

# THE PROPAGATOR. IARS

VOLUME 99/00 ISSUE Eight August 2000 PRINTED BI MONTHLY PRICELESS.

Meetings 2 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 PO box 1838 Wollongong 2500.



This will be my **LAST** edition. I would like to thank all those members that sent in items for the editions that I have published. I was only going to do 6 editions but I did get 8 off the press. I would also like to thank Ted vk2tth for getting them printed. The cost to the club was excellent. If we had to **PAY** full price for the printing we would most likely have to put up the fee's. I would drop them off and he would call me and I would pick up.

I would also like to thank the 8 club members that sent in items. This is a **VERY** poor show considering we have 70 members.

Some members even said there were mistakes here and there. Well so be it. I got off my **ARSE** and done it. If you members that have **NOT** given items, if you can do **BETTER** fill in the nomination form found elsewhere in this issue and give it ago.

The Committee would like to Thank the following clubs and amateurs for their

donations to help get the repeater site VK2RMP up and running again. Each club or individual has had a letter from this your club.

## Thanks goes to:-

VK1 Division.  
Goulburn Amateur Radio Club. Mid South Coast Club.  
Barry VK2FP Hillary VK2BHC, Rick VK2KRH, Harry VK2JHW, Wayne VK2TBF, Angus VK2YCV, Lyle VK2ALU, Peter vk2axj. Without their help the club would have been up for a lot of expenses and their donations have been very much appreciated by this your club.



I have just looked at last years AGM's minutes. Have a look at how many attended this meeting. Then get out the last few Propagators and just compare the difference!!!!!!!!!!

At this meeting there will be a **GREAT Raffle prize**. I have been able to get a 3 course dinner for 4 people at a restaurant that the winner uses a lot!!!!!! So make sure your there with your \$2 coin and you maybe the lucky winner!!!!!!

Also all those members that have paid there membership **BEFORE** the July meeting. All their names will go into the draw to have their membership refunded.

**BUT YOU MUST BE THERE TO COLLECT!!!!!!!!!!**

So come along and make this AGM the best the clubs had for many years. Nomination forms are else where in this edition so fill them in and hand to the outgoing secretary. If there's **NO** nomination forms there cannot be an AGM. *Congratulations goes to Simon vk2xqx the winner of the SNOWBALL. \$45*

The **SES, WICEN, IARS** exercise will be held August 26<sup>th</sup>. The exercise will be using Paket Radio with one station at the SES building and about 3 in the field. We need members to help out. So if you can help give your names to Chris vk2xbc at this meeting. **AX2000 CALL** will be used August 21<sup>st</sup> -28<sup>th</sup> give your name to vk2ubf at this meeting.



Minutes of annual General meeting held on 10<sup>th</sup> August 1999

Opened at hours 20:50 hours

Attend 12

Apologies from: vk2's cav , zdm , kfq , ezd , axj , fhn.

Visitors: nil

Correspondence in: invoice from vimcom, vk2 minutes, election for Alex Darling

News letters from: Dragnet, Smoke signals, Brag.

Correspondence Out: Letter to John Martin vk3kwa re repeater listings.

Minutes of last AGM read and accepted as read by those present.

Moved vk2tth second vk2ubf

There where No matters arising from these minutes.

Treasurers report: The treasurer gave his report and the clubs finances where in a sound state.

Repeater report: The repeater officer gave his report and all repeaters where working well.

General Business: The out going president dissolved the present executive and invited Lyle vk2alu to elect a new executive.

There where 3 nominations for president. Brian vk2ubf Ted vk2tth who declined on account of she who must be obeyed. Rob vk2tnk.

After a vote Rob vk2tnk got the nod.

Vice president only one nomination Ted vk2tth so elected.

Secretary. Only one nomination Brian vk2ubf so elected.

Committee members. Nominations from Simon vk2xqx, Rob vk2mt, Jim vk2zww, John vk2bho,. As no more nominations received all elected.

Propagator Editor one nomination vk2ubf so elected.

Repeater officer. Again only one nomination so Rob vk2mt elected.

Canteen officer. One nomination so Simon vk2xqx elected.

Publicity Officer. After much discussion Phil vk2tph was elected .

The meeting closed at 21;10 and the new committee started the general meeting.

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# MEMBERS

## PROFILE.

Brian Clarke Continued from the June edition.

By the time I was 13, I had built a 35 Watt amplifier, using a pair of 807s, driven by a 6SN7 phase splitter, fed by a pair of 6J7s in a mixing configuration, to accept input from a microphone (a Shure crystal mic, gift from Bob senior), and a gramophone pickup - actually, one of the earpieces stuffed up the horn of the gramophone. My dad recruited a few friends to build a shed at the bottom of the garden, where I could play my music as loudly as I liked. I had started with an Atwater-Kent EM loudspeaker on my 4.5 Watt amplifier, but by now I was into the big league - using 12 inch Wharfedales, Rolas, Whiteleys and Jensens in boxes far too small to do justice to their quality. But I had the loudness thing licked. And I was following a downunder tradition of having a radio shack at the bottom of the garden. War surplus was good gear I was now at High school and made friends with other radio/electronics-minded boys. We were all into buying war surplus radio equipment from all over New Zealand. We ordered a batch of RF thermocouple ammeters, which had a 1mA movement; we designed and built our own multimeters, for about 10 shillings (\$1). Suddenly, we were able to test faulty as well as good radios without doing the iatrogenic damage for which our 'calibrated'

screwdrivers were often blamed. I developed a resistance measuring circuit which did not depend on the condition of the battery. For valve testing, I could always go to Bob.

One of my school chums introduced me to a ham who had a backyard shed where one wall was filled with Command sets, all working. I recalled having seen a communications set-up in a police car, using this stuff. I listened for hours, enraptured. Did I want one of these radios? Did I ever! For £5, he would supply one, in a week's time. How was I going to power it? Off dad's car battery, of course. He put a BC-454 together for me to run off 12 V, but I would not get much out of the genemotor. It was a big expenditure and I did not want to blow it up, but I also wanted to hear from around the world like Bob, ZL1DC did. At first, I just used it as it was. Then, I connected the genemotor fields in parallel and soldered bars on adjacent input commutator segments, which lifted performance quite a bit. But it was not loud enough. It could be connected to my 35 Watter, but I was in the Boy Scouts and wanted to take this radio on camps where there would be no AC mains. So, I fitted a 12AU6 under the chassis as an AF pre-amplifier to feed the 12A6. I was the number one signaller in our troop, in semaphore and Morse. RNZAF Whenuapai, on 3.2 MHz, could be heard all over the North Island, and it was interesting Morse traffic, for the whole troop to practice receiving.

I recall being captivated by an article in Popular Mechanics describing how to make a handie-talkie to work on 420 MHz. It used a 955 in a simple reflex circuit, switching a dynamic earpiece or a mic transformer and carbon mic to achieve PTT. When I turned 15, I joined the radio club at the High School. We had responsibility for public address at all school events. That year, we decided to have roving reporters at the Field and Track event. We built up a bench version of that simple 955 design, but now we added a separate AF stage using a 3V4 and mic transformer that alternated between output and modulation transformer roles via a DPDT push switch. With 2 prototypes, and careful tuning, we could communicate all over the school's campus - but, the breadboard design was not easily portable with all those trailing leads to the battery bank. We reworked the design to use smaller batteries - one 67V5 battery and one D-cell, rather than two 45V and four D-cells; all the coils were now wound with silver-plated copper wire, ceramic valve sockets were removed from war surplus gear and we experimented with different acorn valves. The 957 and 958 would transmit OK but not receive; the 958A was our eventual choice, though it was more expensive.

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Page Three.



We designed a very smart case, about 10 x 3 x 1.5 inches with a ground plane 1/4 inch of brazing wire aerial fitted to a SO-239 on the end. Very professional, we thought. The main problem was that the receive and transmit frequencies differed - so we could not talk HT to HT - but we did have two bench prototypes which were quickly boxed to become the base station. This was 1956. Galvin Manufacturing Corp of Chicago, Illinois had the BC-611 - we had the BC-01! In the radio club's 'shack' - actually the projection room for the school's assembly hall we had a ZC1 ( WW2 Radio Corporation of NZ's contribution to the war in the Pacific) and a 1154/1155 set, and an amateur licence, probably in the name of the physics master, Jack Woolloxall. The fellow I got the BC-454 from offered to build me an ARC-5 3 to 4 MHz transmitter for £3. Just to put these money matters into perspective, my dad's income was about £1200 per annum, so £3 was about 66% of one of his day's earnings - more to the point, it was about two weeks of my income from my paper round. Right off, I was a bit disappointed by the Tx. It had a hand-marked cardboard dial, which even blind Freddy could see was not accurate, nor as good-looking as the original black dial. And, to really put the boot in, it did not work. Bob, ZL1DC, introduced me to Cliff, ZL1MQ (SK, alas, just last March 1999). Cliff clearly knew these sets very well, and, in no time, had it working. At school, we built a

power supply as a physics project, and, as we had no modulator (I was not going to be fleeced again), we used Morse. We had an 80m delta which worked all NZ very well. But we did not know about EMI. I was the PA operator in the school hall for one evening's concert, when I heard the distinctive CQ CQ CQ call coming loud and clear over the hall's PA. Boy, did I get into deep do-do's over that one!

Reluctantly, I took my Command Rx and Tx home. Bob senior offered to let me use his call sign, so long as I let him know when I wanted to use it. I now had my own 12V battery and a charger I had built, winding my own transformer. I had made up a change-over relay box to control HT alternately to the Rx and Tx, and connected up that wonderful aerial from my xtal set days. The aerial did not seem to be working so well now; so, I chose not to transmit that night. The next night, after I had finished my school homework, I went down the backyard to my radio shack. Someone had broken in and stolen the Tx, Rx and battery charger. I was heart-broken.

I went to the police - do you have a licence to operate that equipment? No. Who else knows you have these radios? Names and addresses, More questions. But no radios turned up, and I lost a few friends - how could you think I might pinch your radios? I grew up in my relationships with the police, from that event.

A year or so later, Gilbert's were offering Command stuff NIB, at £5 per radio. After much soul searching and some counselling from mum and dad, I restocked AND put a big padlock on my radio shack door. Later, I acquired a BC-455, a BC-946, an ARR-2, a 3 Rx rack and a 3 Rx remote control - but no inter-connect cables or spline drives; these latter seemed to get left in the aircraft. Even local controls were made-ups - not even MX-21s for us. By now, I was studying hard for entry to university, so radio took a back seat.

Do you want to be an engineer, or just a counter jumper? The 1st year at university was hard work. I had done sufficiently well at high school that I was enrolled in 2nd year Maths. Radio was nowhere that year. At Auckland, we took our professional years (2nd, 3rd and 4th) at a residential college some 22 miles south of Auckland, at Ardmore. The BC-946 was my entertainment radio. In the practical labs, I made a project of aligning the clutch of Command sets I had, finding that I could achieve 1uV or better for 10 dB S/N; I also found that the engineering school's signal generators were wanting in the accuracy department. Brian Egan, ZL1??, head of the labs had an amateur licence, but amateur radio did not seem to be encouraged. This was a professional school.

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After graduation, girls and sex came higher on the agenda than radio. Even though I still had my Command stuff, it was all wrapped up and put away. I was back into music as an instrumentalist and PA supplier. I tried to record my piano ramblings, to be confronted by irreducible distortion.

This problem led me into microphone pre-amplifier, equalisation and mixer design. When my post-graduate studies took me to London, UK, I got into professional sound reproduction in a big way - both valve and transistor. At this time, the market wanted big pieces of equipment, like the valve gear - I was in my element. Multiple 6L6s, 807s, KT66s and EL34s abounded. I knew how to make these things sing. My Command gear had got pinched in NZ. As I wandered past the window of a surplus radio shop, Centre Electronics, in Birmingham, I saw a very ill BC-454. It had no clothes, no rear connector, no bottom plate, very few screws and very few of the original bypass capacitors. Poor waif. I just had to nurse it back to health. I found a small sheet-metal shop which specialised in panels for obsolete motorcars, in Leamington Spa; the owner and I made the variable capacitor cover, the top dust and valve covers. A screw manufacturer in Coventry was persuaded to make a couple of gross of the small screws, which I then had plated black; they were the correct thread but no-one in England would set up to make those lovely

filister head machine heads - so I got round heads. I got the BC-454 going quite well. I was starting to get interested in radio, again. Through Howard Turner, the owner of the surplus shop in Birmingham, first I got an ARR-2, then an AVO valve tester. Howard and I tried all sorts of places for documentation on the ARR-2 - local reference libraries, the London library, military bases and I even wrote to various archives in the USA. Result? Zilch! It never occurred to me that there might still be some hush hush on this set in 1985! A bit later, Howard found me an Eddystone 740. It covered more spectrum than the BC-454, and had variable filtering. It had a lovely sound and looked absolutely stunning, with that wonderful slide-rule tuning scale and world-reknowned slow-motion dial. But it lacked sensitivity, and, at the upper frequencies, selectivity. The valves were all OK - the Eddystone was NIB. It was time to graduate to the Racal RA-17L. This is a complex beast with its Wadley loop drift cancelling circuit. But, like the BC-454 and the Eddystone, it was a valve job. And I knew how to work with valves, or so I thought. This was the most complex piece of electronic equipment I had ever encountered, and built like a battleship - almost the complete antithesis of Dr Drake's Command design. And with careful tuning, it could be persuaded to resolve SSB.

Return to Downunder  
I had lived in Australia for 5 years after graduation, and it was to Australia that I felt

drawn when Margaret Thatcher made life in UK less comfortable for academics. I was engaged by Price Waterhouse (PW) to work in their consultancy division. My radio and electronics impedimenta comfortably filled a 20 foot container. My 1st project for PW was with Metal Manufacturers (MM) in Port Kembla. One of MM's young Turk managers used to come past my desk whistling in Morse. Come in, Dennis, VK2DMR. He invited me along to the Illawarra Amateur Radio Society, which I joined. Here I was befriended by Lyle, VK2ALU, who had made radio history through his EME contacts with US amateurs, using valve gear; here was someone I could commune with.

By this time (1988) in Australia, defence surplus equipment was starting to wind down. The big names like ACE Radio, ABC Metals (Alfredo Cavioni), Deitch Brothers, and Waltham Dan were not buying anything new and the military were co-operating by not offering much, either. Nonetheless, I went to a few auctions at St Mary's, Moorebank and Randwick. Here I met Bernie, VK2ABN, and Lindsay, VK2BIM, who introduced me to the artwork of Collins gear. I acquired a 51J4 and a CV-157 from William Messe, who ran Waltham Dan. William and I spent many hours fanning the breeze in the doorway of his shop in Oxford Street, Paddington.

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He kept telling me about a friend who had cancer of the waterworks. I could tell by his gait and general demeanour to whom I was referring. He and I became good friends, so much so that when the big C finally got him, his wife, Vera, asked me to liquidate the shop's stock. Unfortunately, managing the liquidation meant that I did not get to see all the bargains that had not seen light of day for 30 or 40 years. I also learned of the tricks the other bidders at auctions had played on him - bumping up the prices, and leaving him with mostly worthless junk. Fred, of ABC Metals, took all the junk that I had not been able to move to radio hobbyists. Vera was most under-impressed with what was realised. However, every cloud has a silver lining; through this work, I met Ian, VK2ZIO, and Col, VK2DYM, who, between them have one of the best collections of military communications and Radar equipment and documentation. Ian is the curator of the Castle Hill Military Museum (by choice) and a school master (by economic necessity). I tried to get the ARR-2 going, but neither Ian nor Col could help. An advert in Amateur Radio, the Wireless Institute of Australia's journal, got me a circuit from Ron, VK3OM. Unfortunately, he had only a vague idea how it worked, and suggested that I contact Billy Babb, VK3AQB. While on a consulting project in Melbourne, I arranged to meet Billy. We got on like a house on fire. Billy had very good

documentation on the Command series, along with several aircraft hangars full of military comms and Radar equipment and spares. I was aided and abetted in my Command collecting by Billy, but eventually started to draw blanks. Billy suggested that I contact Ray Mote, K5FKT. A 'phone call to Ray revealed a very knowledgeable person. Ray supplied me with many of the components I was missing, and pointed me to others who could help. A daughter I had not seen for some time was living in Ohio; she invited me to visit - why not meet Ray on the way across the States to Ohio? Good idea, said Ray. I got off the plane at LA, hired a car, followed the coast road north to Oxnard, knocked on the door - we yakked for about 7 hours. Over the next few days, we visited Davilyn, Apex (twice!) and a TRW swap-meet. Winter in Ohio made the roads to Richfield impossible, so I missed visiting Sam Hevener, W8KBF, but I did get to spend some time with Terry Aitken at Wright Patterson AFB - what an amazing collection, especially the back-stage reconstruction arenas. Along with my visit to Fair Radio Sales, and meeting George (now SK) and Phil Sellati, I ended up removing about 150 pounds of excess freight from the States. I had seen Mecca! Back home, I started refurbishing some of the clunker Command sets I had accumulated. All I had wanted was as complete a selection of the range of sets as had

normally been in use during the war. My visit to Ray had wised me up to the variety there had been. And, at Ray's prodding, I had visited August Link, in Carlsbad, CA. He had at least one example of every Command piece of equipment that had ever been produced, all in mint condition in glass exhibition cases. Now, I knew what 'collector' quality meant. On a second visit with Ray and Angie (WD6DMK), the opening yakk went to 11 hours.

This time we covered three swap-meets. In Australia, we have one per year like this, at Wyong, New South Wales. In the States, these swap-meets seem to run every month. Ham heaven! A very much more targeted raid was made on Apex (thanks, Michael Ryback). Fred Raper, a two-way radio tech, brought around his photo collection, showing Command installations in all manner of combat aircraft - what an eye opener, and just the sort of information Terry Aitken at Wright Patterson needs. My excess freight was a mere 250 pounds, this time. Thanks to Fred, and to Mike Hanz, KC4TOS, after all those years, I now have not only the documentation on the ARR-2, but also what is probably the only ARR-2 with a motorised turret, and the test set. Absolute unobtainium in Downunderland! What I would still like to know is, what was the purpose of the British rack modification using a 6L7? Continued next page. Propagator August 2000.



Present day ventures Larry Godek, W00GH, is helping me with the final touches to my Command collection. I should then be able to exhibit a working set-up, covering 0.19 to 9.1 MHz on receive in 12 V (Avro Anson bomber) and 24 V versions, and 3 to 9.1 MHz on transmit. Does anyone have any 4 receiver and 4 transmitter racks? Or were these only mock-ups for the manual photographs? My military collection grows apace. I got my full licence through practising Morse on-air with Don, VK2NV, using a PRC-47. This set I have modified by fitting a filter from the Collins 618 series, to resolve LSB. I am also currently working on some PRC-10s, a PRC-25, a PRC-77, a Plessey B47 (British) and a RT-524 in anticipation of the coming cycle 23. And, until I get the Command 'base station' going, I use a GRC-106, via a Viking Matchbox to an 80m horizontal dipole. Let's ride cycle 23 and get some scheds going.

Thank you Brian VK2GCE for this profile.

### Thoughts on Cats

"Managing senior programmers is like herding cats." - Dave Platt  
 "There is no snooze button on a cat who wants breakfast." - Anonymous  
 "Thousands of years ago, cats were worshipped as gods. Cats have never forgotten this." - Anonymous

"Cats are smarter than dogs. You can't get eight cats to pull a sled through snow." - Jeff Valdez  
 "In a cat's eye, all things belong to cats." - English proverb  
 "As every cat owner knows, nobody owns a cat." - Ellen Perry Berkeley  
 "Dogs believe they are human. Cats believe they are God." "One cat just leads to another." - Ernest Hemingway  
 "Dogs come when they're called; cats take a message and get back to you later." - Mary Bly  
 "Cats are rather delicate creatures and they are subject to a good many ailments, but I never heard of one who suffered from insomnia." - Joseph Wood Krutch  
 "People that hate cats, will come back as mice in their next life." - Faith Resnick  
 "There are many intelligent species in the universe. They are all owned by cats." - Anonymous  
 "I have studied many philosophers and many cats. The wisdom of cats is infinitely superior." - Hippolyte Taine  
 "There are two means of refuge from the miseries of life: music and cats." - Albert Schweitzer  
 "The cat has too much spirit to have no heart." - Ernest Menaul  
 "Time spent with cats is never wasted." - Colette  
 "No heaven will not ever Heaven be; Unless my cats are there to welcome me." - Anonymous  
 "Some people say that cats are sneaky, evil, and cruel.

True, and they have many other fine qualities as well." - Missy Dizick  
 "You will always be lucky if you know how to make friends with strange cats." - Colonial American proverb  
 "Cats seem to go on the principle that it never does any harm to ask for what you want." - Joseph Wood Krutch  
 "Cats aren't clean, they're just covered with cat spit." - John S. Nichols  
 "Do not meddle in the affairs of cats, for they are subtle and will piss on your computer.

### THE REAL TRUTH!!!!

The newly-hatched snake and the newly-born rabbit came face to face.

Both were so young their eyes had not yet opened. Neither knew what the other was, so they decided to feel each other and make a guess.

First the snake slithered over the rabbit and then concluded: "You have warm fur, whiskers, long ears and you hop around. You must be a bunny."

Then the rabbit ran its paws over the snake. "You are slippery, you crawl on the ground, and have no balls. You must be a politician."

Thanks John vk2xgj for the above items.

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## HISTORY THEMES COMMUNICATIONS.

Australia's first internal air mail service began in 1921, covering almost 1,900 kilometers between Geraldton and Derby, Western Australia. The Cobb & Co. coach service, once a key part of the postal service, ceased running only three years later.

The PMG began clearing the backlog of telephone subscribers waiting for connection since the war. In 1924-25 alone, contractors added nearly ten million kilometers of telephone wires to the network. By 1925 there were twenty-two automatic exchanges, and the first three-channel telephone carrier to transmit multiple conversations over the same wire. Similar systems were introduced between all capitals except Perth by 1926.

The first automatic exchange went into service in 1927, by which time Australia's telephone density ranked seventh in the world, all most seven telephones per hundred people.

The world's first police patrol-car radio service was established by Victorian Police Department in 1923. Morse messages were sent from Domain wireless stations to a Marconi receiver in police Lancia motor cars. Modifications later provided two-way communications.

Short wave radio telegraphy experiments began between Marconi in Britain and AWA in Australia in 1924. The short wave system, known as Beam Wireless Service, opened for public use between Australia and Britain

in 1927. The Australia-Montreal Service to Canada was introduced the following year. Telegraph traffic fell dramatically after its introduction, causing dismay among governments who had duplicated the public submarine cables only the previous year.

Commercial radio stations began as "PAY-RADIO", under a plan introduced by FISK in 1923. The "sealed sets" sold by AWA received only one station, to which the listener paid an annual subscription. When the sets failed to sell, the PMG announced a system of 'A' class stations (financed by listeners' fees) and 'B' class stations (which could advertise), in 1924. Five years later the first 'ABC' was formed after the government decided to amalgamate the 'A' class stations, and the contract went to the Australian Broadcasting Co., composed of Greater Union Theater's, J Albert and sons and Fullers Theaters.

Outback Australians got their own inland wireless service in 1925. It became the Royal Flying Doctor Service in 1928, when the Rev. John Flynn teamed up with Qantas. At the heart of the service was a pedal-powered transceiver designed by Alfred Treager, which could transmit Morse code to a base station as far as 1,500 kilometers away.

After experimentation in 1928, the Beam Wireless Service progressed from radio-telegraphy to radio-telephony in 1930, with the inauguration of the Australia-UK service. A service to New

Zealand was introduced later the same year. Rate of six pounds for up to three minutes restricted usage to those in dire need or with plenty of cash- especially during the depression. In 1934 a radio-picturegram service was introduced between London and Melbourne - the longest such service in the world.

The Australian broadcasting Co. was formed in 1932, taking over all the 'A' class radio stations, assets and staff of the Australian broadcasting Co. By 1938 the ABC network include two station in every capital city, and listening to radio had become a common family pastime.

Alf Traeger added a keyboard to his "Flying Doctor Radio" in 1932 so people who didn't know Morse code could still effectively communicate using it. Further refinements in 1935 allowed voice communications.

Australians have always been eager to adopt new forms of communications. Initially, the need for the colonies to communicate with each other and Britain spurred the development of post and telegraph systems.

Samuel Mc Gowan demonstrated the telegraph in Melbourne in 1853, only nine years after Samuel Morse invented it in America. The glee at the prospect of almost instantaneous news and information was evident in a report in the Argus, which enthused that there was

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'something very delightful in the actual contemplation of this, the most perfect of modern inventions. We call electric telegraph the most perfect of modern times-as anything more perfect than this is scarcely conceivable, and we really begin to wonder what will be left for the next generation upon which to expand the restless enterprise of the human mind.'

Further development may have seemed scarcely conceivable then, but in the intervening hundred and forty years generations of Australians have found plenty to occupy themselves with.

When the 'most perfect invention' had been improved to the point where the overseas beam wireless telephone service first connected Australia and Britain by telephone, on April 30 1930, British Prime Minister J.R. Macdonald was moved to exclaim to his Australian counterpart James Scullin, 'What an age, my dear Mr. Scullin, we are living in. What would our grandfathers have thought of it!'

#### ROYAL FLYING DOCTOR SERVICE.

The Royal Flying Doctor Service (RFDS) provided medical dental services to isolated areas of inland Australia. RFDS aircraft not only fly doctors to patients and act as emergency ambulances but also provide regular clinics to remote areas, are used in search and rescue operations, and to drop food supplies in time of flood and bushfires.

The South Australian branch also has an ophthalmic service.

The RFDS radio network is a valuable communication link for isolated places, and also used to transmit the School of the Air.

The service operates in Queensland (from bases in Cairns, Mount Isa and Charleville), New South Wales (Broken Hill), South Australia (Port Augusta and Ceduna), Western Australia (Wyndham, Port Hedland, Caravon, Derby, Kalgoorlie and Meekatharra). The Northern Territory (Alice Springs) and Tasmania (a limited service from Hobart).

It's funded by donations and government grants.

The idea grew out of a suggestion put to John Flynn in 1917 by a Victorian medical student, Clifford Peel, that air transport could be used to provide fast access to medical services for people in remote areas. (Peel, as a member of the Australian Flying Corps, was killed a few days before the end of world war 1.) For the project to be feasible it was necessary to develop a reliable, low cost, easy-to-operate method of communications so that the service could be contacted. This was provided by Alfred Traeger who, at the instigation of Flynn developed the Pedal Wireless between 1924 and 1927.

The first flying doctor base was established by the Australian Inland Mission (AIM) of the Presbyterian Church of Australia at Cloncurry in Queensland. The Service

began in 1928; DR K St. Vincent Welch was the first flying doctor, using DH50 Aircraft.

Thank you Ron vk2ur for this item.

Don't forget there's a lot of prizes up for grabs at this meeting. If your **NOT** there **YOU** will have **NO** chance of winning them. So get along to this meeting you never- never know you may just be lucky. Please fill out your domination form and make this AGM the best the club has had for many years!!!!!!!!!!!!!!

#### ILLAWARRA COMMUNICATIONS

If your looking for Quality Coax, Cellfoam and Helix Cable, Quality Pulse RF Connectors RFI/BENELEC.

Mobile and Base Station Equipment.

GME Electrophone Radios, Power Supplies and accessories.

Premier Motorola Radio Dealer for the ILLAWARRA AREA. Simoco (Phillips), Kenwood, Uniden and Maxon dealer. Radio programming available, most Brands and models.

Nicad battery optimization service.

#### ILLAWARRA COMMUNICATIONS.

101 AUBURN STREET WOLLONGONG.

(lower end near big tower)  
Phone them on 02 4229 7300  
visit their web site at  
<http://www.illcom.com.au>

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## DAYTON HAMFEST

If you ever get the chance, you must go to the world's biggest Hamvention, The Dayton Hamvention and ARRL National Convention at Dayton OHIO U.S.A.

I was asked if I would like to go to Dayton, back in December 1999, with Gerry VK2APG, and of course said yes, with no hesitation, so flights and hotel accommodation were booked, just had to save up now.

The trip started out early at 5.30am on Tuesday 16 May, making sure that my case was packed, camera, film. Passport, airline tickets and money in pocket and of course my 2m.70cm hand held radio, which I left at home last time I left Australia. Gerry arrived about 7.30am, had coffee and a final check, then it's on our way to Sydney airport. After getting checked in seats organised and bags checked we were off to the airport Maccas for breakfast and walk around the duty free shops and relax. It was soon time to go through customs passport checked out okay but I always manage to set off the security scanners when walking through, security have decided that I must have metal legs.

The 747 jumbo that we were flying on was only half full so we had plenty of room to stretch out with a full row of seats to ourselves. After fourteen hours, a different hemisphere and time zones we landed in Los Angeles International for a plane change. This was supposed to be a two hour change over, but managed to be a four hour delay, it seems that the Pilot for that particular flight had taken a sickie!! Finally we were airborne once again with a three hour flight and another time zone from LA to Chicago O'Hare Airport, which is on the edge of the great Lakes, near Lake Michigan, now that's some Airport, being the second largest and busiest in the world.

We managed another two hour delay and plane change then off to Dayton, this being a short flight of forty-five minutes and yes another time zone. On arrival at Dayton we soon caught a taxi over to the Marriott Hotel at around midnight on the 16 May even though we had been travelling for nineteen hours.

After a good nights sleep and a hot shower it was downstairs for an all American breakfast which went down very well. The service at the hotel was first class.

Wednesday was spent at the National Air Force Museum, where we saw the first plane that was built by the Wright Brothers, the Kitty Hawk, plus WW1 And WW2 war planes and every plane ever built by the Us Air Force, from B52 bombers to the Stealth fighter, there was also a mig from the USSR plus Space Capsules. We also saw a couple of movies on the Imax Theatre in the museum which is all free admission apart from a small charge for the Imax. After a good day it was back to the hotel for Dinner and a beer or two.

Thursday was spent at a Historical village of Dayton's past history, this was within easy walking distance of the hotel. It included the first house built in Dayton, the school and many other buildings each with it's own guide that would give a short talk on the past history of the building. In the afternoon we walked into downtown Dayton.

The population of the City of Dayton is half a million, with at least half of them Black American.

It was back to the hotel to meet up with some of Gerry's friends that were travelling from out of town to Dayton for the Hamfest and were staying at the same hotel. These guys have a stall in the Hamvention flea market with the other three thousand six hundred and eleven outside stalls. Andy WB8HYO, Dave KE8KT and Michael W1DRY, a great bunch of guys who were on the same floor in the hotel, along with many other Hams from the States, Brazil, Argentina and Australia. These guys also ran us to the Hara Arena Exhibition Centre and back for the next three days.

At last it was Friday the day Gerry and I had been waiting for since we arrived – the start of the Hamvention. It was an early breakfast, we needed to be at the exhibition centre to help the guys set up their flea market stall and get our tickets which were a three day pass. At 9am the doors to the 49<sup>th</sup> Dayton Hamvention opened and we were in the queue with some of the thirty thousand hams and visitors who for the next three days walked through the exhibitors and flea markets. Where do we start!!!!!!

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This really is a very big exhibition with six hundred and fifty-seven exhibitors all under cover in the arena and conference halls. All the major manufacturers of Radio, Yaesu, Icom, Kenwood, Alinco and franchisees from different US States displaying and selling the same products. All the commercial and small antenna builders, Cushcraft, Gap Antenna Products, Hy-Gain, Hustler etc, etc.

All the linear amplifier builders plus our very own Emtronics Pty Ltd from Sydney, MFJ Heil sound, Kentronics and Radio Shack just some of the suppliers of extra accessories related to the hobby. Kachina, Winradio, Timewave and other computer related products were in abundance. There were many organisations in attendance, ARRL, RSGB, G.QRP Club and 10-10 International, which myself and Gerry are members, plus the Ford Motor company, also lot's and lot's of software for the computer users.

J and W Software, QSL shop (make your own QSL card) lot's of Login programs DX4Win, Writelog and satellite tracking of course. Amsat had a large booth in one of the halls. There were many new products and radios on display.

Over the next three days there were many forums covering Packet, QRP, Radio and the Law, Antenna technology, Dxing, Contesting and an ARRL forum of Meet the President. Gerry and myself had been invited to the VHF weak signal group banquet on the Friday evening, more on that later. So a check in the Hamvention brochure, which is fifty-five pages, to see which forums to attend. We decided on antenna technology which was at 2.15, the speaker, well known Dxer John Devoldere ON4UN, and at 4.15 the forum was the 10-10 International Group, with President K4CIH, Tom Henderson the speaker.

Okay lets go Shopping!!!! Before we come back for these. A quick check of all the retailers booth's and pick up on some of the giveaways, Badges, lapel pins and small laminated maps with dealer names all over them. There were lot's of Brochures on display, but these did not last too long, only for the first ten thousand through the booths, there was so much to see and look at over the next three days. I lost count of the number of times we were stopped and asked "have you come all the way from Australia for the Hamvention", or "I know that call, I have spoken to you on the HF bands, I must admit some of these I remember some I didn't". By this time it was getting round to the time for us to attend the first forum we wanted to go to, they had three large rooms set aside for these forums for the convention, ON4UN spoke on the subject, getting the most out of your vertical antenna, also HF ground radial techniques, this mainly on the low bands. Then Dr Steven Best VE9SRB spoke about wave reflections and impedance matching, this was very well presented, interesting and informative. Once this was over we headed off to find room 2 for the 10-10 forum. We were introduced to the room and members as being the furthest DX, needless to say this was also another well presented forum for those interested in the current and coming events of 10-10.

It was now time to be back in the flea market area to help the guys pack up their stall for the evening and travel back to the hotel, freshen up, a change of clothes for the VHF dinner.

The Holiday Inn Hotel was the venue for the VHF banquet that started about 6.30, in total there were one hundred and sixty five guests, at the start of the banquet each person would stand and give their callsign, name and grid locator.

Once again Gerry and myself were deemed the best DX and were given a round of applause. We made many new friends and spoke at length with Dave Sumner K1ZZ of the ARRL and Tom Whitted WA8WZG who gave a talk at one of the forums on VHF/UHF Microwave on the Saturday. Both David and Tom were interested in what is happening with VHF 6m and HF in Australia.

The meal was very nice and was enjoyed by all, a prize draw was held with one hundred prize items ranging from 2m antennas and filters to callbooks. Toward the end of the evening there had been a great deal of Dxing done. Both Gerry and myself have been invited back to next year's hamvention dinner. Thanks to the VHF weak signal group.

Saturday was another early start 6.00am, down to breakfast then back in the van to the arena and help set up the stall for the day. Today was a little warmer so we decided to check the outside exhibitors, three thousand six hundred and eleven spaces are available most of them full.



Row upon row of car boot sales Campervans, trucks and stalls some covered some not. Everything on sale from hundred foot towers to PL259's. New and used equipment, computers, from complete systems or build your own. Badges with your callsign could be made, T-shirts printed or callsigns sewn onto baseball caps. Didn't think we would get around it all plus being stopped and spoken to. We also had plans for another forum today and to meet up with some other VKs at about 3.30. The Amsat forum was to start at 12.15, which we attended and listened to speakers on the subjects of, getting started on Satellites and "Phase 3-D spacecraft and launch status". After the forum we were to meet at the CQ magazine booth with VK3EW David a well known Dxer from South Australia, VK1TX Tex who is often heard on 14.226.5 helping to run the Southern Cross DX net most evenings, Kerry VK4MZ and Graham VK2FA from Newcastle, we all spent the next half-hour talking about who and what we have seen and done. Had photo's taken with Dxer's from Brazil and the states and talking DX, needless to say another good day was had by all at the Hamfest.

On Saturday evening it was down to the Crown Plaza Hotel in downtown Dayton, the function was the Contest Super Dinner and Presentation, we were unable to attend the actual dinner as tickets had been sold out twelve months ago but we did attend the get together later in the evening, I must say that we felt like little pistols there with all the big guns, but we eyeballed with many of them and everyone was made welcome.

Sunday was soon upon us and the last day of the Hamfest, and our last day in Dayton and the states. Once more we started out early to the arena checking out the prices and picked up any last minute bargains. "Did manage to pick up some goodies", we had a leisurely walk round the outside exhibitors, it was a little cooler today so not such a big crowd. Most were waiting for the grand prize draw, "BIG PRIZES" everything from full station HF rigs FT1000MP, mobile rigs from Yaesu, Icom, and Kenwood to 18 element yagi's for 440MHZ plus antenna rotators to hand held radios.

Midday arrived and the time for us to leave for the airport and the trip home, we called by the stall of Andy WB8HYO and the boys to say our good-bye's and thank them for all their help and hospitality, and hope to see them next year.

We made our way to the main entrance with our bags and our new purchases to find a taxi for the start our journey back to Australia. The flight from Dayton to Sydney is very long but comfortable. We arrived back at 6.30am Tuesday morning tired but had had a great time.

I would like to thank Gerry VK2APG for the excellent company and help with our vacation.

My xyl Catherine being left at home, the boys in the states who ran us about and looked after us both. Also to the Dayton Amateur Radio Association for an excellent Hamvention.

**IT IS THE GREATEST SHOW ON EARTH!!!**

73 Phil Miller VK2FHN

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**Minutes of General meeting held** on July 11<sup>th</sup> 2000.

**Opened at** hours 19:35 hours with VK2TNK welcoming all those attending this meeting.

Attend 27 members

Apologies from: vk2'sFHN, AGB, TPH, WRJ.

Visitors: Tony Cox & Norman Gingell

Correspondence in: Minutes of conference of clubs, minutes of vk2 division council meeting, Renewal notice from Ian Bowmaker, Account from vimcom, \$77.70 ABN number from Vimcom, Renewal notice from Peter Campbell, Donation from Mid south coast radio club, Renewal notice from R Mc Intosh, Renewal Notice from Dom. Zanni, Letter from the IMB re cheque dishonored, Letter from the Tax office re ABN for this club. Cheque book from I.M.B. Letter to vk2mt from ACA re licence mix up.

News letters from: St. George, Ballarat Amateur Radio club, Central Coast.

Correspondence Out: Thank you letters to vk1 division, Goulburn club mid south coast club, vk2jhw, vk2tbf, vk2ycv, vk2alu, vk2fp, vk2axj Re donations to the club. E Mail to TS Hawkesbury re the non event at TS Albatross.

Minutes of meeting being has read. Moved vk2ubf 2<sup>nd</sup> vk2tth.

Matters arising from: nil

Treasurers report: Given my Jim vk2cav and attached. Looks like a LOSS for this year.

Repeater report: Rob spoke of the UHF Knights Hill site and the VSWR problem with the aerals. Will get to look at them when time permits and he's got time to climb the 200 foot to look at them. The Maddens plains site will have paket installed on or about Sunday July16th. It's proposed to have 144.700 and 144.925. He also spoke of the licence mix up with ACA (again) and will get off the details ASAP. Also an FM 815 repeater has been DONATED by vk2trb and Rob's working on it to install at Maddens Plains when he can.

General Business: The visitors spoke of a radio course that hopefully will get going and they asked Phil vk2tph to advise the radio stations to give it air time. The course will run for 12 weeks at Albion Park. All details to Tony Cox on 0411121641.

A shack clearance will take place on July 16<sup>th</sup> all equipment is from VK2 KWHY. Meat tray won by VK2KEJ.

At a later date the club will have some VHF radios for sale. But at this time no price has been set. So watch this space.

General meeting will be held: August 8<sup>th</sup> which is our AGM.

Meeting close: 20:15

After the meeting Cakes tea coffee and sausage rolls where enjoyed by all. The items for clearance went very well with many club members going home with lots of goodies for NOT much money. Hope the wife is still talking to them!!!!



## PRESIDENTS REPORT AGM 8TH AUGUST 2000.

First, may I apologize for missing the last meeting due to a trip overseas. I heard on my return that the vice president did a wonderful job.

Whilst in the U K I made several contacts on 2 meters including one ham who spent a considerable time in and around Wollongong. Naturally I invited him, and any others, to make contact with us on any future visit, via the 146.850. Although this would mean modifying their transceivers because their 2 meter band is only 144 to 146 Mhz.

Being in mobile mode it was impracticable for me to note callsign of contacts. In and around London the repeater I used , 145.625Mhz was used for hours on end as a chatter channel by a small group of operators who hardly ever gave their callsign and certainly were not exchanging information of a technical nature!

The link up we have on weekends, would be an impressive revelation of many a British ham. The only thing I learnt of a practical nature was that you usually can access their repeaters - which require CTCSS- by whistling into the mike ""Waltzing Matilda"" which usually did the trick.

On arrival home I was delighted to find 6850 up and running again, thanks to the tireless efforts of the usual team. I would like to personally thank all those clubs and Amateurs alike that donated to this cause. It would be appreciated by the usual crew if MORE members would pitch in and help out.

The club this year had a very large membership. Lets hope every member renews their membership. I think the numbers is around 72. We post out around 90 copies of your news letter and to coin a phrase from the out going secretary ""The club that sets the standards which others try to follow"". The club has attended all of the conference of clubs at W.I.A house and have been well received on every occasion. At the last conference your delegates asked about getting a repeater on 145.6?? But was told it couldn't be done. Lets hope the next delegate brings in up at the next conference.

If we could get more willing helpers, who knows where this club could have gone!!! At last AGM most positions were filled by members that didn't want the jobs. If it's the same at this AGM , from where I'm standing I think this club could fold in the next year. So come on rally around the flag and make this AGM one to be remembered for a long time to come.

I will seek re election , but I think it should goto somebody else. They may even have a ball doing it!!!!!!!!!!!!!!!!!!!!!!!!!!!!

I would like to thank all outgoing committee members. Your help was greatly appreciated my myself.

ROB VK2TNK

Thanks Rob for this item.

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# TREASURES REPORT FOR YEAR ENDING 30<sup>TH</sup> JUNE 2000.

OPENING BALANCE

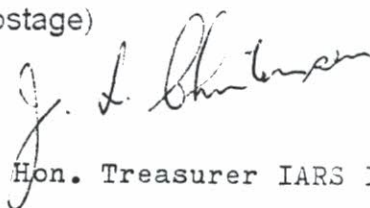
\$2368:63

## INCOME.

MEMBERSHIP FEES	(72members)	\$1170:00	
Raffle Sales		\$371:13	
Donations		\$255:65	
Advertising		\$225:00	
Auction Sales		\$160:50	
Sales of equipment		\$92:00	
Bank Interest		\$2:42	
Petty cash on hand		\$31:55	
		\$2308:25	\$4676:88

## EXPENDITURE.

Radio Repeater Parts	\$1479:35	
Australian Communication Authority.	\$250:00	
Raffle costs	\$196:70	
Catering	\$175:88	
Postage	\$207:48	
Printing of Propagator	\$147:24	
Wireless Institute of Australia	\$54:00	
Bulli repeater site	\$104:00	
Transgrid	\$100:00	
Auction Sales costs	\$61:00	
Insurance premium	\$110:50	
Post office box rental	\$48:35	
Snowball door prize.	\$45:00	
New member reward	\$5:00	
Petty Cash spent (postage)	\$4:50	

  
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\$2989:00 \$1687:88

Closing balance \$1687:88

Loss for year \$680:75

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## 1999 – 2000 REPEATER REPORT

Well another 12 months has passed & the Propagator Editor has requested an Annual Report on our Club's Rptr's. Time being at somewhat of a premium, I'm just going to try & itemize the events.

**23/6/99** – The VK2RIS 6975 Rptr was changed from a modified FM-828 to an FM-814. (The 814's are what many commercial organizations use, having 50 watts output & built-in P/S ) The change greatly improves performance on the Rptr, particularly it's RX performance, but unfortunately with this improvement we now have desense from the Txer to RXer.

**29/6/99** – VK2RUW 8225 Rptr, Goulburn Link, Interface Unit & 20 amp P/S re-installed at Knights Hill after being removed from site on 21/5/99 for modifications & tuning. Found that the 17 elmt UHF Yagi at 200' now had a very high VSWR & so was unusable. Had to diplex the Rptr onto the 100' antenna.

Then went to Saddleback & installed a 3 elmt VHF yagi for 6975's Txer. This antenna allows the Rptr to RX & TX on separate antennas, removing all signs of desense. RX performance now excellent.

**2/10/99** – Visited Mt Boyne for a tune & check. 6675 Rptr & VK2AMW-5 Packet Digi all checked OK.

**6/10/99** – Visited Maddens Plains to re-install 8725 Rptr after being removed due to technical problems encountered on the 11/6/00. (This was when ACA visited the Site to assess the CSR interference to 6850. I personally felt that it was a waste of time, they only confirmed what we already knew. They offered two suggestions – either change off 6850 or put about 15dB of attenuation in our RX line!) Interfaced WIA Broadcast RXer into 8725 for relaying to Goulburn & Canberra.

Then went to Knights Hill for further work on 8225 & UHF Link.

**31/10/00** – 8225's mute locked open after Broadcast. Had to remotely shut the site down till it can be visited (was only there a few weeks before).

**5/11/00** – A visit to Knights Hill found that the DC supply was sitting at 5 volts. Further investigation found that the 20 amp P/S had failed & the back-up battery charger had failed. The eqpmt had, over the last week or so, been operating only on the batteries until the voltage had dropped to far & 8225's RXer mute had failed to close. Why did both the P/S & charger fail? Further investigation found that the 8225's RXer was also very "deaf". Rptr, P/S & charger all removed to the workbench. (Later discovered that there had been a lightning strike at the site a week ago.)

**15/12/99** – After earlier contact with the Maddens Site Owners, met a representative at the site for further investigation of the on-going CSR interference to 6850. His name was Brian & he was an Amateur! With the callsign of VK2YBE. He was very helpful, with lots of ideas & suggestions. We both climbed right to the top of the tower (about 200') for some checks. He offered us an antenna position high up on the tower to get as far away from the intermod interference as possible.

Work on damaged Knights Hill eqpmt progressing. The charger's transformer was open circuit on the primary & the output FET was open circuit. The 20 amp P/S output fuse had blown & the regulator IC had not just blown, but melted into the socket. The two front-end RF amps in 8225's RXer had failed. All in all, a bit of a mess.

**29/1/00** – Major working-bee at Maddens Plains. In attendance were: TRB, TKE, TPH, XBC, AGB, UBF & MT. Work included installing a new 6850 FM-814 Rptr, new 8725 FM-815 Rptr, link to 6675 Rptr, a new eqpmt rack, running 200' of LDF 5-50 to top of tower & the installation of a foiled-dipole for 6850, as far away from the CSR intermod as possible. Checks confirmed that the intermod was FINALLY gone! Unfortunately, had some technical probs with the new 8725 Rptr, so re-installed the FM-828 Rptr.

**11/2/00** – 8225 Rptr, 6975 & 9725 link & P/S reinstalled at Knights Hill, but now find the RX pre-amp has failed. Link to 8725 also installed. However by the afternoon, the Rxed audio level was, for some reason, dropping severely.

**19/2/00** – Went to Knights Hill to investigate the problems. Fixed all probs.

**20/2/00** – 8225 Rptr has failed! Not Rxing or Txing.

**23/2/00** – Another visit to Knights Hill revealed that the centre conductor of the RCA power plug was, although mechanically sound, not making contact from the pin to the riveted solder lug. Amazing, how unlucky... Pin "squashed" & all OK. Unfortunately, we now had CTCSS mutes open spasmodically. Further investigation found that the voltage from the P/S was dropping slightly (about 1 volt) under load causing (for some reason) the mutes to open.

**24/2/00** – 6975 appeared to be off the air. Further investigation found that it was still actually operating, just that the Txer output was VERY low.



Later that day, the Rptr was removed from site & put on the workbench. That night found that one of the variable caps on the output of the 50 watt PA had melted & burned. Cleaned-up & replaced.

**15/3/00** – An e-mail "reflector" is established to pool ideas for the establishment of a brand new duplex UHF link system from the Victorian border thru to maybe Coffs Harbour. One of the biggest VK Amateur projects envisaged. About 25 Rptr Officers & Clubs involved.

**22/3/00** – Went to Maddens & installed the 8725 FM-815 Rptr & retire the old FM-828 Rptr.  
6975 Rptr also re-installed back at Saddleback.

**26/3/00** – All eqpmt at site off the air. A visit to the site revealed that the 30 amp P/S had appeared to fail (it later was found to be working fine). The internal P/S of 6850 & 8725 Rptrs turned on to put them back on the air. 6850 OK, but 8725's Txer promptly failed!

**29/3/00** – Visit to Maddens to investigate 8725's Txer failure. Unable to fix on site, so it was removed & the recently old 8725 Rptr brought out of retirement.  
Worked on 8725 PA stage & found many burnt & melted caps. Worked on the Rptr for many nights, but without success.

**9/4/00** – Went to Knights Hill to try & improve 8225's poor RX sensitivity plus other linking things. Unable to fix 8225 on site, so removed & brought back to the workbench.

8725, 6975 & 6672 all linked (as an experiment) to UHF links thru to Goulburn & Canberra, etc.

**24/4/00** – Went to Knights Hill again to install new 30 amp P/S to help with the link power load (had been some problems due to the extra load from link radios & packet digis).

**29/4/00** – Around Midnight we received some "visitors" at Maddens. They tried accessing other commercial eqpmt, then promptly helped themselves to ours. Stolen were the 8725 Rptr, the VK2AMW-6 digipeater, 30 amp P/S, 2 VHF/UHF duplexers, site DTMF controller & WIA Broadcast RXer plus several connectors & leads. VERY disheartening.....

**30/4/00** – The standby 6850 Rptr installed at Sublime Point, an interim measure as our gear could not be safely secured against possible future re-visits at Maddens.

**3/5/00** – The 6975 link RXer's CTCSS mute opening for long periods for some unknown reason.

Over the next few weeks, eqpmt & donations sent to us from individuals, Clubs & the VK1 Division in support of the Maddens break in.

Lots of late nights spent building new DTMF controller, Broadcast Rxer & other sundry eqpmt, in readiness for Maddens working-bee.

**5/6/00** – All gear removed from site. Still not happy with P/S, 8225 sensitivity & 6975 link CTCSS. Found that in the CTCSS mute problem, the commercial decoder board was voltage sensitive. Mute would close & behave itself at 13.8 volts, but would open at 13.2 volts. The voltage drop on the supply leads was JUST enough to open the mute when all Txers were up. Who would have believed it! Decoder board replaced. Also rebuilt the link interface unit for future linking of 6850/6975/6675 Rptrs.

**11/6/00** – Working-bee at Maddens. In attendance: ZLJ, XBC, UBF, AGB & MT. Reinstalled 6850, diplexer, DTMF controller & Broadcast RXer in a new more secured location. Re-routed heliaxes. Also removed old antenna & feedlines. Rptr working well, lots of use.

**22/6/00** – Visit to Knights Hill to install re-worked interface unit, 6850/6975/6675 link radios, 8225 Rptr & UHF link radio to Goulburn. All installed OK, except 8225 as the 100' Rptr yagi now had bad rectification. (The 200' still had bad VSWR).

The VHF Rptr linking working well. On weekends, our 3 VHF Rptrs are linked to the UHF link system.

**16/7/00** – Maddens Working-bee. In attendance: ZLJ, TPH, XQX, JBS, AGB, MT plus various Harmonics. Installed extra heliax feedlines to our new more secure location. Installed & wired-up 30 amp P/S (which was donated from the VK1 Division) which was in turn connected to 150 AH batteries. Installed two new Packet digipeaters – VK2AMW-3 on 144.700 and VK2AMW-4 on 144.925. (They are also interlinked.). Installed new VHF/UHF Duplexers. Also all wiring for future installation of new 8725 Rptr.

Now as you can see, it's been a very busy 12 months. We are slowly recovering from the Break-In & installations are very much of a "professional" level. I must thank the following for their invaluable assistance: John ZLJ, Phil TPH, Chris XBC, Rod TRB, Brian UBF, Simon XQX, Peter AGB, Ken TKE & Peter BIT. Without your help fellows, none of the above would have been achieved. THANK YOU!!!

Till next time – Rob MT                      Thanks for this Rob.



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VK2RMP	146.850	VOICE	MADDENS PLAINS	
VK2RMP	438.725	VOICE	MADDENS PLAINS	VK2RUW,2RGN
VK2RIS	146.975	VOICE	SADDLEBACK MOUNTIAN	
VK2RUW	29.620	VOICE	KNIGHTS HILL	(OFF AIR)
VK2RUW	438.225	VOICE	KNIGHTS HILL	VK2RGN,VK1RGI

**PAKET RADIO**

VK2AMW-1	144.725	GATEWAY	WOLLONGONG (SOON)
VK2AMW-3	144.825	PAKET	KNIGHTS HILL VK2AMW-4
VK2AWM-4	144.925	PAKET	KNIGHT HILL VK2AMW-3
VK2AMW-5	147.575	PAKET	MT BOYNE
VK2AMW-6	144.700	PAKET	MADDENS PLAINS
VK2AMW-7	147.575	PAKET	MT MURRAY

**SATGATE**

VK2XGJ	144.700	BBS	DAPTO
VK2XGJ	147.575	BBS	DAPTO
VK2XGJ	440.050	BBS (ROSE)	DAPTO
VK2XGJ	53.100	BBS	DAPTO

CLUB MEETINGS HELD 2<sup>ND</sup> TUESDAY OF EVERY MONTH EXCEPT  
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vk2kej John Lawer

**REPEATER COMMITTEE:** Rob Mc Knight VK2MT, John Lodding VK2ZLJ,  
Chris Stevens VK2XBC, Brian Farrar VK2UBF, Simon Ferrie VK2XQX.

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**DISCLAIMER:** All comments are those of the EDITOR and not of any  
committee or club member. All projects are presented as given and if any  
damage is done to your equipment the club is NOT responsible in any way.



## FINAL 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 :.....

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.

### Illawarra Amateur Radio Society Inc.

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

### Nomination form.

I.....

of.....

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** handed in at this meeting.

NO NOMINATIONS FORMS NO A.G.M.

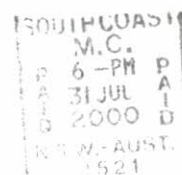


Congratulations, you are just about to read or you have just read the LAST edition of the Propagator that I will be doing.

I hope you have enjoyed these news letters. As much as I have compiling them for you. I hope somebody takes over and does a BETTER job than I did. Let me know what you think of it.

Cheers Brian Farrar VK2UBF out going editor.

HANDLE WITH ENTHUSIASM



IF YOU  
CAN  
YOU'LL



ROB Mc KNIGHT VK2MT  
16 LOMBARD AVE  
FAIRY MEADOW 2519



# THE PROPAGATOR

VK2AMW SINCE 1948

The official newsletter of the Illawarra Amateur Radio Society

If undelivered please return to PO Box 1838 Wollongong 2500.