing directly across the freshly mowed 1200 metre grass runway. We began setting the trikes up immediately. The wind seemed to be getting a little stronger. One of the reasons club members

“One of the reasons club members like this place is that the cabins are almost beside the runway parking area. Just jump out of your cabin, jump the small fence and you’re in your trike, ready to fly”

like this place is that the cabins are almost beside the runway parking area. Just jump out of your cabin, jump the small fence and you’re in your trike, ready to fly. We decided to set up our cabins and make ourselves at home. We were expecting 9 people with 6 trikes. We were sharing two cabins at \$26 per night

each person. This is extremely cheap for the facilities provided. Steve and I chose the best beds for ourselves as the rest of the guys were not rolling up until the Saturday. With no let up on the wind Steve and I made afternoon tea and waited for the wind to die down. It did not happen of course. If it is not raining, it will be bloody windy. Steve was keen to test his propeller. With an extra 100 hours flying experience I let him go up on his own to test conditions and his prop. He was up and back within minutes. “A bit rough up there” was Steve’s first comments on his return. He went up again and I could see the trike base blowing in the wind on take-off, flying in circuit and on

landing. He returned and advised we should wait until the morning. Dinner under the outside eating area with a nice red wine was superb. We had a choice of a game of billiards, a few more drinks or just a sit down watching the evening movie in the common area. We decided to do two of the three before retiring for the night. During the night we heard Mitch drive in at approximately 1.00am. He slept in the back of his Ute so as to not disturb us. Very nice of him!

“One day I will learn to use that camera properly.”

Steve and I got up early and found Mitch setting up his trike. Conditions were calm and cool so we decided to do some early circuits whilst Mitch set up. We checked what the radio frequencies were for the area and debated the correct frequency to use. The sun was still rising and there were little signs of shadows. The flat lands of the Wimmera were the greenest I had ever seen. Having flown past the Grampians on the way to Horsham in March the contrast was remarkable. The landscape was littered with filled dams. The Grampians were dark and grey as it hid the much wanted sun rays to warm conditions up. The flying was great and we returned back to the strip full of beans having finally got up in the air. Mitch was still setting up so Steve and I went for breakfast. Mitch was still not quite ready after breakfast so Steve and I decided to go for a fly to the southern end of the Grampians via the Rocklands Reservoir and return via Victoria Valley (Internal Valley of the Grampians). Conditions up to 2,500 feet were bumpy but once we climbed to 3,000 feet all was calm. The Reservoir was full of water and ghostly white dead trees. With so many dead trees up right in the water, only a world class water skier would be able to tackle the reservoir. I'm sure Mitch in his heyday would have given it a go. Flying between the reservoir and the ranges had Steve in his faster machine flying past to get some great camera footage of me, and I from my wing camera of him. My camera footage will be great! Last time I came here I kept forgetting to turn my camera on. Not this time. I had learnt from previous experience.

We turned at the bottom end of the ranges and although we flew over Victoria Valley Airport, I never saw it. Steve began to get bored as he tried to slow up his trike waiting for me to keep up with him. He decided to venture off ahead of me crossing over the mountain range and off into the blue yonder. I was keen to go straight up the valley and get a closer visual of the cliff rock faces. As long as I stayed high, (6,500 feet) I did not get any rotor off the top of the mountain ranges into the valley. As I ventured deeper into the valley, landing choices became more limited. Staying high made me feel calmer. The sun was now up, but the outside temp was only reading 10 degrees. A little chilly, but the sights more than made up for it. Inbound to the airport I could hear Mitch was finally up in the air and doing some circuits. Steve was preparing to land and conditions were still light. Although, as we hit the 2,500 feet mark, conditions turned rougher. The shadows of the sun created a new landscape to view. It's amazing how the shadows make everything look different.

On landing I rushed off to down load my great camera footage. UMMM! No footage recorded. Operator error struck once again. One day I will learn to use that camera properly.

“Mitch gave George some specific instructions on bed activity protocols during the night”

Joe rolled up with his trike followed by George and Penny. We were sharing 2 cabins between 9 people so beds were seconded on a first in best dressed basis. (Although we did save one of the double beds for George and Penny). Mitch gave George some specific instructions on bed activity protocols during the night as he was in one of the beds in the same cabin. George took this under advisement and I believe adhered to these for the duration of his short visit.

Steve needed more food and fuel for an afternoon fly as he claimed he was unable to find a fuelling station on the way up to the Grampians. His enthusiasm to get up to the Grampians early must

have left him no time to prepare. We decided to go to Horsham to get some supplies and I wanted to get another battery for my wing camera as somehow I was one short. Whilst in Horsham we had some lunch and a coffee. Steve was pre occupied with his “possible, future potential partner. His mobile phone buzzed, vibrated and made musical sounds with the constant messaging activity for the duration of our small trip to and back from the town.



On return Trevor, Max and Graeme had arrived. Max had a recent medical condition and was restricted from flying, so his trike remained at home. Trevor was going to fly from Murrindindi and meet Max at Locksley and fly together to the Grampians. However, on hearing that Max was not flying he was unable to wrestle the car off his wife to allow him to tow his trailer and trike to the Grampians. Thus, he arrived on his Motor bike. A great effort by Max and Trevor as they could have easily decided not to come due to their individual circumstances. We now had 5 trikes and 9 people. Max was not flying so everybody was able to double up in a trike for a fly.

Conditions remained calmed, but cool. As I got no footage from my previous flight, I was keen to do the same trip Steve and I did in the morning. As the others had not done this trip before it was agreed to take this route. Penny asked about clothing and I advised she rug up warmly. George believed conditions were so good he did not need his full flying suit. George and Penny took off, followed by Mitch with Trevor in the rear. I had Graeme in the back seat and asked for him to get some memorable hand held video footage of the fantastic scenery we were about to transgress over. Joe followed behind. Steve disappeared and

I did not see him again until we landed. Within minutes, George was on the radio explaining he was inbound as he was already too cold to continue on. Penny was toasty warm I was later told. Joe’s radio was a scrambling mess of noise having only recently had it returned from the manufacturer for repair. I was unsure where Joe was going but he seemed to be going in a different direction to us. We journeyed on regardless. It soon became apparent that Graeme did not know how to use my camera and so any great hand held video footage was not going to happen on this little adventure. At least I knew the wing camera was on. Mitch and I continued on. We could hear some noise from Joe every now and again but could not locate him. Conditions were exactly the same as the previous flight. We stayed at 7,000 feet to avoid any turbulence from the rotors. Graeme felt the cold but was happy to keep flying. Just as well as I was keen to keep flying and had little intention of taking him back early. Mitch and Trevor seemed to us to be taking the turn at the southern end of the Grampians on a very wide base. We enquired where they were off to and we were falsely accused of cutting the corner on the end of the mountain range. It took a later viewing of the GPS tracking log to prove our case. We made our way back to the airfield and met up with Joe and Steve on our return. Joe had travelled high above the Grampians to 9,000 feet and we all gave him a hard time for going so high. He did complain it was pretty cold. George and Penny finally made it back some 45 minutes later. Max had afternoon tea and a hot kettle ready for us on our return.

“The exhilaration from the backpackers was electrifying”

We decided to go to the Northern end of the Grampians for an early evening flight. Max said he would have a BBQ ready for us on our return. We welcomed his comments. We again took off in a group. Joe was first and the last time we saw him he was off in a steep accent over the mountain range in an easterly direction. We tried to contact him on the radio and he responded with garbled noise. It was later joked that he was heading for a

weather satellite to check out the next day's forecast. Conditions had become perfect. The weather was now extremely calm. The temperature was a balmy 23 degrees in the air and was the warmest it had been all day. Conditions were perfect for flying. We did not want to return to the airfield.

On our return, the airport was alive with a bus load of backpackers staying at the park for the night. 20 year old Irish, English, German and George tells me Swedish backpackers (Which I never saw) were all lined up asking for a joy flight. Penny, Max and Trevor seemed to have everybody organised and they enthusiastically fought for a place to get in first. Now I know what the Beatles felt like in the 60's. Joe, George, Steve and I began taking joy flights. The exhilaration from the backpackers was electrifying. It was extremely satisfying giving these guys a chance to see the Grampians from the air. Conditions were so good that engine idle landings were easily achievable. An added bonus of excitement thrown in for some. On the ground, the exchange of passengers was filled with laughter, amazement and giggles. Even from the guys. We each took 3 or 4 passengers up for approximately 15 to 20 minutes each. We saw the sun drop below the horizon and the last landing was minutes before last light. Trevor was impressed with our accuracy to land just inside last light. Two backpackers missed out on a ride and Steve agreed that if they were around at 7am he would take them for a ride. Max was left in despair with black, burnt sausages.

Editor's note: No they weren't burnt Max, they were beautiful (as a sausage can be).



The alarm went off early and we began preparing the trikes for an early morning flight. The two backpackers were there at 7am ready for their flight. Steve and I took them up for a flight. On our

return, the airport was again alive with thrill seekers. During the night a second bus load of backpackers had arrived and the first group had shared their flying experiences. On our return, George, Joe and now Mitch were preparing even more backpackers for a joy flight. Wow! The excitement and trepidation was again evident and all of us shared the joy of giving these guys an experience they would always remember. We each took another four passengers up for the morning flight. Conditions were quickly starting to change as the morning went on. A cross wind was brewing and conditions were beginning to get rougher. Landings were beginning to become more adventurous and flying time was soon to end. The tour guide and some elderly visitors from New Zealand also got in on the flights. Once we had finished, we were exhausted. Time for a late breakfast. George and Penny could not get the Monday off work and began to pack up after morning tea for the trip back to Melbourne. A good effort considering they were hoping to stay for three nights, but only managed the one. Maybe they were not happy with Mitch's bedding protocol after all? Conditions began to deteriorate in the afternoon and we were unable to fly. Steve was going back on the Monday, so began packing his trike up on the Sunday afternoon. Joe, Mitch and I were keen to keep flying and were hoping to get an evening flight in along with an early morning flight on the Monday. A look at the Monday forecast showed a big low coming across the Wimmera at about 11am on the Monday morning. Rain and stronger winds were forecasted for the Monday and the Tuesday. Not good. A small bush walk for some, a few drinks and an afternoon nap for others was on the agenda. We decided to go to a local restaurant for dinner. A good decision by all. The beer was cold, the meals were big and the company was amusing. On our return, we sat outside watching an electrical storm pass by whilst we sat in calm conditions.

An early start to Monday was on. As I warmed up my trike in the early morning I blew the door open on the cabin whilst Max laid in bed. A face full of breeze and dust quickly awakened him to his senses. They're the breaks you have to encounter when you're not flying.

With Steve's trike packed and ready to go, he decided to stay for a while to take some video and

camera footage from beside the airstrip. We all took off to show Steve some of our landing and low passing skills. Trevor hopped in the back with me and we did a number of circuits for the camera. As there were four of us flying around the airport, full situational awareness was required. The occasional missed radio call sometimes left us seeing trikes in places we were not expecting. Steve's battery in his camera was dying and we were getting bored flying around in circles. Trevor and I took off for a fly to the nearby ranges. As we progressed alongside the mountain side, we could see the low building in the distance. Winds were starting to rise and as forecasted, the front would not be too far away. We returned back to the airport for a late hot breakfast.

Steve and Trevor said goodbye and we again checked the weather forecast. A massive storm had gone by at the bottom of the Grampians during the early morning. Another storm had gone by above the northern end of the Grampians. Conditions were only good where we were. However, that was not to be for too long. Joe went for a quick fly and was back after one circuit. In disbelief he stated "that was the worst weather he had ever flown in". We quickly began to pack up. The winds began to roar and Joe yelled for help to keep his trike on the ground. We managed to get the trikes packed up just in time for the front to begin its pass. Wow! Conditions changed quickly, but as forecasted.

"That was the worst weather he had ever flown in"

After lunch Mitch and I decided to go home. Max, Graeme and Joe stayed for another night, but without flight. Mitch and I drove home caught up in the weather front all the way to Ballarat. The wind blew and the rain pelted down. This is ridiculous. I was so impressed with the rain I decided to take some video footage as I drove along in the car. Mitch and I decided to stop at an old Pub in Ballarat for a counter meal. Very nice I must say! The club T shirts we were both wearing attracted some discussion by others in the pub. We found ourselves in deep discussions about trike flying with total strangers. One person was an ex SMC member from Tyabb. He still had his trike, but had not flown it for 6 years. "Anybody want a cheap trike"?

So, it is with great pleasure I announce another successful weekend flying with members of the SMC. If not flying we were sharing tall stories or just relaxing in the countryside beside an airstrip with some great facilities. I believe all had a great time and I encourage everyone to join in on these great weekends. No matter what the weather is forecast to be or what your level of flying experience is, you should be there! I look back at the weekend whilst I edit my camera footage into a movie. (Less Graeme's shots of his face, arms and legs) and remember that for the first time, I never saw any Kangaroos.



Electrostatic Discharge during Mircolight Refuelling

Ian Rees

Most trike pilots use a product called “Mr. Funnel” when refuelling their aircraft. The funnel serves 2 purposes. It filters any particles in the fuel and it also provides a water trap to keep water out of the trike fuel system. However, there is a very clear label on the side of the Mr. Funnel which states

**“CAUTION, funnel
must be grounded to
prevent static
discharge”**

I have noticed that this statement is most often ignored by the majority of pilots. I have only seen one pilot earth the fuel system during refuelling. Why? I expect it is because we are not familiar with the requirements to protect against fires while refuelling. Additionally, we are often in a rush to get airborne which means we often over look the requirement stated above. As the funnel does not provide a convenient method of providing an ground connection, it has not been the norm to do so. I think that if pilots had access to an easy and affordable method to ground the fuel system, most pilots may decide to do so to protect themselves and their aircraft against a fire caused by ESD during trike refuelling.

ESD = Electro Static Discharge. ESD is caused by a build up of electrical charge on 2 or more objects which can cause the flow of current when the 2 items are brought into close proximity. It is called “static” because there is no current flowing while the charge remains on the material. The voltage level of a typical ESD can exceed 1000V and be as high as 15000V. Static electricity is usually caused when certain materials are rubbed against each other—like wool on plastic or the soles of your shoes on the carpet. It is also caused when materials are pressed against each other and pulled apart. The process causes electrons to be pulled from the surface of one material and relocated on the surface of the other material.

The reason the Mr. Funnel specifies the funnel to be grounded is to avoid ESD between the funnel and the refuelling system. Hence the refuelling container should not be carrying any charge relative to the funnel and hence it should also be grounded.

The control methods for ESD have evolved mostly due to electronics manufacturing industry. An international standard called “ANSI/ESD S20.20-1999 Protection of Electrical and Electronic Parts, Assemblies and Equipment, ESD Association, 1999” is the main standard for ESD control measures and equipment. I have considered using these control methods for ESD management in the trike refuelling system and have selected some ESD control components which are typically used to meet this standard. The system design was demonstrated to the SMC members at the last club meeting. A request for an article from the committee was made to get the concept published to the rest of the club members.

Basically, the system is concerned with making sure the funnel and the jerry cans do not hold any static charge when they are brought into contact with each other so that no ESD can occur when the neck of the jerry can touches the funnel.

A commercial grade ESD adjustable strap is connected around the base of the funnel and connected to the trike electrical earth. Another ESD strap is connected to the jerry can and also earthed. The connection from the ESD straps to earth is via curly cord cables to 4mm grounding jacks located on a terminal block wired to the trike earth. The terminal block is shown below. The black wire is routed to the main earth point on the trike frame. A discussion was held regarding connecting the trike earth to ground but it was decided that this was not required.



Several club members expressed interested in purchasing the parts and I have prepared kits for those who wish to purchase a set as demonstrated. The kit consists of 2 ESD adjustable straps. One strap for the funnel and one for the jerry can. Also, included are 2 flexible curly cord cables. One end of the cable clips onto the ESD strap and the other end has a 4mm jack which plugs into the earth connector block as shown above (included). The cost of the kit is \$75. Additional ESD straps are also available separately. Anyone interested in obtaining a kit can contact Ian at

ian-rees@bigpond.net.au.

Rotax Manuals

Source: www.rotax-owner.com

Rotax has released revisions to the following four stroke engine manuals

Operators Manual (OM) 912 Series, Edition 3.

Line Maintenance Manual (LMM) 912 Series, Edition 3.

Installation Manual (IM) 912 Series, Edition 2.

These manuals can be downloaded for free from the manuals section of their website

Contributions

Please send all contributions to newsletter@southernmicrolightclub.com.au

We are looking for

- Pictures
- Articles
- Tip of the month
- Items for sale
- Trike related humour
- Trike friendly airfields
- Scenic routes
- Maintenance tips

Do not concern yourself over making it look pretty or grammatical correctness. We are a Trike club, not a literary society. We just want to hear about the escapades of our members.

Please take care however about tips and tricks. Please ensure correctness and include sources. The whole idea is that our members can rely on the information given to be factually correct.