## Andrew's Musings Part 1

As promised, this is the start of a series of articles on my modular layout building, what inspired me, what I hoped to achieve and the fun designing and building them along the way. From popular demand, the suggestion is to "start at the very beginning, a very good place to start", especially if in Austria with the Sound of Music. However, my involvement is not the start, because the club itself has a long history and modules before that, which is probably of equal interest to all of us. I have asked one of our founding members if he would write an article about how the club has got to where it is from its beginnings in the 80s.

Naturally, any article will be from the writer's perspective and mine will be no exception. When it comes to this one - the start of the C track modules - there was a fair bit of discussion, debate and compromise and I'm writing my version of events, which is probably incorrect from other points of view. Hey, hopefully I won't offend, but please forgive me if I haven't got things exactly right. So let me take you back to 2006. By that stage, I had been part of the club for about 5 years and seen the club layout move from the Papakura Military Camp... to storage under my house... to right upstairs in the first building in Onehunga via an awkward staircase which just managed to get the 2.4m long modules around the corner. I had also established contact with Western Districts Model Railway Club and had been involved with Model X for a couple of years, displaying Maurice Handisides' layout (the one we squeezed into Silverdale for a few months last year) and my Z gauge layout (which is another story for another day). The club layout, both at Papakura and Onehunga, gave us plenty of opportunity for running trains on club nights, although Onehunga was a bit tight. However, for some of us newbies in the club, who hadn't been worn out by multiple exhibitions over the years, the idea of getting out there on display was appealing. The club layout was firmly ensconced upstairs, there were a few members with some spare C track sitting around from various attempts at home layouts and the idea was floated about creating some new modules for display. Voila, we had the start of a module SIG – special interest group – with the original "moduleers" being our grand master Steve Siegel and cohorts Glen Cometti, Warwick Harman, Garry Anderson (now in Wellington), myself, with Steve Pople and Mike van Dam being involved with building club corner modules. I think I have everyone there – apologies if I have missed someone.

Okay, so we have a bunch of guys. What now? Well, we each have some C track – first decision made, because we don't want to spend money rebuying anything else. C track is great; it's just not as flexible as K track for conforming to length. If you need some help with making C track work, you can always refer to our website -

https://aucklandmarklinclub.nz/images/reference/pdfs/c\_track\_Length.pdf. So the next decision . . . what length? Actually, in between, I think there was another decision to have a double track mainline and wide radius turnouts, so a track spacing of 64.3mm was decided on (rather than 77.5mm) also lending itself to the more graceful R4 and R5 curves, therefore making the long passenger trains not "open up" as much on the turns. There was another option considered, which was to have a single line at the back of the module raised up by 100m to give some variance in height, but this was discounted in the end. But back to the length.

With any modular group the joins between modules must be consistent in profile, track positioning, wiring, height. Do what you like in between, but the end points must be the same. Ah then there was profile as well. The group decided not to go for a "flat earth" design, and instead have a module depth of 200mm to give some license for more contours, adding in a 30mm drop at the front and 30mm rise at the rear of the module. The track was laid 360mm and 424.3mm from the rear, so that at home you could always put your modules back to back and put an R1 and an r??? semicircle at each end to create a loop (I have created this R1.5 to get the 64.3 spacing by using 24130, 24115, 24094, 24115, 24130 – it is actually 426.6mm in radius, but there is just enough flexibility even in C track for 2.3mm). This loop is assuming you don't disobey a certain other rule about not extending forward into the audience or backwards into the operations area, which is something I ignored right from day one with my viaduct modules (next month's article). Hey what are rules for, if not to be broken? And back to the length.

Admittedly, it isn't a concern if the intention is not to create a big oval layout where the sides need to be equal. If we had dogbones instead, then the length of the modules could vary for each individual's preference. Actually dogbones could be useful, even if the whole layout is an oval, because then we could have an entrance to the inside which didn't involve ducking under the modules, which even for us slightly younger ones is a pain in the butt. Bring on the wireless routers, so we can control the trains from the outside! The only downside with dogbones is we then only have one line, rather than two, so it halves the number of trains that can operate at any one time. Talking train operation, we have always had in mind block control, at least on the corners and provision has been made for this in terms of cuts in the rails for detection and isolation. However, the total reliability hasn't always been there and we need something to keep an eye on while exhibiting, so manual control of the trains has become the norm.

The length Andrew?! How did we come up with 1220mm x 610mm? Go off to the timber store and you get 2400 x 1200 ply, so everything needs to be carefully cut to create the extra length. The length comes from America, being 4 foot x 2 foot and to be exact comes from ETE (European Train Enthusiasts) who had published some standards for their own modular group. The Great Lakes Chapter specifically had them for C track. If you want to see some of what they are up to, have a look at https://www.etegl.org/ So rightly or wrongly, we picked up on an existing standard, so that someday we could fly over to America and join our modules up with theirs. Problem is that we also immediately went about adding our own Kiwi ingenuity to the specs, mainly to do with contours, so we would need to have a joining module anyway. Hey, it is what it is, and the extra length has perhaps allowed me to do some more fancy bits than my initial suggestion of 1080mm in length. 1080? It is 3 x 360, which is a common denominator in all Marklin track combinations. 1080 also fits a little easier across the back seats of cars, and it does work with one wide radius turnout per module (24711, 24071, 24229, 24236, 24229, and 24077 = 1079.1mm in length). However, that doesn't include the joiner track (unless you chopped some intermediate rails) which was probably the other big consideration initially discussed. We decided on using 24188s to bridge between the modules, rather than butting the rail right up to the edge which can have it get caught on things or being slightly misaligned . . . at least the joiner track will give some minor flexibility for changes in contour. It isn't without its problems, clicking and reclicking C track together, losing the track into other people's private collections, but like all decisions you live with it and make the most of the possibilities.

Which is exactly what a number of us have done, creating a number of different scenes for our trains to run through. Steve S was the first off the rank with his 3 module (i.e.: 3660mm long) yard scene, coaling facility, hump track, engine shed and a branch off to an inside staging yard. Steve always does a nice job with the air brush and the finer detail as well as the overall look. Be great to see them again someday. Glen was also there with 3 modules, with the plans being to have a station with multiple platforms. Well the track went down ... (smile) ... and his modules have been really useful over the last few years as a staging / fiddle yard, having no scenery and therefore space for taking trains on and off safely with no catenary in the way. Swapping out trains has long been a problem, so having this facility means more members have got involved with bringing their trains to shows and getting a chance to run them. Talking catenary, it was one of the features we wanted to show, since no other clubs have it on their exhibition layouts, possibly for good reason, since it does make cleaning and derailments more difficult. We have it on ours and it gives a certain authentication to having electric trains running. One exhibition we did actually join up the catenary between modules and run the trains fairly successfully with pantographs up, but it does involve another element of having joining wires and carefully disassembling the modules at the end so we don't rip off a module or two of catenary poles.

Back to the modules, I started on my 2 module viaduct, Warwick chipped in with a 1 module overpass (road bridge going diagonally over the top of the track, with a country home on the rear part of the scene. That's another thing we thought through as well – how far back is the track? I have mentioned the 360 and 424.3mm from the back, but importantly this left about 160mm in front of the track on the audience side. This gave a little more scope for scenery in the foreground, so that it is not just the trains, but the journey they are going on as well. One thing I really like seeing is trains twisting and turning through the environment, disappearing and reappearing behind hillocks, trees and in Warwick's case disappearing and re-emerging either side of the bridge. Finally we had Garry's contribution, a really nicely done farm scene (getting ideas from the amazing layout builder in Europe – what's his name again?) with cattle underpass, girder bridge over a river and also Garry's really special trains, like the railcar that the German Soccer team travelled on after winning the World Cup.

One thing I have forgotten to mention is the corners, thanks to Steve Pople and Mike. They helped out by building the 4 original "standard" corners based on R4 and R5 curves with joiners. They now look a little sad for wear, but the initial abandoned line, farm, stream and tunnel motifs were great, despite Mike having flooding issues with the stream, as the Woodland Scenic easy-to-use water product would find every way to soak up the banks and onto the floor – yes gravity doesn't exist when you need it. So that was the start of things to come, with several more members getting involved over the years and various additions being made to the original specs, which can be found on our website (https://aucklandmarklinclub.nz/images/reference/pdfs/amc\_module\_spec.pdf).

Probably the most controversial addition is that of backdrops. Hey I like them, because it completes the scene without having a 1/1 scale stomach in the back of the pictures. It does, on the other hand, make it harder to keep an eye on the trains from the inside, but once again wireless control is a good answer. Wellington and Christchurch have also got involved, although using specifications more like

the original club modules (since they already had modules in a similar design), with their own adjustments. Hey, it works for them and if we get together (which we have on occasion), a touch of number 8 wire joins everything up (as does my special 250mm joiner modules, once I get them finished). You never know, all three of us could one day join them all up and possibly have about 80 modules linked together. To finish, as an interesting fact, our modules at 1220mm long at 1/87 scale means they are roughly 100m in length (so you can use this statistic to work out the speed of your train if you have nothing better to do – one module in 3 seconds is roughly 120km/h). Perhaps that's why we went for a length of 1220mm?!

Next issue: The Viaduct