Ballarat Radio Model Flying Club Inc.

Web site: www.brmfc.org.au Inc. No. A0062781D

NEWSLETTER – April, 2020

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Note the meeting location.

The next general meeting would be held at the **Eastwood Street Leisure Centre in the Canteen,** on Wednesday April 22nd commencing at 7.30PM (Turn left after entry to the Complex, and the Canteen is on the left again). Don't forget to bring a plate for supper.

Please note: Meetings are cancelled until further notice due the COVID-19 pandemic. We were advised on March 19th that the Eastwood Leisure Centre closed its doors at 5PM March 18th to be reviewed during the week commencing April 13th.

Photo taken on Wednesday 22nd April around 5PM after upgrading the electric fence wire with a heavier gauge.

Club position on COVID-19 (29th March)

Due to the COVID-19 pandemic which has led to government restrictions on social gatherings and unnecessary travel, the Ballarat Radio Model Flying Club committee decided as of 29th March to close the fields (Trawalla & Burrumbeet) until further notice. From time to time there may be a member or two onsite checking the security of our assets.

A temporary closure sign was also attached to the gate on Sunday 29th March and the web site updated to convey the message that we have temporarily shut down.

Whilst attaching the sign water tanks and gas bottles were turned off and loose items such as trolleys were put inside the kitchen.

BRMFC Committee.

Points of interest from the last meeting

Extract of newsworthy items from the minutes of the last meeting. Note: Some events/activities may have concluded or been modified as circumstances change.

No meeting was held in March due to COVID-19.

Goin's on at the Field

Electric fence

Cattle are back in the paddock again which necessitated erection of the electric fence around the field.

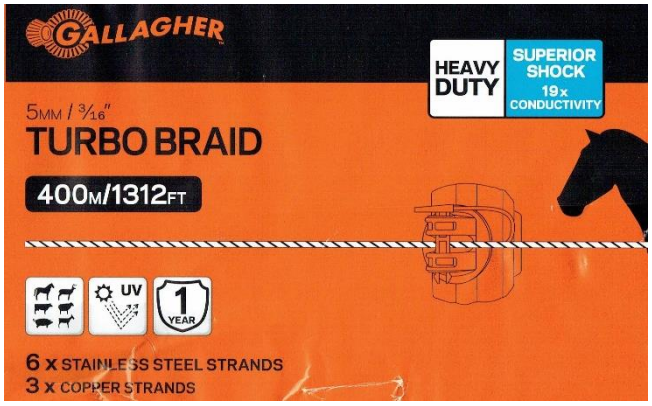
Alan Crisp& Peter Evans (President & Vice President) went out to the field last Sunday (19th April) to erect the fence after being alerted by Ted Burke that cattle had dislodged one of the start-up stands. It's quite a big job for just two people taking about three hours to complete. The committee asked Ted who lives locally if he could keep an eye on the field on a regular basis whilst driving past (getting essential supplies).

We were notified again on Monday morning by former member Rick Pimblott (thanks Rick) that the cattle had breached the fence which was erected the day before, and were wandering around the field.

Alan and I (Ed.) went out later that morning and repaired the fence, but came to the conclusion the wire needs replacing preferably with a heavier gauge.

They had also dislodged the start-up benches by rubbing up against them so we moved them into the compound for now.

On the way back from the field we called into Hewitt & Whitty to see what is available. They had a heavier 5mm wire braid (currently we have 3.5mm) with much better conductivity to provide a superior shock.



400m for $169 and 200m for $102. (Don't know what we paid for the 3.5mm wire but probably half the price.)

We thought we needed around 600m so based on the above 2 x 400m rolls @ $169 = $338 which the committee approved the purchase.

Two rolls were purchased on Wednesday morning, then Alan and I went out in the afternoon to replace the wire braid. We arrived around 2:15PM, in separate vehicles to observe the current isolation rules and set to work rolling out the new wire. There were no cattle or sheep inside the electric fence nor were they anywhere near our field. They seem to just move around the paddock, so sometimes they'll be nowhere to be seen then they'll be all around our facilities.

One of the main problems we've had with the fence is the pin in the insulator that attaches to the star picket wears through particularly on a corner post. If the plastic pin was replaced with a bolt it would wear the conductors in the cable instead. To overcome this we've fitted pulleys to the corner posts and also where there's a significant change of direction.

One of seven cables fitted to the corner posts – four down the southern end, two at the north/east corner and one where it runs across at 90 degrees to the power unit.

Peter Evans managed to get some ex aircraft control cable pulleys about 2" diameter which are perfect for the job. At the moment they are wired in place but we plan to replace the wire with some manufactured metal clips that will also prevent the wire coming off the cable when there is no tension such as when the fence is laid down. Even with the wire attachment the braid didn't seem to come off the pulleys but it could.

We started at the fence along Church Road and worked around dropping the old cable out of the insulators and

clipping in the new heavier cable. Also fitted the pulleys at the corner posts and used a height gauge to ensure the wire is at the same height all the way around for consistency. With the pulleys in place, tensioning the cable at the unit now has an effect all the way around to the Church Road fence – you can see the cable tightening all the way around to the other end.

After picking up the cable from Hewitt & Whitty I found a length of 1" dowel in the garage and cut out two big washers from MDF scrap thinking we'd be hanging onto it while rolling out. Al suggested tying it to the trolley which worked a treat. Al is bending the wire to attach the pulley.

The main run along the north/south runway. We were quite surprised how the poles are in such a straight line!!!

The first roll almost made it right around to the power unit located near the toilet falling short by about 20m. Rather than opening the other roll we decided to use 20m of the 3.5mm cable where it attaches at the Church Road fence. That way we have the better conducting cable 95% of the way around rather than starting with the inferior cable first. The section across to the Trawalla shed is also the original 3.5 mm cable connected to the new 5mm cable.

After it was all connected the unit was turned on and tested using the Gallagher tester and this time there was a noticeable improvement in the readings all the way around as compared to the old cable. I can attest that it works because when finishing up and taking some pics I inadvertently touched it near the north/east corner of the strip and it gave a fair kick.

Fingers crossed it works effectively this time. The heavier wire is a lot more visible as well whether that makes any difference to the cattle I don't know, but better for us anyway.

Start-up table

Whilst in lockdown mode president Alan has built another start-up table using some timber from a structure that was dismantled at his place. This one has some improvements over the other three, particularly being constructed from heavier timber and also the side trays have an insert so small items can't fall through the timber cracks.

Toilet building maintenance required

Whilst out at the field on Monday 20th April and needing a "you & me" I could hear a strange noise and thought "don't tell me the recently fitted new fan bearings have packed up", but alas it was a tear in the sheet of Laserlite that runs the length of the roof. It was peeling back and flapping in the breeze. Alan scampered up the water tank stand and I handed him a couple of star pickets to lay over the top so the Laserlite wouldn't peel off completely. It's still watertight but will need a new sheet when we are back at the field.

The two star pickets holding down the Laserlite are just visible behind the solar panel.

Ted, can you keep an eye on it when you call in? The tear is visible just above the door into the urinal.

New Models in the workshop

Siai Marchetti – by Graeme Allen.

From my perspective as a member of our sport and hobby and at this most difficult time, it is important for all of us to remain positive in everything we are doing whilst we are in this semi lock down period that we must all going through in one way or another to keep safe.

Not that I have ever wanted to enjoy the experience, but I can now imagine what it must be like to be a guest of Her Majesty in one of her resorts, the kind that doesn't allow you a lot of freedom to walk around in what you could term as a large area, I don't think I have ever been so lost in all of my life with regard to not being able to go where I want and when I want, we will however get through this, all we have to do is keep communicating with each other and keep each other's spirits up.

There is a good side to all this of course, when we come out on the other side, we will have learnt some valuable lessons such as how precious life really is, and how much we enjoy our freedom, as well as many other things I'm sure.

For us modellers, there is an additional bonus of course, and that is we get to play out in the workshop (well, some do anyhow) and work on those new projects as well as some of the old ones that need a little bit of TLC.

As there has obviously been no activity at the field (**nor should there have been**) to report on, I volunteered to Roger to do an article for the newsletter as we must make every effort to keep communication going as I said above with everyone through this difficult period.

To that end, I would like to share with you some bits and pieces of a project that I have been working on for some time now.

Let me first say that I don't profess to be any great builder so I'm not blowing my own trumpet here, just wanting to give you a bit of entertainment through sharing my experience.

So, welcome to the Marchetti Nightmare

Please note: - the following is not a paid for article by the club although I believe it bloody well should be paid based on what I have gone through so far in building this fine ship of the skies.

Anyhow, as they say in ***STAR WARS***, the story so far: -

In late 2018, I was surfing several modelling site looking for something that I could perhaps build with my meagre level of modelling capability and I happened to come across a model that I had been interested in for some time now, enter the Marchetti SF 260.

The Italian manufactured Siai Marchetti is or has been, used by many Air forces as a trainer and/or light attack aircraft.

This livery in the photo is a Belgian Air Force trainer which the model I am putting together is based on.

Military Belgian elementary training aircraft Marchetti SF260.

After purchasing the model, I had to wait several months for it to come from overseas and when it arrived, surprise – surprise, the canopy was cracked and so I then thought I would have a fight on my hands to get the supplier to get me a new one but fortunately, I do get on ok with the supplier and so received a new one in about three weeks.

I must say, in the time that I was waiting for the new one, I did manage to repair the one that was broken on the edges in two places and paint it black (**original colour was yellow**) so I now have a spare (**hope I never have to use it**).

As I started into the build, I quickly realised that this was not going to be something to be built in a week or so but would be quite a lengthy process.

One of my very first challenges was to decide what size motor I would use given the spec's called for an engine of 35 to 50cc, an added problem with the model was that there was no centre line markings on the firewall to give me an understanding as to where the motor should position to achieve the right thrust line.

Fortunately, I was able to get onto a forum on the net whereby I could exchange emails with a guy that told me how to get the motor in the right position (**he told me it was a trade secret so I hope I've got it right or its going to be one hell of a test flight when it comes around**).

The motor I chose was an RCGF 40cc Stinger SE twin engine which I must say looks the goods, nicely machined, has the smaller spark plugs and runs an absolute treat and fitted inside the cowl perfectly allowing for nice air space and flow around it.

Now, having said all that about the motor, the sad news is that I quickly discovered that a 40cc engine just wasn't going to cut the mustard in either power or the weight that I needed to help balance the model.

So, enter the next nightmare, an EME 70cc twin which again, looks the goods as far as being a quality unit, not that I have run it yet, that will happen in the model.

The unfortunate bits are one, I had to go and do all the work again to get it in the right place and two, it's obviously physically bigger than the 40cc so, bugger, cut the cowl time.

Cowl laying on the bench, cut both sides

As I sat there pondering all the work I had done and what was ahead of me (**as well as having a small sip out of a whiskey glass every now and then to calm my nerves**) I suddenly thought of another issue, would the firewall be strong enough to carry this motor or indeed even the 40cc for that matter and so I decided no, more work was required (**and of course, another sip of the whiskey glass**) so off come the motor again. (**Should have fixed the firewall issue to start with, shouldn't I.**)

As you will see from the photo below taken from inside the fuselage towards the firewall, there doesn't appear to be a lot of attachment of the firewall to the fibreglass fuselage, it is unfortunately your typical ARF construction with not much attention paid to strong construction methods, the glass looks pretty thin around the edges.

It took a while to get the right shape with a cardboard pattern but eventually I got a templet to fit quit well so then cut a ply one to fit, a reasonably thick ply one.

As you will see from the second photo, I stood the fuselage on its nose and tied it to the bench then installing the ply inside using fibreglass resin and carbon fibre strands, you may be able to see that I temporarily installed a mirror in the fuselage so I could see where I was putting the resin mixture and carbon fibre strands (bugger of a job)

Next, I decided to take a short break away from the main parts of the fuselage (**maybe I'd sipped that whiskey glass to many times**) and do some work on the canopy area.

Firstly, I ordered a couple of pilots off the internet that I found to be the right size that I needed.

When they arrived, I decided to paint them as I wasn't happy with the blue bodies and white helmets.

Below, you will see I started to paint them green and gave them some microphones

After I had finished, I made a couple of seats as well as an instrument dash and some levers etc. and of course, my version of a fire extinguisher.

The Fly Boys

After installing the fly boys in their new home, I then turned my attention to working on the wings and the undercarriage.

As the model is a trike, the mains are fitted into the wings which isn't an issue for installation given it is a fixed undercarriage set that comes with the plane.

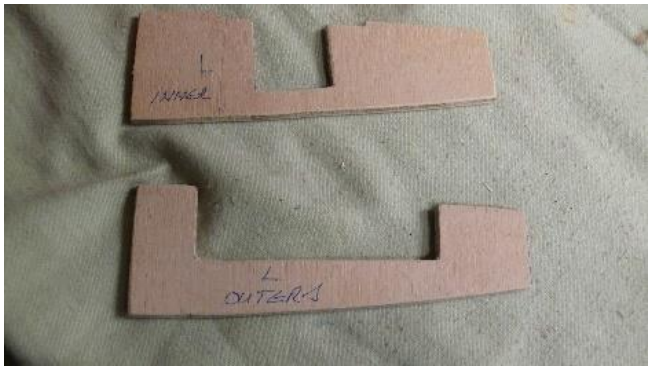
Unfortunately, I wasn't satisfied with that and so I ordered a set of retracts.

There were two types of retracts available for this model at the time, (Air and Electric) (I believe electric is now the only ones available) I decided on the electric as a change instead of the air system.

Once again, I should have known it was not going to be easy and some major mods were going to be needed to fit them in.

Significant cutting away of the first two wing ribs was required to allow the retract to fold up which then meant re-strengthening of the wing and so some internal wing rib plates had to be made, there are also so some additional plates fitted on the stringers inside.

Top part of rib section cut away



Wing rib plates (Both wings).

It looks a bit better now that it is almost finished (apart from a little more cosmetic work).

A significant issue I noticed when I first started working on the wings was that one half arrived with one of the wing to the fuselage location bolts being installed crooked, fixing this is no fun at all as you have to try and get your fingers inside the end of the wing to remove the mounting block that the metal thread is mounted into.

After a lot of effort, a little swearing, questioning the birth right of the person who installed it and thinking about visiting the whisky glass again, I managed to remove the internal mounting block and sand inside with an angled tool I made before re-installing it so everything lined up.

The wings are also fitted with wingtip fuel tanks as well as lights in them, as usual, you don't get a lot of instruction in

the manual on how to attach these types of things so again, fly by the seat of your pants stuff.

Without going into a lot of detail and boring people (**which I probably have already**) it takes quite a bit of measuring, re-measuring (**measure twice drill once principal**) and a lot of masking tape to hold everything together and in the right place while the drill process is done and the required holes for screwing and wires are done.

The above is the start of the process to get everything lined up before drilled processes.

Please note: If you think the wingtip is bigger than the end of the wing or your eye are playing tricks on you, they are not, it's just that the wingtip is sitting on a box and therefore closer to the camera lens when the photo was taken so the wingtip looks bigger.

In order to attach the tip to the wing, the small amount of information in the manual said to glue them on and as I said earlier, not much of anything else in the manual to help you do a reasonable job.

I decided that apart from gluing them, I also wanted to screw them onto the wing and hence, all the measuring up.

In order to screw them on, I had to drill holes in the side that is then visible when they are installed so I picked the smallest drill size I could get away with as far as a hole size to get a screw in through and then went to Clark Rubber who, seem to require some part of your anatomy to pay for the smallest bit of rubber, I purchased some rubber caps which I later painted after installation.

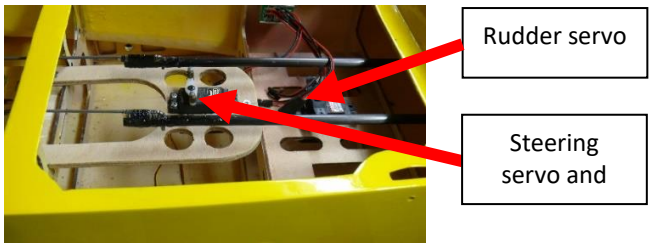
At this point, the wingtips have been fitted, caps painted, and the lights fitted.

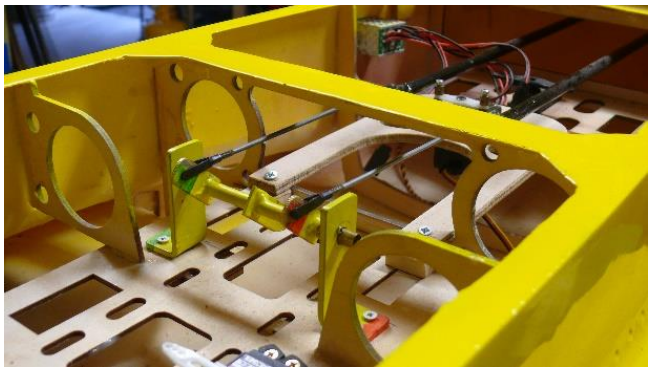
After completing the installation of servos in the wings, I have continued working on the fuselage.

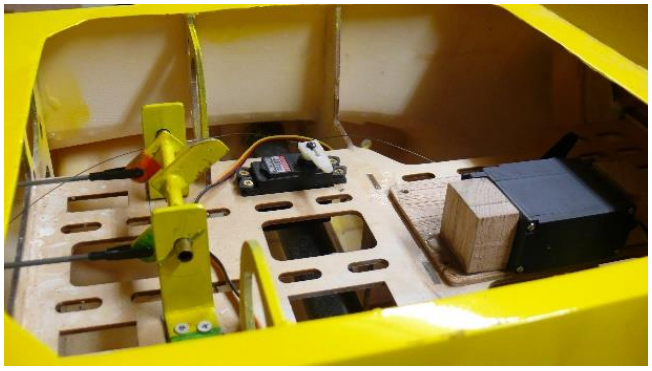
I have had to make a few things such as a separate removable tray just to mount the steering servo, I have also made my own push/pull system for the elevators given they are split.

Believe it or not, the fuel tank was an issue in as much as it needed to be to the right inside the fuselage behind the firewall in order to not interfere with the throttle servo, I made a removable tray from very thin ply which the fuel tank is mounted on a bed of suitable silastic that holds it in place on the ply and the tray is then screwed into place.

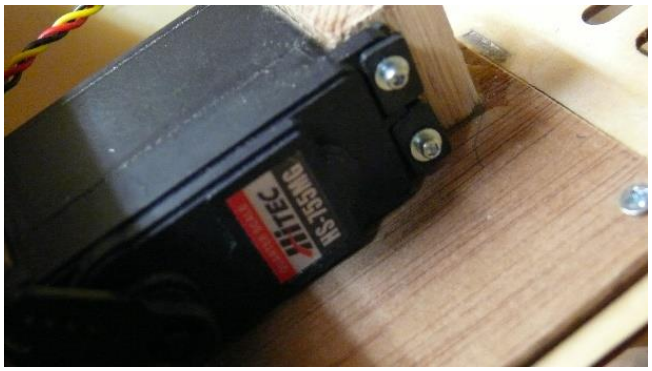
The steering servo will obviously be linked to the rudder servo through a slave channel so movement on both can be individually adjusted but work together.



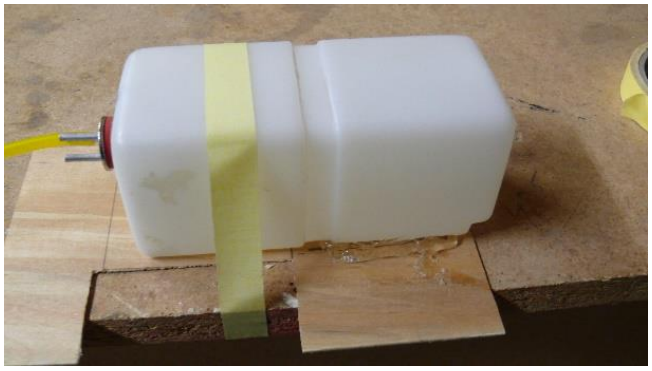


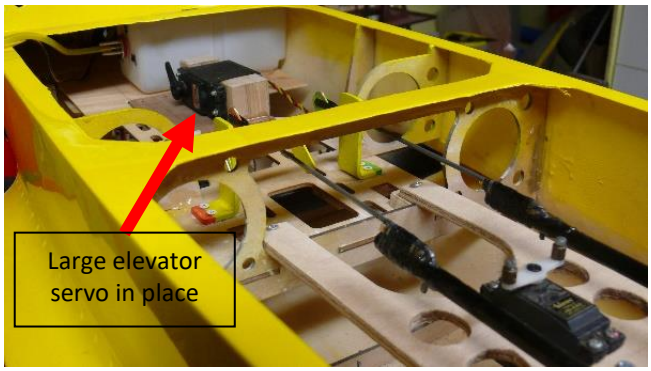


Above is the push/pull system and will be driven by a very large Hitec HS-755MG servo below.



Whilst the below is not a very good photo, it shows the fuel tank with some silastic along the edge of the tank, there is plenty underneath.





Fuel tank in place and elevator servo

Well, I think that's about all for the moment, I still have quite a bit to do before I get real nervous when it needs to jump into the air (**after the curfew and we can return to normal**) and yes, there will be many runs up and down the runway before that ever happens of course.

Wingspan 2286 mm (90 in)

Brand – CY Model

Motor – EME 70 cc

Until I see you at the field, take care everyone and like I said at the beginning of this, we will get through this current time.

Best Regards,

Graeme.

P.S. Hope I haven't bored anyone to much, thumbs up and keep smiling. (**and an occasional sip**)

Thanks Graeme. A lot of work on both the model and the article. Much appreciated Ed.

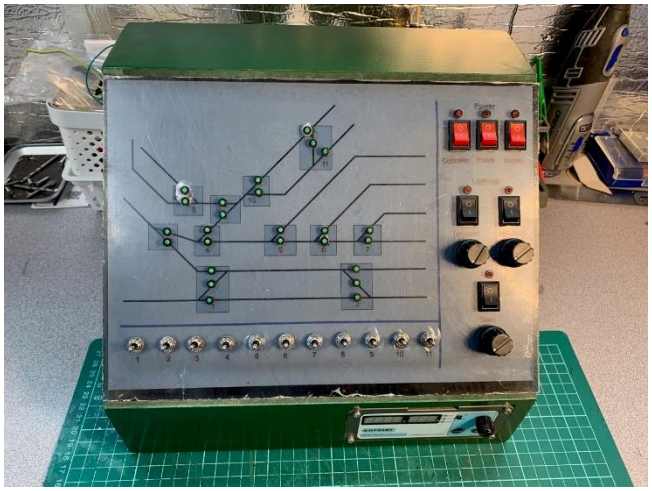
Model Train Layout by our secretary Nigel Newby

My modelling time during this worrying period has been spent not on my aircraft but on my reactivated interest in trains.

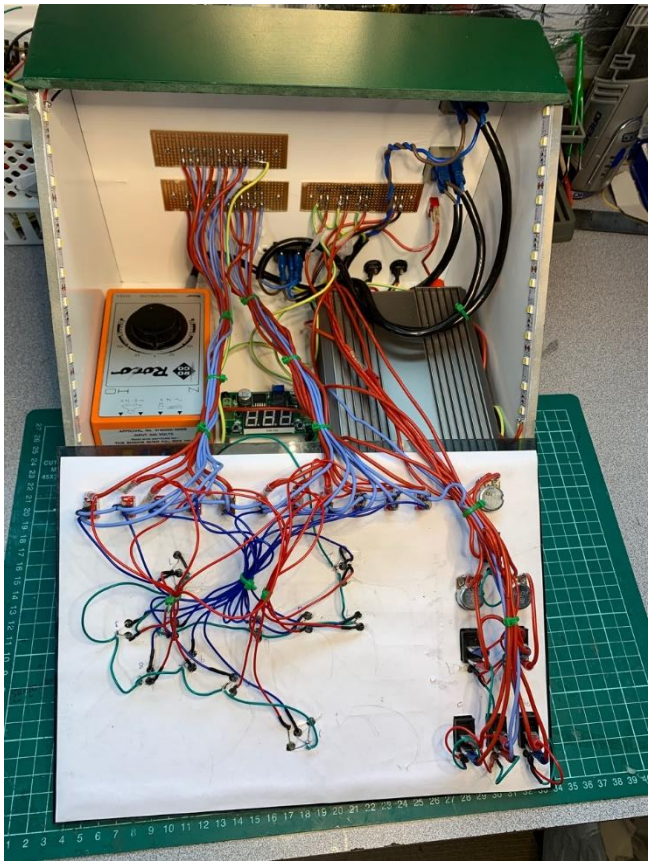
Like many, I am guessing, I had (and still have) a keen interest in trains since my childhood when steam on British Rail was still a thing. I decided to construct a model rail layout with an English setting (yes I'm a pom) which would be small enough to fit into my new workshop while still giving me room to use it for my other hobbies. The control system I chose was the "newer" digital control system, DCC, which gives far more functionality, controllability and flexibility to the system's operations (hence more fun). This works on 15v AC rather than the old DC system. A down side is the added cost plus the requirement to fit separate receivers (decoders) to each locomotive. A big plus though

is the ability to control multiple locomotives with the one controller.

This eventuated in a small baseboard of 3.6m by 1.6m. It has two loops with sidings for goods, carriages and industrial areas. There will be a small town area as well as a corner depicting farming. I have built most of the buildings and laid them onto the board to determine positioning to then be able to decide on the terrain and road layouts. None of the scenery work has been started as yet. The track has been laid onto cork underlay but the electrical work of wiring of the tracks and points has yet to be completed. I made a "control cab" to house the power supplies for the DCC controller and points plus the point switches, main power switches and the lighting switches and dimmers. The making of this has been fiddly and occasionally frustrating but is now almost complete with the front panel to finish and replace a couple of LEDs which blew because I forgot to install resistors in their circuit.



I have included a couple of photographs to show its progress, plus one of my locomotives. The detail on manufacturer's new locomotives and rolling stock is nothing short of amazing and their running is now very smooth, especially on DCC. The bridge, terraced houses and shops are made from card kits which made them quick to construct and they are very convincing.



Well this isn't about RC but it is keeping me sane(ish) and I plan to continue with the building of my planes as well. The aircraft under construction are a Top Flite Cessna kit, Tiger Moth (ARF) and restoration of a 2.1m P51B which has a Zenoah petrol motor. Plus of course a few others including repairs :-)

Hopefully see you at the field in the not-too-distant future.

Thanks Nigel. Many of us probably have an underlying interest in trains as well. Looks like a lot of work. Ed.

Tips & Tricks

A few more interesting YouTube clips arrived on my phone and tablet over the last month which I thought may be of interest during this period of isolation.

Watch **"Inside the CARF-Models Factory! | #3dbrosgothailand Pt. 2"** on YouTube https://youtu.be/YXK_O07RHRs

Watch **"Nothing Can Kill the F-16 Fighting Falcon"** on YouTube https://youtu.be/-qeF9kXwUiY

Watch **"HARS Neptune test flight 14 04 19"** on YouTube https://youtu.be/oqFG6Z7FwGg

Watch **"Full F-22 Demo: Exclusive Look Inside the Raptor"** on YouTube https://youtu.be/gEaExsULkx0

Watch **"Fighter Jet Overruns Runway"** on YouTube https://youtu.be/w3IFW0CUrUI

Watch **"P-51 "Voodoo" - High Speed Low Pass"** on YouTube https://youtu.be/tq_i9RpvKuY

Watch **"✈✈成田空港 Go Around[MD-11]尻もち寸前 大バウンド後 ゴーアラウンド Heavy storm ウインドシア (windshear） Super Crosswind Narita"** on YouTube https://youtu.be/htKvwQJoo30

Watch **"✈✈春一番「春の嵐総集編」Go Around 大荒れの成田空港 ゴーアラウンド続出 壮絶横風着陸 Super Crosswind Narita Airport!!"** on YouTube https://youtu.be/uZSUCwE23-k

Watch **"Dunlop Aircraft Tyres"** on YouTube https://youtu.be/2rJVZM0i_7c

Watch "How Its Made - 132 Toilet Paper" on YouTube https://youtu.be/OizgI354pJc

Watch **"Dangerous Landing during heavy storm- Runway appears on final - Cockpit view"** on YouTube https://youtu.be/ovUy-c3EcyI

Watch **"Why Does Getting Kicked in the Testicles Hurt So Badly?"** on YouTube https://youtu.be/fEddg1twmY0

Watch "**F4U Corsair and P-51 Mustang- Class of '45 - Thunder Over Michigan 2019"** on YouTube https://youtu.be/C9cbXUUSzOs

Watch **"Flight to Antarctica, Christchurch to McMurdo Sound"** on YouTube https://youtu.be/X6iyz4hrEaQ

Watch **"Video 091 Lancaster's"** on YouTube https://youtu.be/toP9DyO7tBA

Watch **"Can planes REVERSE out of the GATE? POWERBACK procedure explained by CAPTAIN JOE"** on YouTube https://youtu.be/iSxydOLq8QI

Watch **"RC Military A400M Scale RC Model Airplane Ultra High Detailed"** on YouTube https://youtu.be/36-pnic5IhA

Watch **"The Real Breitling L-39 Albatros and the RC Turbine Model Jet's Formation flight Unique"** on YouTube https://youtu.be/QA4Nu8blMPQ



Event Calendar

Note: Most if not all events have been cancelled/suspended or probably will be due the COVID-19 pandemic. I have left the calendar as is to show the events that were scheduled.

April 1st (Wed)	Indoor Flying at Haddon Hall 7 - 9:30PM – BAMI
April 5th	**BRMFC/BAMI interclub day at BAMI field (TBC)**
April 4th/5th	Echuca Moama Annual Fun Fly - EMMAC
April 10th-13th	Easter long weekend
April 11th (Sat)	**VFSAA Scale comp at Trawalla.**
April 15th (Wed)	Indoor Flying at Haddon Hall 7 - 9:30PM – BAMI
April 18th/19th	VMAA Trophy – P&DARCS
April 23rd-26th	VJAA Wangaratta International Jet Event
April 25th (Sat)	**Sausage Sizzle – Bunnings Ballarat**
May 1st – 3rd	Twin Cities 13th Annual Scale Rally – Albury

See the VMAA Calendar for all Victorian events.

That's all for now. Happy landings.
Roger.