

THE PROPAGATOR. IARS

VOLUME 99/00 ISSUE Seven June 2000 PRINTED BI MONTHLY PRICELESS.

Meetings 2nd Tuesday of each month (except January) S.E.S building Montague Street Nth Wollongong.
Starting at 7:30 PM. Official news letter of the Illawarra Amateur Radio Society Inc. PO box 1838 Wollongong 2500.

Welcome to the JUNE edition of this news letter. This maybe my second LAST edition.

It doesn't seem like half the year has gone by. It just seemed like yesterday that we where all worried about the Y2K bug. But I think the Y2K bug may have been just a ploy to make some computer software makers MORE money.

I have not, as yet, decided to do the Editors job next year. I have enjoyed doing this job but with all my other jobs, find it just a bit to much. The members that have sent in items have made it a lot easier but when you get about 8 members out of 70 that contribute it's a VERY poor show.

In this edition there is a Nomination form. If we could get some members to do the jobs I hold now. **Namely** Secretary, Broadcast call backs on Sundays, Raffle prize coordinator, Conference of clubs delegate, Repeater committee, Repeater working bee caterer, Committee member and all round nice guy.

So find the nomination form and fill it out and **BRING** to this meeting. I think I know now, how many forms, filled out, will be at the meeting. They will be able to be counted on the fingers of an armless person!!!!!!!!!!!!!!

So come on an SURPRISE everybody and get those forms in. Lets make it a ballot for positions for this upcoming **AGM**. You never know you may even enjoy yourself and have a ball doing so!!!!!!!!!!!!!!

The AGM will be held August 8th 2000 starting at 7:30pm.

5 wpm morse for HF

The ACA has accepted the proposal from the W.I.A to reduce the code requirement for HF from 10 to 5 wpm.

All states divisions agreed unanimously for full HF privileges to those that have passed theory and reg's. with 5 wpm.

One concern about changing the morse test speed could comprise reciprocal licensing arrangements with other countries. The test for 10wpm will remain for those that want to have a reciprocal licence, with other countries.

The W.I.A views this as an interim arrangement. As it's expected that the ITU'S morse requirements will be reviewed in 2002/3

"It's proposed that the Radiocommunications Licence Conditions (Amateur Licence) determination No 1 of 1997 and other Amateur documentation will be amended prior to the Sydney Olympic Games".

Amateur Intermediate Station Licence will authorize operation the same as Unrestricted Station Licences.

No Changes are proposed to the current qualifications for the Intermediate Licence and Unrestricted licence.

Intermediate Station will still be issued with call signs that will differentiate them from unrestricted stations.

In order to implement the above changes, the ACA needs assistance of the W.I.A to update, where appropriate, regulation papers that contain questions reflecting the current arrangements relating to Intermediate Stations.

Edited for space reasons. From Richard Murnane vk2sky WIA federal news Coordinator.

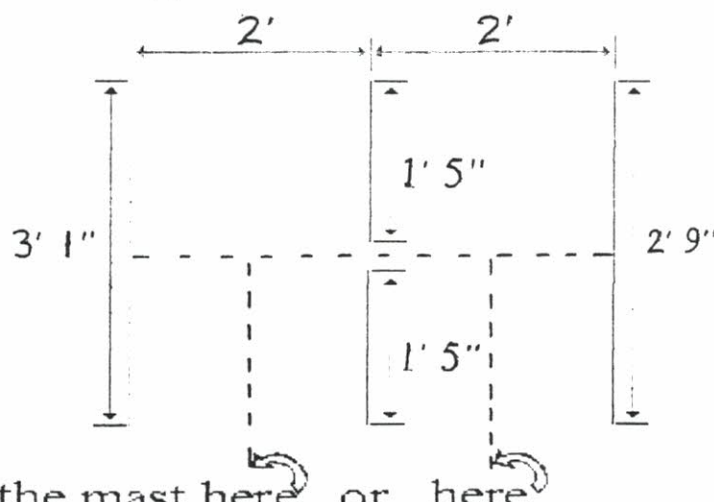
CONSTRUCTORS CORNER

TINY 2+1

As with any standard three element design, this three element direct connect antenna utilizes a reflector and a director to achieve gain. As in the case of the 'Tiny 2', the front-to-back was sacrificed in order to squeeze as much gain as possible from the antenna. I managed to obtain 6.52 dB over a dipole in free space while still retaining a direct connect antenna. Right up front you might ask, "Why build this antenna rather than some other design?". The first reason is the very fact that it IS a direct connect antenna. The design allows you to hook your cable directly to the antenna without the time consuming process of matching, yet the SWR is just 1.18 to 1. The 6 1/2 dBd gain is of course a nice side bonus. Another nice feature of this design is the element diameter. Each of the elements is made from 1 inch diameter aluminum tubing. I like the fact that you don't have to play around sliding elements in and out trying to get to the proper lengths. You simply cut each to the lengths shown below, and position the elements on the boom. It is also easy to find 1 inch furniture tips at local hardware stores which give the antenna a nice professional look!

Element name	Relative position on the boom	Element length	Center point of element
Reflector	0	3' 1"	1' 6-1/2"
Driven	2'	1' 5"	N/A
Director	4'	2' 9"	1' 4-1/2"

Things to keep in mind: You will need a boom length of about 4 feet 2 inches even though the distance between the reflector and the director is only 4 feet. The extra space is needed to allow for the use of mounting brackets to hold each element to the boom. Center each of the elements by using the center point column in the chart above. When mounting the driven element, remember that it is split at the center and must be insulated from the boom, you can use PVC pipe to accomplish this. It not only helps insulate the elements, but also supports them at the same time.



* Attach the mast here or here

The proper location for connecting the mast is exactly center, either between the driven and director, or between the driven and the reflector. Connecting a metallic mast any closer to the elements will detune the antenna causing high SWR.

To build or not to build, That's the question.

There are so many antenna designs out there that it's sometimes difficult to decide which one is worth while building. The simplicity of this antenna makes it perfect for anyone as a first time antenna project.

ANTENNA CONSTRUCTION TIPS

SPLIT ELEMENT BEAMS:

CONSTRUCTING THE DRIVEN ELEMENT

The driven element of a split element beam needs to be isolated from the boom. Also, each of the two sections of the driven element needs to be isolated from each other. One method of accomplishing this is to make use of a section of PVC pipe. On small beams such as those for the two meter band, a 10 inch section of plastic pipe works well.

You'll need to be connecting the coax cable to the beam somehow. One method is to use 2 screws (stainless steel if possible) to connect each of the wires of the line. The size of the screw is not important although the length will matter since it must be long enough to make it through the pipe and to the elements. It also has to have a little room to hold the wires from the coax.

Take a moment now to see if there is any writing on the PVC pipe. You'll want to position the writing so that it will be facing the boom. Next you will mark the position where you expect to attach the wires from the feed line. To help you determine this, place the boom on the ground and the PVC pipe across it (as if it were the driven element.) The question is, looking down on the PVC, where will the wires attach? On the top or 90 degrees over on the pipe more toward the boom? Once you decide this, determine the center point of the pipe (5 inches from the end of the pipe.) Mark this spot with a marking pen. Next, measure 1/4 inches on either side of this center point.

Again mark these locations.

Use a drill and drill out each of these two marks (not the center mark.) The size of the drill bit should of course match the size of the screws that you are going to use to attach the cable. Now that this is done, slide the two sections of the driven element into the PVC pipe, one from each end. Keep inserting the pieces until you see them through the drilled out hole in the pipe. Insert just far enough so that through the hole all you see is metal. This will keep the actual elements close together yet far enough apart that they are not touching each other. Verify this with an ohm meter if one is available. Finally, just screw in the two screws (through the PVC and into the metal) and the driven element is ready to be connected to the boom.

Constructing the other elements:

Some beams require adjustment of the elements for matching once they are totally built. Others like the *TINY 2* and the *TINY 2 + 1*, do not have any such requirements since they are designed to have a good match to start. When this is the case, it's nice to use a single piece of tubing for the elements instead of having multiple pieces that slide inside each other. Not only do these multiple sections complicate the building process, but it also requires additional hardware to attach the additional tubing. With single diameter tubing, you measure it, cut it, and you are done.

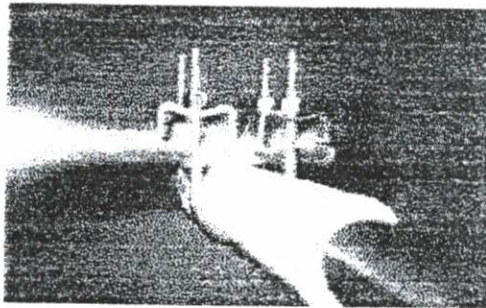
When choosing the element diameter for your beam, be sure to think about the element ends.

Are you going to want to put end caps on them? If so, do you have access to an ample supply (2 for each element?) End caps give the antenna a professional look, but some diameter caps are hard to find locally.

Most hardware stores seem to carry the one inch furniture caps, so keep this in mind when designing your antenna. The element diameter does affect the resonant frequency of the antenna, so be sure to model your antenna with the correct diameter for the elements.

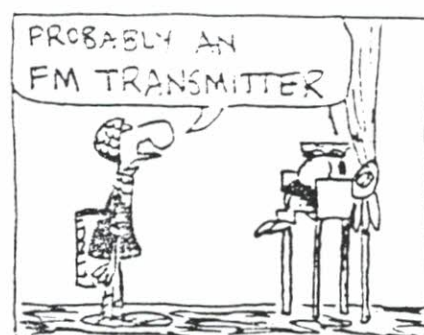
Attaching the beam elements to the boom

Once you've got all of the elements constructed, now you are ready to attach the elements to the boom. If you've got your own favorite method of attaching elements, feel free to go with that. If you don't want to mess around with mounting plates and the beam is small (VHF or UHF), you might want to try this method. You'll need two U-bolt clamps for each element, the kind with the "teeth" that can dig into the elements. Take two U-bolts, place the U-bolts *over the element*, one on each side of the boom. Now do not put the clamp across the element, put it across the *boom* instead so the clamp is actually on both U-bolts. This will allow the teeth to dig into the metal of the boom. Do this for each end of the U-bolts and then screw on and tighten the nuts. After you do this, you will have to test the element to be sure you have tightened it enough so that the element can not move or even rotate in place.



Raising the antenna in position:

One of the most difficult things to do is to place the antenna at its permanent mounting place. Whether you are planning to erect a small antenna for 144 Mhz or a large array for 20 meters, an item of great use is a gin pole. A gin pole consists of a pipe (eight to ten foot), a pulley, some rope, and U-bolts. The pipe is mounted to the tower with the U-bolts. A rope is fed to the top of the pipe through the pulley and back down to the antenna. Then, by pulling the antenna up to its mounting position and tying the rope securely off, you will have both hands free to tighten bolts and make any other alterations to the antenna.



RENEWAL NOTICE.

Name:.....

Address:.....

member of W.I.A

yes no

Suburb:.....

please tick.

Post Code:.....

Call:.....

I wish to renew my membership in the I.A.R.S (inc).

I enclose, Cheque/Cash. For :.....

I am a member of the W.I.A Yes No.

Fees Full membership \$20 Concessions \$15

Fees **MUST** Be paid before the end of August or a late fee will apply.

Please fill out the above and post to Po Box 1838 Wollongong 2500.

Or bring along with you at the next meeting.

Illawarra Amateur Radio Society Inc.

P.O BOX 1838 WOLLONGONG NEW SOUTH WALES AUSTRALIA 2500.

Nomination form.

I.....

Call sign.....

A member of the Illawarra Amateur Radio society Inc.

Nominated Position

Hereby nominate for the above position on the executive of the Illawarra Amateur Radio Society Incorporated. In the event of my election as a member of the executive. I agree to be bound by the rules of the Association.

.....
Signature of Applicant.

.....
Call sign.

.....
Date

I.....

A member of the Association, second the application

.....
Signature of Secunder

.....
Call sign.

.....
Date.

Applications forms **MUST** reach the Secretary by the 21st June. They can be handed in at the June meeting. NO NOMINATIONS FORMS NO A.G.M.

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There has been a fair amount of discussion in Electric Radio, Amateur Radio, Radio & Communications (and other Amateur Radio journals) about retaining Morse Code as a compulsory component for gaining an Amateur Radio Operating Licence. Most of the discussion seems to me to have been along the lines of either "Morse capability breeds good operators" or "What was good enough for me is good enough for my offspring", ie, the 'like father like son' argument. But less space has been devoted to any other argument. Let's put that to rights, shall we?

CLAIM #1

One of the major claims of the pro-CW proponents has been that Morse Code leads to better behaviour on air. In a graphical form, the proposition is:

Behaviour vs CW operator	Good CW No CW capability
Well-mannered on air	Cell 1,1 - Good amateurs
Boorish on air	Cell 1,2 - No amateurs
	Cell 2,1 - No amateurs
	Cell 2,2 - Bad amateurs

The problem with this proposition is that it is so easily falsifiable: we all know amateurs who fall in Cells 1,2 and 2,1; further, we all know amateurs in Cell 1,1 who are boorish and amateurs in Cell 2,2 who are well-mannered. So, the argument in its purely dichotomous form (ie, that people only have either good or no CW capability and only exhibit either good or Boorish behaviour) is not tenable. We can water the argument down to a more probabilistic form, thus: 'The better one's CW capability the better one's overall on-air behaviour.'

This may be a closer approximation to the truth, but then again it may not, which then alerts us to other explanations, such as:

- perhaps having CW capability is not the sole cause of exemplary behaviour on air; and
- perhaps some of those with high speed CW licences gained them by corrupt means; or
- being on air allows one to exhibit behaviours one would not dream of if one were in direct contact with one's audience. (A good example of this is the way some car drivers shout obscenities and profer rude gestures to other road users; away from the insulation of the car, they are generally well-mannered at home, in front of the spouse/partner, or with workmates and friends.)

CLAIM #2

This claim contains two parts, viz, a logical fallacy and an inheritability fallacy.

2.1 THE LOGICAL FALLACY

To say that 'what is good for the father is good for the son' is like saying one prefers:

- candle light to electric light;
 - feather-quill pens to word processors; or
 - lead typesetting to desk-top publishing,
- and then moving from a purely personal preference to demanding that it become a legal requirement forced onto all others, no matter what their personal preferences. This is the well known "What is = what ought to be " argument. In most democratic societies, there are constitutional safeguards preserving the rights of individuals to pursue their own personal preferences provided such practices do not impinge on the ability of others to pursue their own personal preferences.

2.2 THE INHERITABILITY FALLACY

In societies where the father brings in the bread and dishes out the discipline, it is frequently found that the son takes on the occupation AND many of the mannerisms of the father. Some observers even go so far as to suggest that these behavioural syndromes are transmitted genetically. It is far more likely that the opportunities for alternate interests and occupations were severely limited, thus restricting the repertoire of the offspring. In other words, the explanation is more likely to be in the parenting style of the father, ie, in the social realm rather than the genetic one. This is an example of the problem of learning by "Sitting by Nelly" - the learner gets all of Nelly's bad habits and views along with the good technical skills.

CONCLUSION

Morse is good stuff for its own sake. The benefit comes not in moving from 5 to 10 or 20 words per minute, but in being able to converse at 40 to 50 wpm. Let's not try to justify its continued use with specious, legalistic twaddle. It provides a means of communication when QRM and QRN transpire and conspire against AM, SSB, FM and other wide-band-width spectrum consumers. And for those of you who haven't noticed, the NDBs are still broadcasting in Morse. You better hope that the pilot of your next flight knows his Morse so that he can tell you where you are.

73 de Brian, Vk2GCE.

Thanks Brian for this item.

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Good health is merely the slowest possible rate at which one can die.

It's not hard to meet expenses... they're everywhere. Jury: Twelve people who determine which client has the better attorney. No one ever says, "It's only a game," when their team is winning. Love is an unusual game. There are either two winners or none.

When you're finally holding all the cards, why does everyone else decide to play chess? If you're living on the edge, make sure you're wearing your seat belt. The mind is like a parachute; it works much better when it's open. Never take life seriously. Nobody gets out alive anyway. An unbreakable toy is useful for breaking other toys.

A closed mouth gathers no feet. Light travels faster than sound. This is why some people appear bright until you hear what they have to say. Although there are a lot of trial marriages, there's no such thing as a trial child. Homeless people may have no homes, or no food, but they always seem to have cigarettes. Aim low...reach your goals...avoid disappointment. When life gives me lemons, I make a whiskey sour and go to bed.

The Story of Digipeter Rabbit -- a No Code Fable

By Frank Terranella, N2IGO

Once upon a time, in the far-away kingdom of Radio, there was a peaceful valley called Hamville, inhabited by a group of rabbits. Hamville was originally settled by the Whiskey family, and the patriarch of that family was an old hare called Charlie Whiskey.

Charlie Whiskey was a farmer by trade. He came to the beautiful valley of Hamville when it was all open meadows. He saw the potential for farming the vacant land and over time he developed a thriving carrot plantation. Charlie Whiskey's carrot plantation was the envy of all the inhabitants of the kingdom of Radio. He succeeded year after year in producing a bumper crop of carrots. All the other residents of the kingdom came to Charlie for advice on planting carrots. Charlie would always tell them, "The secret's in developing a good ear." No, Charlie didn't have superior hearing, but he had developed a very special skill. You see, Charlie picked his carrots with his ears.

In fact, Charlie had worked hard at perfecting this skill and was able to harvest at better than 20 carrots a minute. All of Charlie's family learned to pick carrots with their ears. Soon they were all picking at better than 20 carrots a minute. Charlie was so proud of his special skill that he insisted that everyone who came to work at Hamville first show that he could pick carrots with his ears. Charlie would not give new settlers any land unless they could demonstrate to his foreman, Victor Echo, that they could pick at least 5 carrots a minute with their ears. When they could pick 13 carrots a minute, Charlie gave them more land to work. When they were able to pick carrots by ear at the rate of 20 a minute, Charlie made them full citizens of Hamville.

This process of learning to pick carrots with your ears went on for some time. In other parts of the kingdom of Radio, other rabbits began to pick carrots by ear. However, there were some noisy ducks, known as the Quackers, who lived in the community of Good Buddy. They used their mouths to pick their crops instead of their ears. They had much larger mouths than the rabbits and saw no need to use their ears. The rabbits all looked down on the Quackers. "We must always require ear harvesting skills for entry into Hamville," they said. "That way we will keep out those noisy Quackers." So everyone who came to Hamville had to learn how to pick carrots by ear if they wanted to stay. Charlie Whiskey was adamant about that. "If you don't want to learn the skill of ear harvesting then go work in Good Buddy with the Quackers," he would say.

And so the years passed, and new methods of farming were developed. These new methods were easier to learn than ear harvesting, especially for the animals who didn't have the big ears that the rabbits had. What's more, the new methods were just as efficient as

Continues next page Propagator June 2000 Page Seven

ear harvesting. As time went by, fewer and fewer of the young animals were willing to learn the skill of ear harvesting. The population of Hamville began to dwindle. All the residents of Hamville were getting on in years. To make matters worse, there were new neighbors nearby who coveted the beautiful open farmland of Hamville. They wanted to come in and turn it into commercial uses like shopping centers. And worst of all, the pollution from the Quackers, the other Rabbits, and the Mice (known in Hamville as the QRM group) was having an adverse effect on farming in Hamville. The future looked bleak indeed.

Then, one day, a stranger called Digipeter Rabbit came to Hamville. He was an educated rabbit who had studied at the School for Scientific Bunnies (SSB). He had majored in Farm Mechanics and knew all of the latest scientific agricultural methods. But for all his education and know-how, there was one thing that Digipeter could not do. He could not master the skill of picking carrots with his ears. And since he already knew how to pick carrots more efficiently with new scientific methods, he was not interested in learning.

Charlie Whiskey was outraged. "What do you mean you won't learn to pick carrots with your ears? Why, we in Hamville have been picking carrots that way for 75 years. It's a tradition here. It shows that we're special and that we're better than the Quackers. If you don't have the desire to develop a good ear, then we don't want you here in Hamville."

But Digipeter was adamant. He saw no reason to learn an obsolete skill just to stay in Hamville and he refused to even try. Charlie Whiskey took the matter to the Ancient Royal Rabbit League, which he had founded. The ARRL decreed that everyone in Hamville must learn to pick carrots with his ears or be banished. And so Digipeter Rabbit left Hamville and founded his own village called Techietown.

Soon, all the young animals in the land of Radio were flocking to Techietown. But Digipeter had his own entrance requirement. A good ear and a good memory were not enough for him. No one could stay in Techie-town unless he could demonstrate technical knowledge, understanding and ability, and the desire to contribute to the advancement of Techietown.

Digipeter encouraged all the residents of Techietown to experiment in the cultivation of new unexplored lands, never before farmed. Digi-peter showed them how to overcome pollution problems. He showed them how to use the land they had more efficiently. Digipeter even perfected a method of farming which allowed a number of rabbits to farm the same land at the same time. And while the residents of Hamville were picking 30 carrots a minute on a good day, in Techietown, harvests of 300 carrots a minute were possible. Using Digipeter's methods, and those developed by the other bright, young residents, Techietown soon became the most prosperous village in the kingdom of Radio. This did not escape the notice of the Field Carrot Council, which governed the kingdom of radio. To reward the residents of Techietown for their contributions to the kingdom, the Field Carrot Council gave Techietown more and more land to work, until its borders touched those of Hamville.

Meanwhile, Hamville was still plodding along as it always had, oblivious to the revolution in farming occurring around it. The old hares still picked carrots by ear. The Ancient Royal Rabbit League complained bitterly to the Field Carrot Council about all the new land it was giving to Techietown, but the population of Hamville continued to drop. When the Field Carrot Council gave 2 acres of Hamville property to Techietown, the residents of Hamville began, for the first time, to be genuinely concerned about their plight. Some even dared to ask the Ancient Royal Rabbit League to change its mind about the need to learn to pick carrots by ear to live in Hamville. "We need new blood here to fight off the Field Carrot Council," they said. Charlie Whiskey, now in his nineties, was furious. "We have to maintain our standards. We don't need those smart young bunnies, we need

rabbits skilled in our time-honored harvesting techniques. We need rabbits who are dedicated enough to the principles of Hamville to want to learn our methods. If a rabbit really wants to live here, he'll learn our ways. If he doesn't, we don't want him. You don't want those Quackers to move here, do you?"

But by now the residents of Hamville had seen the writing on the wall. Although they genuinely enjoyed picking carrots with their ears, they realized that there were now other ways which yielded just as many carrots. And though they would probably continue to pick carrots by ear as they always had, they could no longer shun those bright young rabbits who chose a more modern method. A group of rabbits, led by an elder statesman rabbit named Elmer, who had once served in the government of the kingdom of Radio, asked the Ancient Royal Rabbit League to change its policy. The League agreed and issued a decree that henceforth ear harvesting skills would not be required to become a resident of Hamville.

When Digipeter Rabbit heard of the decree, he sent envoys to Hamville with all the latest scientific discoveries, which he shared freely with the residents. The residents of Hamville seized upon the new knowledge and soon Hamville became revitalized. Its population began to increase as young rabbits were attracted to its bountiful open farmland. The Field Carrot Council, impressed by the renaissance in Hamville, did not take away any more of its land, but actually gave some new territory to Hamville. Everyone was amazed at the new vibrancy of Hamville.

Charlie Whiskey, though sad that his beloved harvesting method was no longer in vogue, saw that his people were prospering and was glad. And to show that there were no hard feelings, Charlie Whiskey sent Digipeter Rabbit a packet of 73 carrots which he had picked himself -- with his ears.

The residents of Hamville rejoiced and declared a festival to celebrate their new prosperity. And over the front door of the Hamville Festival they put a banner, which read: "A bunny's worth is measured not by the skill of his ears, but by what lies between them." The residents of Hamville had learned an important lesson.

Thanks you John Vk2xgj for this item.

-THE END-

Cavions recycling for earth care.

*available from our yard are all sorts of
preloved bits and pieces old & new.*

Electronic parts, meters, gauges, instruments, cable, wire, metal sections, aluminum sheet, brass, copper, s/steel, motors, gearboxes, pumps, assorted machinery, planks, ladders, shelving, safes, scales and compressors.

We buy all metals including platinum and gold.

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Phone (02) 4284 6838

MEMBERS PROFILE

Brian A Clarke, VK2GCE

The following tale is one boy's recollection of what it was like growing up during the tail end of the golden era of warm, glowing valves, in the land of Gondwana. It is also a tribute to the many friends, amateur and otherwise, who helped shape this tale.

New Zealand, early 1940s

I was born during, and survived, the war and enjoyed my childhood, through two magnanimous gestures by the New Zealand government - my dad was in a protected occupation, and military service for under 5s was not yet in legislation. My dad was employed as a civil engineer, supervising the building of water supplies for Auckland City as well as survival shelters underground for civil and military personnel, against the possibility of invasion. He trained when an engineer was expected to be multi-skilled, before the notion became popular with the economic rationalists, 80 years later. As a result of his job, I was taken around all sorts of places a little boy normally would not visit, and acquired all sorts of kit - but, more of this later.

My entry to things electrical may have occurred as early as age 3; my mum loved to tell of my pushing nails into the wall power outlet and holding a 2-pin bayonet cap light bulb to the nails to light the bulb. My mum was trained in the ways of achievement motivation, and survival may have been its own reward. I remember the particular power outlet because its switch had a peculiar toggle action, but I do not recall the light bulb. My mum was also prone to exaggeration.....

My dad had an insatiable curiosity and, to a very young boy in an age of severe rationing, he had an amazing store of skills, tools and THINGS. Many of my playthings were made from bits of old wood and THINGS; I learned how to measure by string and eye, saw, plane, drill (by hand, of course - electric drills did not come to me till I was about 11), nail, glue, sand and paint. I made a telephone system in its entirety - carbon microphones, earpieces, buzzers, induction coils, condensers, switch-hooks and cases - from jamjar lids, tin cans, wire stripped from transformers 'rescued' from the local dump, bits of old ration packs and things. And it worked. When my dad saw what had emerged from the rubbish under the garage bench, he liberated some Ericsson telephone sets from one of the dam sites (the Huia or the Nihotipu, I think) he had completed. These telephones used much larger cells than I could steal from 'unused' torches - so we started a form of child labour market; if I mowed the lawns each week, I earned 1 shilling (about 3 or 4c). This lesson had a profound effect. The jobs grew, my income grew, my appetite for electrical and electronic bits grew. Eventually, I had to leave home in order to find the kind of work that would support my habit. But, I run ahead a bit, here.

Everybody seemed to have crystal sets

When I was about 5, everybody seemed to have crystal sets, We would go visiting and listening on S G Brown headphones, comparing aereals, loudness and stations heard. Some sets had tapped coils, some a tuning condenser, some a sliding bar on the coil, while some had all of these. From his past, my dad produced a crystal set in an oak box with an ebonite front panel; it had a tapped coil, a tuning condenser, 4 brass terminals and a cat's whisker xtal detector - but it was not very loud. We took it to Bob Townsend, a radio repairman dad knew from the school's PTA; he soldered in a tubular condenser across the headphone terminals. He then showed me his radio room - WOW! - there was this open rack full of panels and meters and big glowing valves and wires going everywhere; the wall was covered with picture postcards with big letters

Continued next page

and numbers on them, which he explained were from all over the world. Bob, ZL1DC (now SK) became a firm friend, helping me with all manner of technical matters; he also became a bit of an uncle, because my dad was away so much with his job.

Back home, I listened to my xtal set - it was not much better. Quite by accident, while I was fooling around with a D-cell, the sound became much clearer. By carefully reconstructing my memory banks, I can now see that I had learned how to bias a diode. This became a standard mod on all my friends' sets. It was now clear I needed a better aerial. My dad got several lengths of water pipe which, with reducing fittings, formed a telescoping mast - Bob produced a couple of insulators, my dad a couple of pulleys and some lengths of old telephone wire, and - hey presto! - I had the bestest aerial in the neighbourhood. The signals rocketed in - on a good night, I could hear not only all the Auckland broadcast stations (1ZB, 1YA, 1YC, 1YD) but also some Australian ones (2GB, 2UE). But crystal sets are not very loud

My sister wanted to listen to the xtal set as well; so, we lifted the earpieces out of the headband, but now you had to hold the earpiece. I wanted something louder. The solution to this problem took a while to emerge. In the meantime, listening to the radio had awakened an interest in music. I would tune my parents' radio in to the music stations, broadcast and shortwave. I started to learn to play the piano. I learned the names of the famous instrumentalists and orchestras. My dad turned up an Edison phonograph and a few cylinders. The cylinders were not very interesting - I think they were some of his work dictation; but the idea of those tiny vibrations on the cylinder being quite loud at the end of the horn set me thinking. It was not long before I had strapped an earpiece from my xtal set to the phonograph pickup; no matter that the sound was tinny - it was louder.

The music I wanted to hear was on discs. My dad 'found' an old wind-up gramophone from one of the survival shelters - they had to be able to operate without electricity - and some discs with names like Decca, HMV, New Brunswick, Parlophone and RCA Victor. I started to scrounge and swap for more records. This record player was a bit louder, but you could not hear it next door. And you could not get hold of all those records, let alone own them. Also, although my mum and dad had very broad taste in music, I am not so sure they shared my interest in all the other sounds I was getting (perhaps demanding) from the family radio. So, the next step was one-valve reflex sets, using a 1Q5, then a 1S5 and finally switched coils. There was quite a bit of experimentation with coils - numbers of turns, spacing of sections and phasing. In Auckland, there were several radio shops selling components. On Queen Street, there was SOS Radios and, further up the hill, Bob Townsend's shop. On Wellesley Street, there was Webb's. At the bottom of town was Gilbert's. The focal point for constructors was SOS, where there were all manner of bits and kitsets, and they would give you the circuit diagrams for free. I decided to build a 4.5 Watt amplifier. I found an old chassis at the dump, which still had the valve sockets in it - octals - just what I needed for the 5Y3, 6V6 and 6J7 lineup. The transformer cost £1 - 10s (about \$3) which was a huge amount of money to me, so much so that this transformer got recycled into many projects. Bob helped me with the valves and some other components. I was so excited that I built the amplifier in one afternoon. Alas, it did not work - I was so crestfallen. My dad took me in to SOS Radios, where the salesman - Tony, as I recall - was very diplomatic. Without actually saying my 'work' was crap, he invited me to radio classes, to be held once a week, in the evening. I do not recall any discussion about safety or chaperoning, but there was I, with Bob's son (also Bob) riding our bicycles about 5 miles out into the country at night. Here we learned about soldering, metal-working, resistors, capacitors, inductors, resonance, receivers, transmitters, Morse code - in short, amateur radio. Now the sounds coming out of the family radio on SW started to make sense. The radio bug was really starting to bite.

Thank you Brian for this part of your profile.

END OF PART ONE CONTINUED IN THE NEXT ISSUE.

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WOLLONGONG Just up from the round-a-bout.

Minutes of General meeting held

on May 9th 2000

Opened at hours 19:30

Attend 23

Apologies from: vk2's alu , zwg, fhn, ejh

Visitors: nil

Correspondence in: Twin cities radio re Riverina field day, Wollongong City council re update of their records, ACA licence renewal for vk2amw and vk2ruw also vk2ris. Membership renewals from vk2bes, vk2ro.

WIA conference of clubs registration form, Q and A re GST and clubs.

Minutes of council meeting 10th March.

AX2000 application form.

News letters from: BRAG Smokes Signals and DRAGNET on E mail.

Correspondence Out: E mail to WIA with agenda item for this club to conference of clubs

Correspondence in and out Moved by vk2ubf 2nd by vk2tth

Minutes of meeting being has read in May Propagator. Moved vk2ubf 2nd vk2xqx

Matters arising from: Both Ted vk2tth and Bob vk2wrj said that the meeting at the dam was VERY pleasant. Both their wives like the day out.

Treasurers report: See attached Moved my Jim vk2cav 2nd by vk2ubf

Repeater report: Rob spoke at length of the break in at Maddens

Plains, which he was very upset over. He said that the cost of equipment

was around \$3000 in today's terms. Rob is negotiating with the landlord to get a more secure spot. The break in has put the club back about 2 years but we will raise from the ash's.

General Business: Elect delegate(s) for Conference of clubs at W.I.A house May 20th. Three names put forward, vk2kld vk2ubf vk2bho. AX2000 special call sign. David spoke on this and if we could get it going at the s.e.s but the monition was lost through lack of interest.

Approve the update of vk2amw at www.qrz.com/vk2amw. This was approved and the final wording will be attached to this minutes. See attached report.

Chris spoke on and exercise that the s.e.s and wicen are planing and wants help form members that run paket. This most likely will be a Saturday in August. Chris will give more details at June meeting.

Other general business. GST The club will wait until we hear back from the conference of clubs but it looks like we cannot charge GST but will have to pay it.

Next General meeting will be held: June 13th

Meeting close: 21:10 a long meeting but much was discussed.

Raffle won by Ron vk2ur a nice side on lamb. \$40 Snow ball.

Number drawn was 38 Barrie

Unsworth but as Barrie was not there the snowball will be \$50 at the June meeting.

FOR SALE.

In the May issue I made a mess of the phone number for Peter vk2hpr. He still has the aerial a 2m ringo for sale so call him NOW on 0418480341 **SORRY PETER (ED)**

Tnc pacCom tiny 2 contact Brian vk2ubf.

The conference of clubs was held at W.I.A house on May20th, your club sent 2 delegates Brian vk2ubf and John vk2bho.

The conference started at 09:20 with Michael vk2yc in the chair. He asked each club to introduce themselves. There where about 34 people present. This time the minutes where found to be correct so no time was lost in having them read and written. After the tea break, Michael introduced Peter Naish the federal present.

In Peters talk he spoke about how federal had made a small profit this year and it was the first time in many years that this had happened.

The exam service is breaking even and the cost of AR has been reduced so it's just about braking even. He also spoke about the IRU region 3 conference that will take place in Darwin. At the federal meeting there where reps there from the NZART and about 100 people turned up. Michael made a comment that it was the best meeting held in years and everybody at the meeting agreed.

The federal meeting discussed about 12 papers and these can be found on the website. www.wia.org.au. It is hopes that in less than 12 months time Australia will also have CEPT licensing so it will be a lot easier for visiting hams to get on air here. Also the intermediate licence (K calls) will have FULL call access soon the legislation is in Government as we read this. They have to get the wording correct!!! The federal W.I.A is also looking at getting the FULL 300kc's of the 40 m band.

The federal W.I.A also have a greater relationship with he ACA now than it has ever had. In fact the ACA rang Peter Naish at work and ASKED was it true that the YANKS have dropped the cw limit to 5 wpm and WE better do something about it!! S25 doesn't come up for review until 2003 so some may have to wait a little longer for no CW. And people say the W.I.A do **NOTHING** for you. Come off it get that money out and **JOIN TODAY!!!!!!** Soon the EXAM service will be ON LINE and you will be able to sit your exam on the Internet.

The ACA will allow ALL hams to use the AX prefix from June 15th until 2nd November. So those Dx operators out there get on with it, and don't forget to send that QSL card. Your club has applied for the special call AX2000 and we

can use it from August 21st till 28th so if your interested ask about it at this meeting. Vk2ubf is the person to see. The special call **AX2GAMES** will be on air from W.I.A house during the games. If you want to use this call contact the W.I.A

AGENDA ITEMS

Nepean ARG. What is the future use of 70cm? With the linking that's going on, VERY much use will hopefully be made of this band.

What is the standing of the W.I.A ACA clubs who wish to invigilate exams?

This is a federal matter and will be past onto them.

Blue Mountains. This club supports the existing system of examinations but is opposed to the over-centralization of examinations. i.e. have to send to Melbourne for the results? The W.I.A will look at having the exams marked by the divisions.

Illawarra club. That all details of repeater site apart from the call sign and owner be removed from the data base held by ACA? This had much discussion and was to be forwarded to the W.I.A/ACA team.

Digital interest group. That a BBS forwarding frequency be allocated as such on 6m, 2mtrs and 70cm bands? This also got a lot of discussion. Your delegates spoke about this and said it was a great idea and it should happen ASAP. But others said that having it on 2mtrs it would be to close to the input frequency of the BBS'S and it would be BETTER to have it on 70cm. Apparently in Sydney they have 434.100 at 4800 baud. We asked about having this frequency be set aside for BBS forwarding but it got the chop.

GST. Robin Bates the auditor for the W.I.A gave a talk with MANY questions.

The bad news is we (our club) is the **END** user so the end user is the loser.

We cannot collect GST on the club fees but we **MUST** pay GST where it's charged and we **CANNOT** claim it back so we loose out.

The conference ended at about 6pm when we had our evening meal, which was very nice and a safe trip home by both delegates.

Sorry for the small print but space was limited.

Propagator June 2000.

Page Fourteen.

REPEATER REPORT

Well as you are all probably aware, we had a break-in at our Maddens Plains Rptr site on the evening of Saturday the 29th of April around 2345 to 2400.

The individuals (for want of a better description) forced open the compound gate by breaking-off & removing the chain & padlocks (they actually took the chain with them). It appears they tried to force open the main building & were unsuccessful. They climbed the tower & removed a commercial operator's UHF yagi & heliax connectors. They then forced open the door to our equipment's storage area, irreparably damaging it in the process.

They stole the following equipment:

438.725MHz UHF Rptr (Philips FM 828 radio)

144.700MHz Packet (Philips FM 828 radio)

Packet TNC (MFJ 1270)

Jaytech 30A Power Supply

DTMF Control Unit

WIA Broadcast RXer

2 x VHF/UHF Diplexer

Assorted double-shielded cables

If you see or hear anything about this equipment, please contact myself or another Committee person. Also, keep an eye on the local hock shops, you never know...

This loss of equipment is a major set-back for our Club's Rptr Committee. I estimate it has set us back about 2 years - very unfortunate.

Even though we lost all that gear, we were able to put our stand-by 6850 Rptr on-air the following arvo from an alternative site. The performance to the north is down a bit, but Wollongong is still serviced OK. We are currently negotiating with the Maddens site owner for an alternative location for our equipment & so hopefully 6850 will be back to it's normal performance shortly. We have to build a new packet radio & UHF Rptr before we can get them back on the air. Hopefully this will be in the next few weeks.

The loss of the DTMF Controller & Broadcast RXer are a major set-back to myself personally, as they were designed & built from the ground up to suit the Maddens site & equipment. There are many, many hours involved in re-building these two devices alone. Anyway, that's it for the time being, there is lot's more, but I don't have the time & our Editor doesn't have the space.

Till next time - Rob VK2MT

Thanks Rob for this report.

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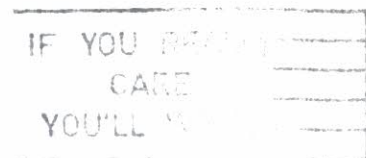
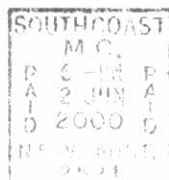
In this edition there is NO club information page. I didn't have enough space for it.

I thank all those that sent in items for this edition.

At the club meeting June 13th there will be the usual meat tray and the SNOWBALL is getting bigger so you betta get along you maybe the winner.

Don't forget that membership is up for renewal and the AGM needs nominations for the clubs executive. If NO nominations there cannot be an AGM. So get them into the club at this meeting, or post to the clubs PO box.

HANDLE WITH ENTHUSIASM



ROB Mc KNIGHT VK2MT
16 LOMBARD AVE
FAIRY MEADOW 2519



THE PROPAGATOR

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