Number 12   Volume 92   December 1992

***** Editorial *****

Christmas. A festive time of the year. A time for family and friends. A time to spread good will. A time to forget old grudges. A trime to assist those less fortunate than ourselves. A time for change, for preparing for a new year. A time when, no matter how depressed or troubled we are, we try to put on a bold front and spread a little cheer to others.

Wouldn't it be great if every one in the world was just a little nicer to everyone all the time, instead just at Xmas? If everyone in Australia increased their understanding of their fellow man by just 1%, it would be great; a 17,000,000% improvement!

Seriously, why don't you alter your attitude a little. Oh no, not you, I know you're perfect, I'm talking to him over there. Why not be more forgiving? Why not improve your attitude towards others just a little. You'll find that if you say "G'day" instead of "Piss Off", life can be beautiful.

December
A change from our usual family Xmas night. This will be a general meeting with a talk from Telecom on communications. We'll celebrate Xmas at a picnic the week-end after the meeting.

January
Time for a break! You can have the month off, unless you are on the committee, in which case we'll have a committee meeting on the usual day and make plans for the rest of the year.

February
Barry Sullivan our local RI from DOTC will be talking about RFI.

March
We hope to have a talk by Dale Woodside VK2TZ on Antennae. I'm told he's very good. I'm really looking forward to this night.
There will be a field day week-end at saddle Back Mountain on the first week-end.

April
John VK2XGJ will be running a packet demo, not just talking about it.

** Science Centre Roster **

Sat	5/12	VK2GMC	VK2GNV
Sun	6/12	VK2ALU	VK2KLH
Sat	12/12	VK2FPN	VK2XGJ
Sun	13/12	VK2KWG	VK2JRH
Sat	19/12	VK2GID	VK2DSH
Sun	20/12	VK2JRH	

That's all we've got so far. I would appreciate it if a few more of you could find time to assist us. All it takes in one afternoon a month. Yes, I know John VK2XGJ and I do it every fortnight, but that's because you won't help and we know that this is the best chance Our Club has to retain some of it's former glory so we feel obliged to ensure the centre is staffed.

***** Thank you *****

Each month I'm going to feature one member who has done something for Our Club. This month I'm at a loss since I don't know who to talk about. There are obviously a lot who need talking about, and some who would rather I didn't talk about them so this time, I'll talk about someone who is far far away and is unlikely to be able to retaliate. Ray, VK2XCC, VK2PHD, VK2AGU. I don't know a lot about Ray, since we never sat down and chatted, so please excuse the brevity and inaccuracies. Ray has been a member for many years and had three main tasks in Our Club. One was the mailing of The Propagator. Ray did this job for years, and in fact, started before I took on the for my first stint at the Propagator 4 years ago. Mailing the Propagator is a thankless task, one not recognised as a job, but it still takes up a few hours each month. Thanks a lot

for the good job Ray. Next, Ray was our Social Director, or to be more precise, Father Xmas. Ray began long before I joined Our Club and has brought a lot of joy to the children and family members who attended our annual picnic Xmas party. Ray's 3rd job was to be a millstone around John VK2XGJ's neck. John had a burning desire to get Ray on to Racket. Unfortunately, Ray always resisted so John has missed out now that Ray has moved to Mossman in North Queensland. Drop in and see us next time you can Ray, you'll be sadly missed by Our Club.

***** Page 2 *****

***** Astronomy *****

At the Science Centre on Friday 4th December, there will be a fascinating night. The local astronomy society will be setting up telescopes so we can look at the night sky, including the comet that is set to destroy Earth! Remember how great it was when Halley's comet came past? Well, it's not quite so spectacular, but will be a good night st the same. We will have several .adio displays including packet, satellites and weather fax. There are a couple of satellites passing by so you'll be able to talk via satellite and see what packet looks like at 9600 baud. There will also be a sausage sizzle and soft drinks on sale. We have sufficient bodies to man everything, but we need your financial and moral support. Financial? Yes, it'll cost you a small fortune to get in. Ask for me, and I'll get you in for $14. Ask for someone else, and you'll get in for $4!

***** Don't Do IT! *****

Greetings Mr Peter. I have one reservation about your idea of having a Telecom person to speak at the Dec IRS meeting: will Rob VK2MT be there? If so, will the Telecom fella have bodyguards available (because I'll bet that they haven't fixed 147.275 VK2RIL by then...). 73 de Graham VK2GID

*** Electronics Australia ***

Wanted....Any old copies of Electronics Australia or its predecessor Radio, Television and Hobbies. I have copies going back to about Dec 1963 if any body needs articles. Ken VK2KWG.

***** Auction *****

We held our auction last month and it was quite entertaining. Keith VK2OB was the auctioneer after a suitable amount of pressure was applied. The problem was that he did such a good job, he'll have the job again next year! Well done Keith. The auction was quite a success, raising a reasonable amount for Our Club, thanks mainly to Ray VK2AGU nee VK2XCC. Besides the equipment, Ray also made a very generous financial donation.

* How Packet Radio Works *
Part 4

So far we have had a look at the workings of Packet radio. The next thing we shall consider is how to actually do things. Let's start with something very simple, which is connecting to another station not very far away, where there is a person at the other end. This might be to talk to each other keyboard to keyboard. For the sake of example, let's say that I (VK2GID) want to talk to Dale VK2DSH. I have already mentioned the hardware required at my end. I need a computer terminal, or a computer that can act as a terminal. I also need a Terminal Node Controller (TNC), a radio and antenna. Some arrangements do away with the TNC and the computer does the work, but that doesn't make much difference to what I am going to say.

Firstly, the TNC or whatever has to be set up with all the right parameter settings. Fortunately, most of them are pretty right from the factory, and I don't want to cover that topic now so let's say that everything is set up. Obviously my radio has to be on the same frequency as VK2DSH's radio, and the antenna pointed in his general direction.

Most TNC's have at least two modes: COMMAND mode where what you type is an instruction to the TNC, and CONVERSE mode where what you type goes out the radio to the world. The first thing that we want to do is tell the TNC to set up a connection to Dale's station. This is an instruction to the TNC, so we need to be in COMMAND mode. Generally this is done by typing CTRL-C (which means hold down the CTRL key and hit the C key), and the TNC responds with "CMD:" or something. I type "C VK2DSH" (without the quote marks), which means Connect to VK2DSH, I hit < ENTER > and away it goes.

What happens then is the TNC sends a connection request packet out over the radio, addressed to VK2DSH from VK2GID. If Dale's TNC hears ′ packet, and nobody else is already connected to it, then it will send back a connection acknowledge packet, addressed to VK2GID from VK2DSH. Also, his TNC will write "*** CONNECTED TO VK2GID" on his computer screen and make it go beep. When my TNC hears the connection acknowledge packet, it writes "*** CONNECTED TO VK2DSH" onto my screen and makes it go beep. This takes about 3 seconds if the radio channel is clear.

The above paragraph assumes that I was lucky. If Dale's TNC already has someone connected to it, then it will send back a disconnect acknowledge packet, and write "***CONNECT REQUEST: VK2GID" on his screen. When my TNC hears the disconnect acknowledge packet, it writes "***VK2DSH BUSY" on my screen. Again this takes about 3 seconds.

What if Dale's system is turned off, or can't hear me? Obviously it can't answer back, can it? In fact my TNC will try a few times (usually 10) to get an answer, then give up and write "***RETRY COUNT EXCEEDED" on my screen. This might take about a minute.

Hopefully by now my system has managed to connect to Dale's system. Usually the TNC will then change to CONVERSE mode, which means that we can type away to each other. In general the station that placed the call would talk first, usually something original like "Are you there Dale? KKK".

There are a couple of conventions here, to save us getting all tangled up about whose turn it is to talk: To begin an over, I send *** (three stars) on a line by itself, which basically means "I am talking, so stop typing and listen". It also means that I have received Dale's over and am starting to type an answer; if I am a slow typist then this might be nice to know. During the over, when I have almost typed a full line I hit <ENTER> at a convenient place to send that line and give me a fresh line to type on. At the end of an over, I send KKK (some people send >) to say "over to you", the same as in CW.

This sounds all very complicated but keeps things orderly. It is worth saying that Packet is a full-QSK (break-in) mode: if the other guy is talking and you have something urgent to send, just send it and he will see it either straight away or when he presses <ENTER> next.

OK, so we babble on for a while and then we want to say goodbye. How do we break the connection? It is conventional to send SK at the end of the last over instead of KKK (again like in CW). Once both stations have said goodbye (with their SK's), then someone will ask his TNC to disconnect. This is again a command to the TNC, so first I type CTRL-C to shift into COMMAND mode, then type "D" for disconnect, and press <ENTER>. A disconnect request is sent, a disconnect acknowledge comes back, and both screens show "***DISCONNECTED", telling us that everything is finished.

That covers the simplest possible case, which is talking to another human over a short distance. There is one matter of theory that we might quickly look at. Although we have a connection between two stations, it does NOT completely fill up the channel like a telephone connection fills up a pair of wires. The connection only uses the channel while packets are actually being sent, so other connections can and do use the same channel at the same time.

Well again that's it for this month, next month we will look at what can go wrong during a contact, and also look at longer distance contacts. Any questions, please ask me or Peter VK2FPN. 73 from Graham VK2GID.

*** Oops ***

Last issue I made one of the cardinal sins of journalism - I omitted an advert! One! Hell! I omitted two! Who were they? You tell me, in fact, why not break away from tradition and read the ads. It took me a lot of time to draw them, and more to the point, the people who advertise are supporting us. Yes, they assist Our Club, so don't you feel you should support them? When you do go in to see them, let them know you are an amateur operator and appreciate their support.

**** Page 5 ****

Bit's 'n' Pieces

Hoped you liked last months bumper issue. Just one of those times when everyone does more than expected of them. I didn't know what to chop out so I left everything in. Except for two VERY IMPORTANT items.

Hey! For a rushed repeater report last month, Ken VK2TKE did a fantastic job. The boy's got more talent than we knew about.

The Ultimate Power Supply

I forgot to mention last issue that this is being co-ordinated by our President Brian VK2KLH. I would love to co-ordinate it myself, but I have trouble co-ordinating my feet to go one in front of the other when I walk, let alone co-ordinate a project! Actually, there's one good thing about being useless - no one asks you to do anything! The only bad thing is that you have to be thick skinned because of all the objectionable comments people make about you.
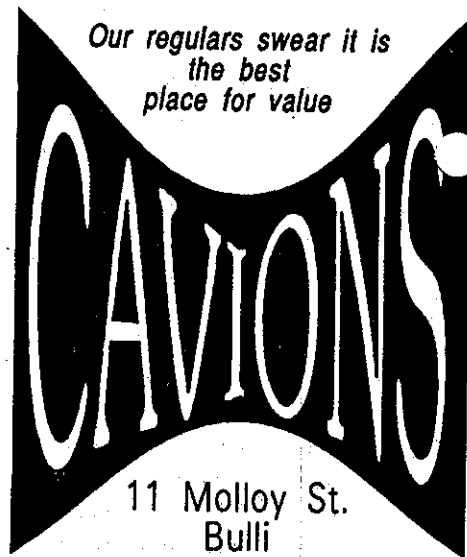
✗ ***** Political *****

I was having a chat with someone the other day and we discussed who to vote for at the next elections. Back in the good old days, we used to vote for the party who would do the best job. These days you vote for the party who will make the least stuff-ups! If there any politicians reading this, don't blame me. That's the image you present these days. Then again, maybe it's our fault since we voted for you.

(These views are entirely my own and not sanctioned by Our Club since they are more diplomatic than I am!)

***** Club Net *****

The net is going from strength to strength. Best we've had is 9 waffle Something happened we haven't had for a long time - G4AWZ Paul managed to time the repeater out! Merv VK2UMC is starting to talk a little more now, hardly had a word to say when he first came up. Vic VK2KVH has a problem, but it's not polite to talk about it - oh sorry not that one, he can hear 16 + repeaters and doesn't know which one to listen to!

*** Another Loss ***

Ray Ball, VK2XCC, VK2PHD, VK2AGU is moving to Queensland, and in fact is up there reading this at the moment. He has promised to write something for me so if it's not here, you know he's forgotten. In the mean time, I found the following report on John's packet BBS.

PACKET NOOZE

RAY's PACKET COLUMN
Editor's note: this is the first of a series of columns, not written by our editorial packet Expert, Ray VK2AGU. Ray has spent countless hours studying the mode, and so we have for you, - how a Terminal Node Controller or "TNC" works: The "computer" port is connected to a high speed printer. The output from this printer is taken off and bundled up into string-tied parcels, or "packets" as they are called. These are taken by very small carrier pigeons into the wires running to the radio. The incoming carrier pigeons deposit their parcels (and hopefully little else) at the "radio" port. These parcels are then opened and read by a proof reader, whose job it is to provide error correction. After successful reading, the "packet" is passed to a typist, who types it into a computer so that it can be transferred to your screen. The "power" input is connected to a highly technical device that makes pigeon feed out of electrical power. Pigeon waste is stored in the corner, until one day a puff of white "smoke" appears from the TNC. Believe me, this is not smoke. There are two limitations in this system: the proof reader and the pigeons. The proof reader can only read so much before he loses interest (technically called being "baud"). After a certain number of words, typically 1200 or 9600 or so, he gets baud and needs to rest for a moment. When there are no free pigeons to carry a "packet", then the channel is "congested" and you have to wait for a spare pigeon. In large cities, most of the pigeons rest on statues, so the channel gets "congested" more often. This column brought to you by VK2GID @ VK2XGJ. Bye!

** Xmas Picnic **

There will be a Xmas Picnic this year at Cordeaux Dam in place of the December family night.

Time :- 10.30   (Of course it's am!)
Date:- Sunday 13th Dec
Location :- Cordeaux Dam.

There will be no Father Xmas and no presents, just us and a good time. To get to Cordeaux Dam, go up Mt Ousley and take the Picton turn off (that's the one at the bottom of the big dip after Mt Ousley.) There are a lot of signs pointing to the dam turn off which is about 16 km from the Mt Ousley/Picton Rd intersection. We'll be in the picnic area at the dam. There is shelter, tables, BBQ's and hot water available. MAKE SURE YOU'RE THERE or I'll write about you in the next Propagator! The thing I hate about going to a big place like the dam is finding our group.

You drive around and say to yourself 'Is that our group?', but they're too far away to see properly you're too embarrassed to say 'Are you Hams?' so you drive past to find another likely group. Eventually you spot a group of 20 cars with antennae on top, a couple of 40' towers with 5 element quads, 20 harmonics running around saying CQ CQ CQ and your lightning quick mind says 'Ha! They could be Hams. Throwing caution to the wind, you walk up and everyone says 'We saw you driving around for the past half hour but you were too far away too recognise and we were to embarrassed to say 'Are you a Ham?'!

The secret is to arrive an hour after the official start time when you know there's going to be a big crowd and you're safe!

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** Committee **

This column vaguely relates to the committee meeting held on 17th November. You know what we did to begin with, so I won't bore you with those details. Before we got stuck into the sherry and hors d' oeuvres we discussed the Xmas Picnic, morse keys, December meeting, membership forms, field day, Monday night net, visits to different places, budget, funds, finance and a lot of minor stuff. Dale reports the club is reasonably financial but

....

Rob gave a comprehensive repeater report. We then discussed the auction night, club equipment, space night and the science centre. Simon VK2XQX invited several guests along to the next meeting. We must have forgotten something since we finished 5 minutes early at 20:25.

***** Repeater Report *****
27/10 to 26/11/92

VK2RAW (146.850) Rptr basically functioning well. The only anticipated adjustment is to turn the mute up just slightly. During yesterday's WIA morning broadcast, the mute kept opening, putting RXer white noise over the broadcast audio. By about half-way thru', the mute had closed slightly possibly due to the reduced voltage from the continuous TX. Anyway, next visit we'll turn the mute level up just a touch.

VK2RIL (147.275) Once again, as has been reported for the last 7 months, the rptr is working fine... and also as is usual for the past 7 months, the rptr is still suffering interference from a Telecom Pager. We first started getting interference at the end of April & here it is almost the end of November. My, doesn't time fly when you're forced to listen to your Club's rptr get falsely triggered & interfered with a couple of million times by a large faceless corporation like Telecom... Anyway, as much as we may all enjoy (?) listening to Telecom's interference, it may all be coming to an end very soon, possibly by the time you read this. But don't be sad dear reader, it probably won't be long before another high-powered & un-filtered pager Txer takes it's place. Since the last report the following action has taken place... DOTC tracked down the location of the offending pager & informed Telecom. Just over a week later Telecom investigated with their own personnel & eqpmnt & confirmed that yes, their Knights Hill Pager on 148.1875MHz was putting out a spurious signal onto the Amateur 2m Band (in fact 7275's input freq.). They found the spurious disappeared when the TXer was run into a dummy load & also when no alpha-numeric data was being transmitted. They also found that one of the four phased-dipoles, that make up the pager antenna system, had spun 90 degrees from the vertical plane. Apparently they felt the antenna was causing the TXer to put out spurious signals, but they had to get a rigger to rotate the dipole. Due to whatever reasons & excuses, it wasn't till the 19th of November (4 weeks later) that they got around to doing the antenna work, but this didn't fix the Pager spurious. So the spurious illegal Pager TXer was

allowed to continue TXing, causing yet more interference to our fully-licensed & legal Amateur rptr, until Telecom could find time to investigate again. At the time of writing it is now 5 weeks since Telecom proved for themselves with their own eqpmt that their Pager TXer was faulty, but still it is allowed to continue TXing it's garbage to air. Surely with all their technical brilliance & skill that Telecom tell us they have with their slick TV ads, you would think that 5 weeks would be more than enough time to rectify a sick VHF TXer. (Even I reckon I could find the switch marked ON/OFF!!!) Remember this is the second Telecom Pager that has put illegal spurious signals onto the 2m Amateur Band in the last 7 months. The other one was the 148.0375 Pager at the W'gong Exchange. At this point Ken & I had had enough. The IARS had gone thru' all the correct & proper procedures in reporting the interference to the Federally appointed authorities (DOTC) & I think we have been very patient, but here we are more than 7 months down the track & the interference still goes on. With some assistance in being pointed in the right direction, & 20 minutes on the phone I eventually reached the Telecom Pager Maintenance Dept. on the 20 Nov. I spoke at length to the person I had reached. He was aware of the problem & felt the spurious would be fixed in the near future, possibly the 24th. On the 24th I was contacted by John Fisher from Telecom. He went to Knights Hill & installed some filters then rung me at work, several times, checking to see if the interference

ceased. Each time it continued. I was eventually told that the output of the 148.1875 Pager was now very clean & they had finished & were going home. When told our rptr was still being interfered with, I was told to once again contact DOTC as it couldn't be their Pager. (I'll leave it to your imagination what I thought at this time!) At this point Barry Sullivan (W'gong DOTC) arrived on site. Barry wouldn't elaborate to me what he told them, b·· they rung me back to say they we going to continuing their investigation! In their discussions, "intermod" was raised, in particular the formula " 2a - b". Substituting pager freqs for a & b we get... $(2 \times 148.0375\text{MHz}) = 296.075 - 148.1875\text{MHz} = 148.8875\text{MHz}$. This is 12.5kHz away from the input of rptr 7275 (ie: 147.875MHz). So this is the reason for all problems!!! The Telecom Pager Network No:2 (on 148.1875MHz) was only commissioned in the past 4 - 6 months. After they continued more work at Knights Hill, the interference still continued, so it was assumed the problem was now at W'gong Exchange. On the 25th they visited there. To cut a long story short. they found the filters they installe didn't rectify the problem. The reason being, that these 2 same Pager freqs are used literally everywhere, the nearest to us being - Mt Gibraltar, Razorback, Sutherland, Waverly, etc. Even if they fix our 2 local sites, they now have to go around & fix the rest. What happens when conditions rise?.. Coffs Harbour, Orange, anywhere may cause us the same intermod. The eqpmt they need to install (eg: circulators, cavity filters, etc) is not cheap. At time of writing

(20.30 26/11 at FPN's shack), the interference continues... They may be coming back tomorrow, but don't hold your breath, this problem looks like going on for a while yet.

VK2RUW (438.225) Not much to report (besides I've used at most of my allotted space on 7275). The rptr is working fine but occasionally the Link TXer momentarily drops out. On the 1st of November the WIA presented the SEANET convention from Darwin with the proposed new DOTC regulations for the Amateur Service. This special broadcast was aired on 8225 (& in turn 8325 Goulburn) courtesy of Ken. Callbacks at the end were very favourable for continuation of this service. This is being planned & hopefully won't be to long. The biggest problem is trying to receive the relatively weak link signal from Dural in amongst the megawatts at Knights Hill.

VK2RIL (438.725) Rptr working fine, no problems. Still receiving good signal reports.

VK2RUW (ROSE Packet) The UHF port is still providing very good link coverage. Unfortunately, it would appear that the filter installed on the VHF port is having detrimental affects on the output of the TXer. (The filter was installed to try & cut out a spurious mix on the VHF port frequency - 144.775MHz). Michael (XCE) is going up later this week to check the system. Apparently there is also a communication problem between systems with new & old levels of ROSE. VK2RUW (29.620) Dale (DSH) has

almost finished building from scratch, a new RXer for the Club's 10m Rptr. With the proposed changes to Amateur Regulations, a whole heap of new possibilities can be opened up. One thought is to have an open DTMF switch to join the 10m FM rptr with our UHF network. This would make it possible for a round-table QSO to take place between Amateurs overseas & interstate on 10m FM with anyone operating UHF in W'gong, Goulburn or in the ACT.

My apologies for the length of this report, but with all the developments with 7275, I figured it was worth including. Anyway, till next time...

Rob - VK2MT

*****WAY BACK THEN *****

Episode 14.

Dapto Moonbounce Project - 1973 and harkening back to 1972.

In the previous Moonbounce episode I mentioned the signal reporting system used. Although this appears quite straightforward there was one aspect on which we took a different view to most other stations. This was - where a signal was of "M" quality - over what period could the letters and figures of the essential part of the information be copied - in order to claim a valid contact? We felt that this information should be copied during a single reception period of 2.5 minutes. Most others believed that it was sufficient to assemble all of this information over a number of reception periods, that is, filling in "the blank spaces" at any time during the complete test period, of generally one half hour and containing some six reception periods.

On the above basis, and as I stated in Episode 12, we did not complete a valid EME contact in 1972. We were therefor surprised to learn, via the pages of QST, no less, that the ARRL had recognised a new 432MHz DX record for the contact between WA6HXW and VK2AMW on April 19, 1972, over a terrestrial distance of 7500 miles! I had forwarded a copy of our detailed record of the test on 19/4/72 to WA6HXW and he had apparently forwarded this to ARRL together with his records as a claim for a new record.

Anyway, this "record" stood until March 10, 1973, on which date we considered that we had made a valid contact with Al Katz, K2UYH, and which the ARRL recognised as a new distance record of 9920 miles (although the signals had to travel about 470,000 miles - or approx. 760,000 kilometres - via the moon, in the process).

Getting back to the start of 1973, the year began with arrangements being made by the U.S. Naval Research Laboratory (N.R.L.) in Sugar Grove (in eastern USA) for the running of a series a special receiving tests on three Amateur bands, looking for signals via the moon with their 150 foot dia. dish, as part of their 50th anniversary celebrations.

On the first 432MHz test in January they heard K2UYH, W0WCD and VE7BBG, on the North American continent, and VK2AMW. They gave us, by mail, a signal report of 5-6-9 and later forwarded photographs to us, of our signal as it appeared on a spectrum analyser - it was 20dB above noise!

On their second 432MHz EME test, made in April, they reported our signal as 5-8-9 and said it was one of the strongest signals heard, even though we suffered from the 3dB penalty due to our circularly polarised signal being received on their linearly polarised feed.

We later received a nice Certificate from NRL, to confirm reception of our signals via the moon.

In February I received one of the latest uhf rf transistors from Joe Reisart, W6FZJ and, by mid April, had built it into a new preamp. The CSIRO who did a precision noise figure check on the preamp. said that, at a noise figure of 1.2dB, it was better than any of their radio telescope "uncooled" preamps on or near this frequency!

We were now receiving our own echoes at an average of 8dB above noise and our next EME test with W6FZJ resulted in our first two way contact with him.

Recognition of our efforts included a large photo of our dish, shown looking toward a very much enlarged moon, on the front cover of the WIA's "Amateur Radio" journal for June 1973, and QST for June also including a photo of VK2ALU at the operating position of our VK2AMW moonbounce station, plus articles on our EME setup in various publications.

The Illawarra Branch of the NSW Division of the Wireless Institute of Australia (as we were at that time) was getting well known in the Amateur Radio world! We were becoming concerned about the amount of rust showing up on surfaces of the dish supporting rings and radial members. Small holes were appearing in places, which meant that moisture was being admitted to the inside surfaces of the tubular steelwork. We therefor approached the University College people, who agreed that a contractor give a quote for grit blasting and then repainting all the dish steelwork, after University workshop staff had welded patches over any holes - provided that the cost of all the work was not too great!

The University then indicated that, because of our success with the Project to date, they were making $2000 available for expenditure on equipment, over the next 3 years.

As one of our difficulties was to make measurement of receiver noise figure and transmitter output power in order to optimise the performance of our systems, we then requested that purchase of a UHF noise generator and measuring device, a 50 ohm coaxial termination capable of dissipating 600 watts and a UHF power meter of say, 1000 watts full scale deflection, be investigated. By year's end it was known the purchase of new measuring equipment would be too expensive but that suitable reconditioned items were available from a source in USA. An order was therefor placed for the items. Over the year we continued EME tests with 3 stations in USA but had only had successful contacts with K2UYH and W6FZJ. We were also starting to receive enquiries from stations elsewhere in the world, who were getting close to 432MHz EME capability.

Operation of the VK2AMW Moonbounce station had been carried out by VK2's ALU, BHL and ZEN, assisted by other club members on occasions, when more general work was involved.

Charlie Proctor, VK2ZEN, was probably the only Amateur in Australia to achieve the CW skills needed to obtain a "Full Call" by operating (under the supervision of VK2ALU) over the EME path!!

Lyle VK2ALU.

********** Uh? *********

I know you believe you understand what you think I said but I am not sure you realise that what you heard was not what I said.

***** Insurance Claim *****

I am writing in response to your request for additional information for Item #3 of the Accident Report Form. I put 'poor planning' as the cause of may accident. Your letter said I should explain more fully, and I trust the following will be sufficient.

I am an amateur radio operator and on the day of the accident I was working alone at the top of my 80 foot tower. When I had completed my work I discovered I had, over the course of several trips to the top of the tower, brought up about 300 pounds of tools and hardware. Rather than carry the now un-needed materials down by hand I decided to lower the items down from the top of the tower in a small barrel by using a pulley which was fortunately attached to the top of the tower.

Securing the rope at ground level, I went to the top of the tower and loaded the tools into the barrel. I went back to the ground and untied the rope, holding it tightly to ensure a slow descent of the 300 pounds. You will note in item 11 of the report I weigh only 155 pounds.

Surprised at being jerked off the ground so suddenly, I lost my presence of mind and to forgot to let go of the rope. Needless to say, I proceeded at a rather rapid rate of speed up the side of the tower. In the vicinity of the 40 foot level, I met the barrel coming down. This explains the fractured skull and broken collar bone.

Slowed only slightly, I continued my rapid ascent, not stopping until the fingers of my right hand were two knuckles deep into the pulley.

Fortunately by this time I had regained my presence of mind and was able to hold on to the rope in spite of the pain. At approximately the same time however, the barrel of tools hit the ground and the bottom fell out of the barrel. Devoid of it's tools, the weight of the barrel was now about 20 pounds. I refer you again to my weight in item #11. As you can imagine, I began a rapid descent of the tower. In the vicinity of the 40 foot level, I met t' - barrel on it's way up. This accounts the fractured ankles and lacerations to my legs and lower body.

The encounter slowed me enough to lessen my injuries when I fell on the pile of tools and fortunately only three vertebrae were cracked. I'm sorry to report however, that as I lay there on the tools, in pain, unable to stand, and watching the empty barrel at the 80 foot level, I again lost my presence of mind. I let go of the rope.

Author unknown, but thanks to Simon VK2XCC for taking the time to download this article from VP2JBS's phone bulletin board and deliver it by hand on a stinking hot day.

***** Who were they? *****

I'll bet you didn't bother to find out who the advertisers were that I missed out of the last issue. You did? Sorry I doubted your sincerity.

Well, for those of you who didn't look, I'll tell you. They were Paul Janson and John Lodding. Paul you should all know of since he has a very good reputation but who the hell is John Lodding? Try reading his ad, you may be surprised!

*** AMATEUR EXAMS ***

Well the first of the new system of exams has been run by the Illawarra Amateur Radio Society. Under the supervision of Ken VK2TKE and Graham VK2GID, 7 people sat for full call theory and 6 for regs. 4 passed the theory, however nobody passed regs and so there are no new calls to come from this. Lucky that Ken only teaches the theory in his tech class, maybe next year he will have to look at the regs as well....

***** John's Column *****

This month has really gotten away from me to the extent that I have had no real chance to sit back and enjoy myself with the various "Toys" that live at my QTH. Three of us attended the Packet Forum at the WIA HQ on Sunday 22/11/92 and met some of the faces that you only see typing to you or talking to you if on phone. Most of them are as ugly as I imagined!! B-) A good time was had by all I think. VK2GID took a major part and will be putting pen to paper for you all to see. I managed to open my mouth a couple of times and Peter VK2FPN was very quiet which I found strange. As most Packeteer's in the Illawarra will have noticed I have been trialing the'FBB BBS programme and have finally got the beast to work for me. I'd still like to know why I have spent three month's on the damn thing and the minute I get the latest version, 5.14, I have very few problems. Odd to say the least. If you the Users have problems with it, try to imagine how it feels to be on the otherside of the fence and get a piece of software, written in France, to work correctly here in Australia! Anyway if you have any problems, have a read of the documentation and Help files and if you still have problems give a Yell and I'll see if I can help. This BBS programme, aside from the mail transfer, has on-line programme xfer and a first for Packet, compressed mail forwarding. I have in my possion a programme that I downloaded from AO-16 that will give computer control to the FT747, a couple of the Kenwood and Icom tranceivers. Anyone want a copy? It will be on the PRBBS or I can give you a copy on disk if you want it. That's all for now, all the Best to you and your's for Christmas and have a Happy, Healthy New Year.

73, John de VK2XGJ

***QSL CARDS ***

Graham VK2GID informs us that a new lot of QSL cards has been delivered from the Bureau. See Graham for cards for VK2's: ALV, ANI, ANO, AOH, APL, BHO, BZ, CO, CRM, DAN, DFK, EJV, EU, FJE, IU, JJ, JHW, JJJ, KCV, VXS and ZNS; also AX2JTR. If you or one of your friends are here, please come and get them.

Graham notes that some of these calls seem unfamiliar, and wonders if we are handling non-members' cards (bet on it). How do these get delivered? Mostly after he's had cards for a while and nothing is happening, they get dropped off by pushbike/car/whatever when he's in the area. What about the more distant cards? They just live in my wardrobe until I do go there.

AMATEUR RADIO DISPLAY

I am putting together a graphics and sound display about amateur radio, to be shown more or less continuously at the Science Centre when we aren't there. I want to include as many different aspects of the hobby as I can, so far I have included DXing, pedestrian mobile (keep in touch), satellite working, computers, building equipment, having yap sessions at meetings, fox-hunts. That was about as much as immediately came to mind, has anyone got any ideas that I should add in? Let me know if you have any thoughts.

This article submitted by Graham VK2GID, contact him on (042) 294170, on packet at VK2XGJ's mailbox, or through Peter VK2FPN.

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***** OOps *****

Sorry about this, but there's no back page again this month. I have just too much material for 16 pages and not enough to go to 20. I have to increase by 4 pages at a time, so something has to go.

Ever noticed that the only time fishermen tell the truth is when they call another fisherman a liar?

To you computerologists - Paul Janson has a Mac emulation that runs on your PC . I've been down to have a look at it and it's great. You know Mac are great for desktop publishing and have fantastic programs, well now you can run it on your PC. If you don't know where Paul is located, don't look in last months Propagator; he's one of the two I forgot. Who was the other one? I just can't remember.

THE END.