

Gympie Communications & Electronics Group Inc. Newsletter

Editorial by Greg VK4VBU

1st Quarter, 2014

Welcome to the 1st Quarter GCEG newsletter for 2014. I hope you all had a great time during the festive season. I must also make mention of how proud we all are of club member Navin Naido and his efforts at saving the life of a Chinese tourist who became unconscious while snorkelling at Airlie beach, well done Navin!!! But first it's over to Alan VK4EAB to tell us his story on how he became interested in Amateur Radio.



Alan VK4EAB



Photo: Greg VK4VBU

VK4EAB – How I became interested in Amateur Radio

My father, before I was born had done the Marconi course in Melbourne and he had learnt morse code and graduated there and of course he had his heart set on going to sea as a wireless operator, anyway he met Mum and that was the end of that, then I came along after with my brother too then my sister came along. My first two or three years were spent with the sound of morse code, my father practising it in the shop, we had a wireless shop in Bridge road Hawthorn in Melbourne. It didn't prosper as the commercial radio stations were coming on the air about that time in 1927, by the time 1929 came things were pretty crook in the wireless world and he had to close shop like hundreds of others you know, they went broke in other words so that was that.

I still have always been interested in morse code right up until the war came along, soon as I was 18, I was drafted in. I went into the air force in 1941 the first draft there and I was drafted away to 100 squadron the Beaufort torpedo bombers, from then I had to do a few courses a crash courses, aircraft electricals then later another course in wireless mechanics and then wireless operator so I didn't waste my time in the air force. I've always been interested in radio all my life, you know an experimenter for years, did my electrical trade too, I've always had an inkling to get back into the amateur radio but I wasn't always able to do it with the family coming along and a sick wife and all that, but eventually the occasion came when I we were farming at Kybong and met a few of the radio blokes around the place and I thought it was about time I got my amateur licence, my eyes were failing then so I made a date with the radio inspector and he came up to my place on the farm with a morse key and everything and did the 10 words a minute, got my full licence and the radio theory was pretty good, the marks were quite good and I passed alright, so that's how I got started.

Presidents Report for January 2014

During this past year we as a group made some major steps forward in finally establishing us in a home and able to start attracting new members, which I am sure you would all agree was a vital requirement as we looked to move forward. These giant steps forward are a credit to the members who have made all of this possible, and I as your president commend you for it.

Due to family matters taking Lyn and I down south to NSW for most of the festive season I have missed much that has gone on so this report will be short on group detail. That said I must again commend Roger and Isaac who ventured yet again up to our repeater site on Mt Boulder to install the new APRS radio Roger has recently completed. Sadly Roger tells me that a short while later it failed which required yet another trip up there, this time on his own. This trip had him having to drag a fallen tree out of the way, however that trip completed, he thinks, the issues that caused the problem are resolved.

As we move into the new year we are once more about to face the cyclone season and whilst most of the major ones tend to dissipate, most if not all of their energy further to the north of us, we can as we all know see some make it this far south. The recent activity out in the Pacific in Tonga is a classic example of just what can happen with devastating consequences. I am sure you would all be aware that one of the very first problems they experienced was the loss of communications, no surprise there happens every time.

In looking at the potential of cyclones impacting here the big question we as amateurs should consider is just how we individually would survive such an event? I believe were we to see wind gusts of only half the speed of the Tonga experience which were up around 230kph, much of the infrastructure here would cease to exist. So how would you survive becoming a victim were we to see 100kph plus winds here, I for one would be looking to ensure that I had taken adequate precaution to hopefully still be able to function.

Whilst it is reasonable for us as a group to see us having the ability to support the first line response groups, should they lose their communications, just how likely are you to be still capable of surviving? In closing I would suggest that you all give your own personal situation due consideration and be honest in answering the question, have I done all I can to survive or is there more I need to do? The emergency questionnaire Roger has sent out is I believe seeking important information that will help determine your ability to still be there after the passing of a severe WX event.

Bob Dixon VK4MR

President GCEGInc

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Lightning Safety Myths and Facts (Courtesy of the National Weather Service)

Myth: Lightning never strikes the same place twice.

Fact: Lightning often strikes the same place repeatedly, especially if it's a tall, pointy, isolated object. The Empire State Building is hit nearly 100 times a year.

Myth: If it's not raining or there aren't clouds overhead, you're safe from lightning.

Fact: Lightning often strikes more than three miles from the centre of the thunderstorm, far outside the rain or thunderstorm cloud. "Bolts from the blue" can strike 10-15 miles from the thunderstorm.

Myth: Rubber tires on a car protect you from lightning by insulating you from the ground. **Fact:** Most cars are safe from lightning, but it is the metal roof and metal sides that protect you, NOT the rubber tires. Remember, convertibles, motorcycles, bicycles, open-shelled outdoor recreational vehicles and cars with fibreglass shells offer no protection from lightning. When lightning strikes a vehicle, it goes through the metal frame into the ground. Don't lean on doors during a thunderstorm.

Myth: A lightning victim is electrified. If you touch them, you'll be electrocuted.

Fact: The human body does not store electricity. It is perfectly safe to touch a lightning victim to give them first aid. This is the most chilling of lightning Myths. Imagine if someone died because people were afraid to give CPR!

Myth: If outside in a thunderstorm, you should seek shelter under a tree to stay dry.

Fact: Being underneath a tree is the second leading cause of lightning casualties. Better to get wet than fried!

Myth: If you are in a house, you are 100% safe from lightning.

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Fact: A house is a safe place to be during a thunderstorm as long as you avoid anything that conducts electricity. This means staying off corded phones, electrical appliances, wires, TV cables, computers, plumbing, metal doors and windows. Windows are hazardous for two reasons: wind generated during a thunderstorm can blow objects into the window, breaking it and causing glass to shatter and second, in older homes, in rare instances, lightning can come in cracks in the sides of windows.

Myth: If thunderstorms threaten while you are outside playing a game, it is okay to finish it before seeking shelter.

Fact: Many lightning casualties occur because people do not seek shelter soon enough. No game is worth death or life-long injuries. Seek proper shelter immediately if you hear thunder. Adults are responsible for the safety of children.

Myth: Structures with metal, or metal on the body (jewellery, cell phones, Mp3 players, watches, etc.), attract lightning.

Fact: Height, pointy shape, and isolation are the dominant factors controlling where a lightning bolt will strike. The presence of metal makes absolutely no difference on where lightning strikes. Mountains are made of stone but get struck by lightning many times a year. When lightning threatens, take proper protective action immediately by seeking a safe shelter don't waste time removing metal. While metal does not attract lightning, it does conduct it so stay away from metal fences, railing, bleachers, etc.

Myth: If trapped outside and lightning is about to strike, I should lie flat on the ground.

Fact: Lying flat increases your chance of being affected by potentially deadly ground current. If you are caught outside in a thunderstorm, you keep moving toward a safe shelter.

Omega (navigation system) - Greg VK4VBU

A sad event when a base jumper died on Saturday the 25th January in Victoria brought attention to the structure he was jumping from, the Woodside Omega Tower which is east of Yarram. What is the Omega Tower? The Omega Tower was part of the Omega navigation system and was used up until 2004 as a transmitter for uni-directional communications to submarines on 13 kHz under the callsign of VL3DEF. The umbrella antenna is carried by a 432 metres (1,417) foot high grounded lattice steel guyed mast. The tower is electrically insulated from the topmost guys which served as the radiators, similar to the metal radials of an umbrella without cloth covering. The mast simply supports the downward sloping guy wires which are the active elements. The guy wires also are used to hold the tower itself in place. The mast is the highest structure in the Southern Hemisphere and is 100 metres higher than the Q1 Tower on the Gold Coast and Centre Point Tower in Sydney.

The station was decommissioned in November 2008. Aircraft warning lights continue to operate on the tower. Transmission equipment from the Omega navigation system is now on display at the Port Albert Maritime Museum. OMEGA was originally developed by the United States Navy for military aviation users. It was approved for development in 1968 with only eight transmitters and the ability to achieve a four mile accuracy when fixing a position. Each Omega station transmitted a very low frequency signal which consisted of a pattern of four tones unique to the station that was repeated every ten seconds. Because of this and radio navigation principles, an accurate fix of the receiver's position could be calculated. OMEGA employed hyperbolic radio navigation techniques and the chain operated in the VLF portion of the spectrum between 10 to 14 kHz. Near its end, it evolved into a system used primarily by the civil community. By receiving signals from three stations, an Omega receiver could locate a position to within 4 nautical miles using the principle of phase comparison of signals.



Omega stations used very extensive antennas in order to transmit their extremely low frequencies. They used grounded or insulated guyed masts with umbrella antennas, or wire-spans across fjords. Some Omega antennas were the tallest constructions on the continent where they stood or still stand. When six of the eight station chain became operational in 1971, day to day operations were managed by the United States Coast Guard in partnership with Argentina, Norway, Liberia, and France. The Japanese and Australian stations became operational several years later. Coast Guard personnel operated two US stations: one in LaMoure, North Dakota and the other in Kaneohe, Hawaii on the island of Oahu. Due to the success of the Global Positioning System the use of Omega declined during the 1990s, to a point where the cost of operating Omega could no longer be justified.

OMEGA was the first truly global radio navigation system for aircraft and was operated by the <u>United States</u> in cooperation with six partner nations. It enabled ships and aircraft to determine their position by receiving <u>very low frequency</u> (VLF) radio signals in the range 10 to 14 kHz, transmitted by a network of fixed terrestrial radio beacons, using a receiver unit. Omega was permanently terminated on September 30, 1997 and all stations ceased operation.

Source: http://wikimapia.org/ & wikipedia.org

2m Net Roster Feb to mid April 2014

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3rd February Greg VK4VBU (EchoLink)

17th March Owen VK4FAAQ

24th March Roger VK4BNQ

17th February Tony VK5WC

31st March Greg VK4VBU (EchoLink)

7th April Ed VK4ABX

3rd March Paul VK4YPM

10th March Bob VK4MR

17th March Owen VK4FAAQ

24th March Roger VK4BNQ

31st March Greg VK4VBU (EchoLink)

7th April Tony VK5WC

Interesting Amateur Radio related YouTube videos to watch

Take a look at these two you tube videos, you won't be disappointed!!!!

<u>The 2kW Backpack:</u> http://www.youtube.com/watch?v=Nxp_Nsa54_Q

Welcome to my shack: http://www.youtube.com/watch?v=g-LaKTFoh90

GCEG Club member saves a life at Airlie Beach

GCEG Member Dr. Navin Naidoo Photo Courtesy Gympie Times : Tanya Easterby VK4FHOT



Story reprinted from the Gympie Times with permission

Reporter: Kara Sonter

THERE must never be a dull moment for Sandra Naidoo, with a husband who is a barrister, a doctor and while on holiday, saves lives. The Gympie mother is proud of her quick-thinking husband, Navin, who resuscitated a woman while on a snorkelling adventure at Airlie Beach.

The couple had taken advantage of a "kid-free" week and headed north to celebrate their 16th wedding anniversary. Visits to towns including Monto, Emerald and Hamilton were topped off with a day of snorkelling on the Great Barrier Reef off Airlie Beach - a day that also happened to be Dr Naidoo's birthday. Mrs Naidoo said she and Navin had just started a swim when they heard someone calling for help.

A Chinese woman, another tourist, had been found unconscious and face-down in the water. She was pulled out of the water but Dr Naidoo, a Gympie GP and senior medical officer at the Bundaberg Hospital Emergency Department, said things weren't looking good for the woman. "I thought it was going to be a corpse retrieval," the doctor said. "It didn't appear to be a simple immersion."

Dr Naidoo estimated the woman was face-down in the water for about a minute and when she was found, she was "out cold". "They pulled her out of the water extremely quickly," he said of Cruise Whitsundays crew, whom he could not praise enough for the assistance they gave him as he began chest compressions.

"The crew at Cruise Whitsundays was excellent." He said after almost two minutes of CPR, the woman "lo and behold" started breathing. It took almost four hours for an RACQ Careflight helicopter to reach Dr Naidoo and the patient, who were about an hour off-shore on the cruise vessel. The woman was transferred to Mackay Hospital and Dr Naidoo was told later the she made a full recovery. While the day of the drama was Dr Naidoo's birthday,

January 2 will likely go down as the luckiest day of the patient's life. Had Dr Naidoo not been in the right place at the right time, the woman's life could have been starkly different. Mrs Naidoo said it wasn't until she and Navin were on their way back to their hotel at the end of the long day, they both realised a day of birthday snorkelling had passed them by. She said while it was no bother in light of the situation that unfolded, they were both surprised when Cruise Whitsundays offered the couple and their sons Dylan and Rhys a complimentary snorkelling trip for their next break away. "So many people were shaking his hand and saying what a hero he was," she said.

Centenary Scout Group visit VK4GYM

Roger VK4BNQ

In November, a group of Scouts from the Centenary Scout Group visited our Clubrooms. Tony VK5WC showed them around with Graham Alder also present to lend a hand.



I think you lost this one Tony ...^

November General Meeting



Yes, we need bigger Clubrooms - A good problem to have. It's great to see so many members attending the general meetings and playing a part in the running of the Club.

Roger, VK4BNQ



- CLUB NEWS UPDATES -

Roger VK4BNQ

Kiwi Woggle

The Scouting event "Kiwi Woggle" will be held at the Gympie Show Grounds over Easter. Our Club will be running a JOTA style portable Amateur Radio Station and the Club needs your assistance with this project. Blue cards are required, Tony VK5WC can arrange these without cost or difficulty but please contact him now. Tony has been able to secure a booking and the special Tele-bridge equipment required for a live contact with the astronauts in orbit in the International Space Station. There is normally an 18 month waiting period for such a contact. Well done Tony, it should be very interesting so get involved and be part of this special event and ARISS contact!

CHSN Donation

In late December 2013, we received some good news from our Member Tanya VK4FHOT about the Cooloola Human Services Network donating \$500 to our Club. This came about because we were left a bit "high and dry" after the closure of the Mens Shed where our Clubrooms were located in Barter St. They recognised the work and effort that we had put in towards setting up a working station along with educational courses which was something that the Mens Shed required. Thanks to Tanya VK4FHOT for helping to organise this donation for our Club.

Mt. Boulder Repeater Maintenance

A few trips to the Mountain were required for maintenance and CTCSS tone mods on the Club 2 metre repeater. The repeater is now running very well with only the occasional crackle that Roger VK4BNQ has now finally been able to narrow down to be in the receiver radio. The introduction of the CTCSS tone has been so successful in reducing interference problems, that the repeater has been returned to operation without any receive line attenuation or additional cavities and other filters. We are currently only running the original RFI Duplexer 4 pot cavity filter. Roger has also rebuilt the APRS unit that reports the battery voltage of the repeater. Thanks to Bob VK4MR for donating a new HT for the job. Below Bob and Tony clearing a tree that had fallen over the track and right, Tony working on some extra flashing to increase storm resistance as we had a water leak that had damaged the bench holding the solar power regulator.







The fault of the solar system not delivering full power was traced to one of the circuit wires having been pinched and damaged during a recent tower raising. The wires were not broken and so it was only a matter of applying plenty of insulation tape and a few cable ties to make sure it could not happen again.



VK4RCM-13 APRS unit.

We were relieved to find that the solar panels had not been damaged in the recent bad electrical storm and the system is once again delivering full power and the batteries are showing and holding 100% charge.

Norm VK4CNP Antenna Repairs



A group of Club members lead by Erik VK4AES visited Norm's QTH last Wednesday to modify and repair his 80 mx antenna.

Thanks to Erik VK4AES, Bob VK4MR, Tony VK5WC and Roger VK4BNQ for assisting with repairs.

Norm VK4CNP is still very active on HF with daily international skeds - a grand effort at the age of 93 and blind. Thanks also to Graham Alder who recently collected Norm's 2mx radio and had the tone programmed in. Graham also returned and installed the rig before heading off to hospital to make sure that Norm was able to access our 2mx repeater now fitted with CTCSS tone.

Graham - VK4???

And finally but not least, we wish Graham a speedy recovery from his operation. He is back at home and recovering well but needing to take it easy for a while... Sounds like a good time to study the books. :-)



Next Newsletter is due out around the end of April, 2014. Please submit articles to newsletter@gceginc.org.au

Club meetings are held at 7:30pm on the 2nd Thursday of every month except January.

The Clubrooms are open for social meetings every Wednesday morning from around 10am. Saturday afternoon electronic project and maintenance sessions also occur on the 3rd Saturday of each month to be followed by the Rattler Markets. The location is the northern platform at The Old Gympie Railway Station, Tozer St. Gympie.

Full information on the website.

