



Gympie Communications & Electronics Group Inc. Newsletter

1st Quarter 2013

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President's Report

During 2012 we welcomed to our group Kerry VK4LKF and two Foundation Members Jim VK4FAAU & John VK4FXLO.

Having lost our accommodation at The Shed, Barter Street we were able to get some temporary accommodation at 214 Mary Street which allowed us to continue with our Wednesday and Committee meetings. Soon we will be moving into our very own building at the Old Railway Station, Tozer Street (leased from the Mary Valley Heritage Railway Society). Roger, VK4BNQ, being a member of both the radio group and MVHR has been able to make a significant contribution in the lease negotiations and access to the building.

Restoration of this building has been undertaken by members and details of the work carried out is in a later article. We have to give Owen and Graham a pat on the back for the number of hours and the amount of work performed in addition to the normal Wednesday work group.

Barry & his supporters are to be congratulated on the funds they have generated from the Mitre 10 BBQs.

A sale of items donated by members was held at the Sunday Museum Market and again useful funds were deposited into the Group account, thanks to all those who contributed items and to those who assisted on the stall on sale day.

The Gympie Group was successful in their application for a 2012 Volunteers Grant. The Group will receive \$3,537.00 which will go towards much needed equipment.

We can now look forward to a new year with accommodation we can call our own and a healthy bank balance. If we can present the group accommodation and equipment well perhaps we will see more new members joining us in Tozer Street.

ED VK4ABX

GCEGinc. OFFICE BEARERS

PRESIDENT: ED FISHER VK4ABX

TREASURER: BARRY MOLKENTIN VK4KKN

SECRETARY: ISAAC NEUMANN VKFIBN





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GCEG Inc. Club Room update Jan 2013

As most of us well understood right from the start of this project it was going to be a challenge, I have a strong feeling that any of us that have been involved to date would be well aware that this has been just the case.

That those involved have risen to the challenge is a credit to them all with I must say, Owen VK4FAAQ, having made an outstanding effort to see us where we are today. His enthusiasm, old school skills and commitment have been a never ending source of encouragement to us all.

The removal of the entire termite damaged timber and fittings left the building in a condition that needed some very prompt structural repairs which required the addition of a considerable amount of timber. This took some time to do but did, once completed, stabilise much of the remaining building. The complete replacement of the dividing wall also helped to once more help to bolster the structure of the building. This wall had been completely eaten away by termites with only the paint left.

The ceiling in the main room has been replaced, where necessary, and the damaged roof structure on the other side of the partition wall has also been attended to, which once more has the primary roof bearers back in place. This work was done in extreme heat which once again gives credit to all those that made the effort to have this completed. Whilst there is still a little more needed to have the roof structure finalised most we believe has now been completed, or will be by the time of the next building update. Work as late as this week has seen all of this roof work completed leaving just the re fixing of the roof sheeting to be completed.

Work has also progressed on some of the tidying up jobs such as joint trim and initial prime painting, which in the coming weeks will see the final coats being applied on all of the internal building walls and ceilings.

The sand has now been placed and given an initial tramp down and plans are now in place to look to have the new concrete floor attended to. The hope here is to have the concrete delivered and the group members actually finish it off. This is still under consideration and might see this procedure change; however the main thing is that we are very close to having this side of the building almost at the stage it could be considered ready to use. Once this and the other few jobs are completed we will not be far off starting on some sort of bench fit out and attention turned to





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power, security and plumbing matters.

We have had an air conditioner donated by Greg VK4VBU and Roger VK4BNQ is looking to have a fan installed, all of which will add to the overall comfort of our new club rooms, thanks to both of these members for their generosity. Thanks must also go to John VK4FXLO as he has indicated he is prepared to fund some of the cost to have the new floor put in place.

Work is progressing every week and the next update should see us very close to a completion date, however we are far enough advanced with the building that it is planned our next group meeting, all being well, will be held at the new building.

Bob Dixon VK4MR

Pictures are available on the Club's website gallery at www.gcegin.org.au/gallery_1.php



Newsletter Publication

After more than a year as Editor and publisher of the Club's newsletter, John VK4FXLO is handing over to a small army of members to continue the publication. The members involved are: Greg VK4VBU – Editor, Roger VK4BNQ - Publisher and Bob VK4MR assistant editor and writer.

We wish to thank John for his efforts as without them, the newsletter would probably still be dormant, waiting for someone to get it going again. So from all of us at GCEG, thank you John.

Please help us bring a little news to those members that may not be able to make it to every meeting by sending news, stories and articles of interest to our Editor Greg. No item is too small, please email to newsletter@gcegin.org.au. The newsletter also serves as a publicity tool to prospective members and others, so it's an important part of our Club. Thanks in advance.





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Putting Up a Radio Tower – Part 1

"I'll just put up a tower". So quick to say, but it does take a lot of time and planning, not to mention, a few dollars. One has to admire the Amateur Radio stations that have one or more really large towers populated with several directional antennae and rotating devices. The purchase of the actual tower is the easy part.

In my early days of radio, I built my own 3 element 10m beam out of scrap aluminium and I bought a little rotator from a Ham Radio shop in a backyard garage in Box Hill Victoria. There were no other ham radio stores around in my area so this is where a lot of local amateurs bought their gear. I never got to buy or build a tower but I did mount the little rotator on a short pole on the roof of the house – mainly for testing and to see the beam turn. As it was too low, of course it didn't work very well, but it did turn nicely. I still own that same little Emotator Model 102 LBX unit and so I needed a tower to go with it. After all this time, about 36 years later, I hope the rotator still works, I may need to re-grease it and check a few things, but it should be fine.

So in talking with Noel VK4NL from the Sunshine Coast Club, I ended up buying an old tower that they had stored at the their Clubrooms. It's a well built galvanised free-standing tilt tower. Next problem, getting it home up to Gympie... Clayton's Towing are based near the SCARC Clubrooms and they owed them a favour or two plus I'd also had a long talk to the owner on some technical issues and in return, he said he'd bring the tower up for me when he had a truck big enough coming this way. Well it took several months because they needed to use their biggest truck due to the length of the mast and the weight of the base on the base section. It was worth the wait and true to their word, Claytons delivered my new old tower and lifted it over the fence and onto my prepared supports.

The original pin was missing, something I later realised was more unfortunate than I thought at the time as the tower lower part had been damaged at some point along the way and the two lower sections were slightly out of align. It was not visually obvious and I didn't realise until I tried to put the new pin through. I haven't yet worked out the solution to this problem, but now that we're this far, a solution and repair will have to be found.





There it sat for a long time, the supports slowly sinking into the ground as they survived flooding rains and now drought while I pondered about where and how. Finally, some decisions were made, a couple of small trees were removed and I started to excavate a large hole to take the concrete for a good stable base.

Without disturbing surrounding soil, I excavated a hole of about 3.5 cubic metres. There was some very hard rock on one side near the bottom so I left that there for the concrete to bond into. Meanwhile, Bob VK4MR had kindly machined a steel pin which would later join the two parts of the tower and allow the pivot action.



So the next step was to make a steel framework and base to sit in the concrete to reinforce with matching stubs for the heavy tower base. I built this out of building material scraps and some proper reinforcement mesh I'd bought.





The construction was carefully lowered into the hole and placed onto concrete slab chairs so the steel would be surrounded by concrete and not exposed to ground moisture. Thus, it is very important to provide a separate grounding system for the tower otherwise the concrete could crack or explode if a direct lightning strike were to hit it causing an arc to ground through the cement. I will be providing two earth rods and also a solid bond to my house which is a steel frame, the aim being to keep the electrical potential the same throughout should a strike occur. (I can hear Erik saying good luck...)



A cement sheet provided the template for the stud alignment and kept them in the right place during the pour and setting of the concrete.





Extra steel starter bars were also ready to be placed into the wet concrete to further tie in and reinforce the whole tower base.



Finally, taking advantage of the dry weather, I ordered just over four cubic metres of concrete and the big truck was able to climb up over what was then still slightly green grass in the front yard and we slowly poured and agitated the cement until it was up to the top of the previously levelled form work. It turned out OK, considering I also poured and levelled a slab for a new doghouse (probably for me after the tower goes up), as well as raking the left-over cement onto the driveway area. It was a busy full-on morning but thanks to a very good and helpful driver, I got it all done OK.
End of part one.

73, Roger VK4BNQ.

