



GATEWAY

June 2008

NEXT MEETING Friday June 20 2008 at 8 pm

WHERE : Cranbourne Girl Guide Hall, Grant St off Sladen St.

SPEAKER : Phil Pavey VK3YB.

ACHIEVING GOOD REMOTE HF

First licensed in 1982, Phil claims he qualifies as an "old timer".
Callsigns held to date are VK3PMJ, VK5VB and VK3BHN.

He now holds
VK3YB (and
VK3VB).

He is active on all
amateur bands from
160m to 1.2ghz.

Having suffered the
frustration of trying to
operate from motel
rooms Phil will dis-
cuss and demon-
strate two examples
of **remote HF sta-
tions**.

The first is using a purpose built radio, the TS2000.

The second could be adapted to any radio that has a computer
interface (CAT).



Non Financial ex -Members

People who fall into the above category will probably note that they haven't received this edition of the magazine.

This is an Irish hint from the Treasurer!

Chickens and Roads *Continued from page 15*

JOHN KERRY: Although I voted to let the chicken cross the road, I am now against it! It was the wrong road to cross, and I was misled about the chicken's intentions. I am not for it now, and will remain against it.

NANCY GRACE: That chicken crossed the road because he's guilty! You can see it in his eyes and the way he walks.

MARTHA STEWART: No one called me to warn me which way that chicken was going. I had a standing order at the Farmer's Market to sell my eggs when the price dropped to a certain level. No little bird gave me any insider information.

DR SEUSS: Did the chicken cross the road? Did he cross it with a toad? Yes, the chicken crossed the road, but why it crossed I've not been told.

ERNEST HEMINGWAY: To die in the rain. Alone.

GRANDPA: In my day we didn't ask why the chicken crossed the road. Somebody told us the chicken crossed the road, and that was good enough.

BARBARA WALTERS: Isn't that interesting? In a few moments, we will be listening to the chicken tell, for the first time, the heart warming story of how it experienced a serious case of moulting, and went on to accomplish its life long dream of crossing the road.

ARISTOTLE: It is the nature of chickens to cross the road.

JOHN LENNON: Imagine all the chickens in the world crossing roads together, in peace.

BILL GATES: I have just released eChicken2007, which will not only cross roads, but will lay eggs, file your important documents, and balance your cheque book. Internet Explorer is an integral part of the Chicken. This new platform is much more stable and will never cra...#@&&^(C%reboot.

ALBERT EINSTEIN: Did the chicken really cross the road, or did the road move beneath the chicken?

BILL CLINTON: I did not cross the road with that chicken. What is your definition of chicken?

AL GORE: I invented the chicken!

COLONEL SANDERS: Did I miss one?

DICK CHENEY: Where's my gun?

Russ White VK3MWR

The Story of My Electric Car Project

by Geoff Clifton VK3 HGG

Late last year I made a decision to build a road registered electric passenger car, an EV (electric vehicle).

There is nothing new about electric cars as there were more on the roads 100 years ago than today and as recently as 1999, Ford, GMH, Honda and Toyota put thousands of electric cars on the road in California, made by Ford Norway, on lease before abruptly withdrawing them in 2004 because of oil industry pressure, and despite howls of protest by their enthusiastic drivers. (see DVD - "Who Killed the Electric Car").

Both eras, there was a preference for electric cars because they didn't require starting, and were quiet and reliable. The first era petrol took over because it was cheap and easy to store. "Gas stations" grew up everywhere and the electric car died off. Initially my decision to take on this project wasn't just because of rising fuel costs although electric cars are very cheap to run, it was because of its appeal as an interesting project.

However, this month oil reached a record high of \$US135 a barrel. And with increasing demand from China, India and other developing countries, and the advent of "Peak Oil", it will inevitably continue to rise.

An article in *The Age* on 3/06/08 tells how executives at Nissan Japan expect "parallel hybrid" and hydrogen fuel cell technologies to fall short of expectations in favor of plug-in electric cars and Series-type hybrid vehicles using Lithium or other types of high energy density batteries.

Incidentally owners of plug-in electric cars don't call them hybrids!

A "hybrid" is a vehicle that uses two or more forms of propulsion that work in conjunction with each other. Several major motor companies have released "parallel hybrids".

This is where the internal combustion (IC) engine and the electric motor are both directly connected to the drive axle. The main advantage is that braking energy is reclaimed and stored back into the battery pack. The electric motor will also assist in acceleration.

Continued page 5.



GIPPSLAND GATE RADIO & ELECTRONICS CLUB

Club meetings are held on the third Friday of each month at the Cranbourne GirlGuide Hall in Grant Street. Prac nights are held on the first Friday night in the Peter Pavey clubrooms. Both nights commence at 8:00 PM. **Visitors will be made welcome.** Committee meetings are also held in the clubrooms.

President	Ian Jackson	VK3BUF (5625 2545)
Secretary	Phil Pavey	VK3YB (5995 7484)
Treasurer	Albert Hubbard	VK3BQO (5659 6562)
Committee Members: Max VK3TMK, Graeme VK3BXG,		

Magazine Editor: Susan Coleman VK3FXXX

Club Station VK3BJA located in the clubrooms.

6M Repeater **VK3RDD** : Freq. In 52.575, out 53.575 MHz
 70cm Repeater **VK3RLP** Freq. In 434.475, out 439.475MHz
 CTCSS 123Hz IRLP Node Number- **6794** (Using **VK3RLP**)

Call in Frequencies are: HF on 28.325 MHz, USB VHF on 146.225 MHz,
 FM and UHF on 438.850 MHz,

Visit our internet site at: www.ggrec.org.au

Current GGREC Inc. Membership Fee Schedule

Full Member \$37.00, Pensioner Member \$22.00

Junior Member \$22.00, Extra Family Member \$17.00

Fees due after each April Annual General Meeting.

The deadline for articles is the third day of each month.

Please direct magazine correspondence to:
 Susan Coleman email editor@ggrec.org.au

All other Club correspondence to P.O. Box 1098, Cranbourne 3977
 or Email : secretary@ggrec.org.au

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Incorporation Number A0016893M

Cont'd **The Story of My Electric Car Project**

The major *dis*advantage is that these cars still have relatively large petrol guzzling IC engines.

It's been said that the future for hybrids will be the "series-hybrid". In this configuration motors in each wheel are connected directly via a controller to the traction batteries. The wheel motors will provide drive and regenerative braking thus reclaiming energy instead of dissipating it into the air as heat.

This system is effectively all-wheel-drive and will incorporate anti-lock brakes, stability and traction control, and possibly many other smart safety systems that marketing departments will eventually dream up. A very small IC engine running at one speed and tuned to absolute optimum efficiency will provide charge to the traction batteries. It takes only about 20 HP to maintain a small aerodynamic vehicle at highway speed. The reserve power above this is needed for acceleration, driving up hills, towing and smoking up tyres!

I've been playing about with electrically propelled vehicles in different forms over the last few years and although up until now not exactly road vehicles, they helped set the direction towards my current goal.

Starting with my son Tristen's "electric ride-in jeep". The electric system was inadequate, it was burning out switches, wiring, and even went through 3 sets of electric motors. I installed a bank of four good quality automotive relays, two relays switching the motors from series to parallel to give high and low speed (quite a good differential effect in low and limited slip in high!) and another two relays to allow reverse. Heat sinks were made from blocks of aluminum (originally intended for use in experimental mobile phone chassis back in the mid 1980s courtesy of the legendary late Les Jenkins VK3 ZBJ). Thermal switches were fitted to the heat sinks on both drive motors and high temperature GXL copper wire was used to replace the cheap steel strand garbage originally used.

The jeep now runs efficiently and gone are those familiar moments when the kids yell out *"hey dad, the jeep's on fire, and there's smoke coming out!"*

My electric locomotive as seen in a previous issue of this magazine has also been a great success; it will carry 8 or more people and will run all day. It has a ½ HP electric motor, 2 x 12 volt 30AH deep cycle sealed lead acid batteries and a VK3 BUF Alian Electronics SM80 speed controller.

In surfing the internet I discovered the Australian Electric Vehicle Association (AEVA). I became a member and now regularly attend meetings on the second Friday of each month mainly to surround myself with other people who want to build electric cars.

Geoff Clifton VK3 HGG To be continued next month

From the president ... *Ian Jackson VK3BUF*



Have you noticed we are living in the future right now? Well, obviously this statement contradicts itself, but I meant that in the past whenever our future was contemplated in stories and movies, we were given images of exotic flying machines, talking computers, spacecraft and freaky looking building construction projects. Well folks, look around, it happened.

Just last week we had a robot space-

craft touching down on Mars. What's more, there was another spacecraft on hand there to take a picture of it preparing to land. How cool is that!

If you had not already noticed, the 'Google Earth' internet satellite imagery that covers much of the earth just went hi-resolution around Melbourne.

So any pc on the net can now take a flying view of the suburbs. Here's something pretty weird... The satellite actually captured a shot of one of our Club members having a chat in their driveway! Mind you, the imagery is a bit over a year old!

This has spawned a whole generation of people who want to see if their homes can be immortalised from space by writing swear words with lawnmowers. Check out the Club shack from space too. It's good fun.

Even magical machines like Magnetic levitation trains are now a reality and take passengers too and from work at over 500km per hour... Buses powered from carbon nanotube 50,000 farad capacitors can recharge themselves each time they reach a bus stop. I could go on like this for many pages, but suffice to say that there's a lot of good stuff going on out there.

One development I do wish to highlight is the art of using the internet for remote communications control. This Friday night Phil Pavey, VK3YB will be the first



From the president cont'd

to use the Club's amazing new video projector to demonstrate how HF radio can be operated from virtually anywhere in the world using a notebook computer! This is the sort of technology radio that will become increasingly common over the next few years. It opens up a lot of opportunities for people to continue their interests in the hobby from busy cities and other places unfriendly to the large antennas of Amateur Radio.

Last month I posed the question '*What methods can be used to stop birds from damaging antennas?*' Well, Brian VK3NBS takes the invisible prize for his suggestion: *A length of PVC tube placed over elements of a yagi so it will spin when touched, works very well, as the pipe will also spin when a bird grips it, tipping it off. All you need is a lathe to machine up the nylon bushes to fit over the element and inside the PVC. Small plastic ball race bearings can also be used in place of bushes.* Good one, Brian.

Here is another conundrum I would like to hear your ideas about:

If I have a coil of coax of unknown age and condition, how can I check to see if it's still any good to use?

This is a serious problem. If you buy a length of coax from a hamfest sale and are thinking about say threading it through a wall and up the tower for a VHF or UHF run, it would be good to know what to check before wasting any time on it. Send your suggestions to ianjackson@ggrec.net.au soon.

The Club Pub night went down well on the 30th at the Baxter Tavern. There was a small incident when Grahame VK3YCG ordered 3 scoops of ice cream immediately after I ordered bowls of fruit salad. Anyway the waiter at the counter suffered from some kind of 'buffer overrun' and promptly put Grahame's ice cream in my fruit salad and tried to deliver the combination to the table while I still stood at the register.

Meantime Geoff 3ZGW had his cake forgotten entirely. As a result of this memory crash, Geoff had to return to the register and give the waiter a 'reboot'.

See you at the meeting *Ian VK3BUF*

RUSS AND READY

∞ A thief fell and broke his leg in wet cement and
Became a hardened criminal...

∞ The dead batteries were given out free of charge...

∞ If you take a laptop computer for a run you could
Jog your memory.

Russ White VK3MWR

The Guru Say

The Great Gippsland Gate Guru has graciously agreed to provide us with his wonderful words of wireless wisdom.

Watch for more words of The Grand Guru

Mike Ide VK3KTO



HAMFEST LATEST

We need helpers to set up the tables at 7.30am as the doors open to sellers at 8am. Food preparation, cooking and sales usually involves up to 6 people in the kitchen area. Coordinator is Naree Ide. A planning meeting will take place early in June. Staff will be required to attend the doors but with the number of members, I am sure we could work on a rotational basis.

All helpers will be asked to pay the entry fee as buyers. Only those who pay will be eligible to win door prizes. But I am sure the kitchen staff will reward you with a free sausage or burger! Thank you in anticipation.

Albert VK3BQO

YL's RECORD LUNCHEON

A record number of ALARA members and prospective members and OMs, attended the lunch and tour of Moorabbin Airport control tower and radio facilities on Saturday May 31 at the Royal Victorian Aero Club, at the airport. Attendees were able tour the control tower up a breathtaking eight flights of metal ladders to see traffic controllers on the air to a mixture of amateur, small commercial and student pilots. Flying lessons are a mere \$240 per hour including instructor. Next meeting is July 26 in the city, venue to be announced.

Picture, courtesy Alara State Representative Jean Fisher, VK3FJYL, assisted by Maree Vandeligt, VK3FSAT, shows the lunchees meeting the Red Baron.



EVENT	DETAILS
June 06	Friday Prac Night at the Club Shack
June 14	Saturday night Mid Year Dinner at the Tooradin Sports Club (A \$5 deposit must be paid in advance to secure a spot at this dinner)
June 20	3rd Friday General Meeting Phil Pavey, VK3YB will be using the new Club video projector to demonstrate remote operation of HF radio
July 04	Friday Prac Night at the Club Shack
July 18	Shane Clayton to give a talk about putting Solar Power in your home that can feed back to the Power Grid.
July 19	GGREC HAMFEST SALE at Cranbourne
August 16 -17	Remembrance Day Contest weekend

TBA – To Be Announced.

Version 5/06/2008

GGREC Loan Equipment

Members are allowed to borrow certain equipment for limited time use at home. The list of items that can be borrowed has now been limited to items that you would probably not expect every amateur shack to contain. This means that items such as SWR meters, soldering irons and other tools are not on the borrowing list as an amateur would be expected to possess their own equipment of this type. The loan list is as follows: 1 GHz frequency counter, HF Noise Bridge, 2 ATV Transmitters 4 Foxhunt Transmitters and Receivers. **NB** 1. There used to be a **digital capacitance meter** but it seems to have been misplaced - maybe at someone's shack? 2. Got other items you would like on the list? *Albert VK3 BQQ*

PROFILE

Ian Jackson VK3BUF

“ When I was 15 and still on CB, I put an illegal vertically polarised 3-element 11metre beam on mum’s clothesline, at least until a visiting radio inspector wagged his finger at me.”



If Derryn Hinch, a mind-probing space invader, and Tony Fitzgerald QC were all to join forces, they would still be a poor match for the investigative journalism of Susan Coleman, our Gateway magazine editor and seeker of truth. Hence it was with much trepidation when a summons from Susan arrived, requesting details of my shadowy and sordid past. Braced only with the tenuous support of a deep breath and a cup of coffee, my journey under the microscope begins...

When I was 14 I pressed my nose against the glass of a shop that sold 100mw, 27mhz walkie-talkies and thought: “whoa! This is cool! What do I have to do to get my hands on a pair of these?” (No, I was not leering at the gorgeous young woman behind the counter). When I eventually achieved this first radio goal, *other* people’s voices came out of the speaker as well and suddenly the world got a whole lot bigger.

Two years later I had a CB radio and one of these voices from the void was a local bloke in Springvale called Norm Taylor. He was a couple of years older *and* had a car. He’d heard about a radio club that had just started in Dandenong two months earlier, so I scrounged a lift and we checked it out. That was 31 years ago. Hmm..just typing it makes me feel old. It was the GGRC back then. A couple of years were to pass before I convinced them to add the ‘E’. Still pushbike bound, I had figured out how to add extra (illegal) channels to CBs and turned this into a shadowy enterprise. I kept this up until I had earned enough money to purchase a state-of-the-art Yaesu FT101E HF radio to match my new Novice licence. I then quit the CB modifica-

-tion enterprise while I was ahead. This was the moral equivalent of selling seal skins to save money for protecting whales. I still have this radio today, which has lasted longer than most whales have!

When I was 15 and still in High School, I passed the entrance exams into Telecom Australia as a telephone tech, but I had to wait until I turned 16 before they could employ me. When they did, the basic electrical training dovetailed quite nicely with my radio exam quest. I took the callsign VK3NMQ in 1977. It was around then that I met David Campbell, another apprentice (now VK3XMF), but it took a while yet to make him a convert into the diverse and mildly alcoholic realms of Amateur Radio.

Within a year of the Novice call, I acquired the extra limited call of VK3YRC as well. (different call signs for different bands were common) The full-theory exams were all in written form back then. Six months later I did my 10 words-per-minute Morse Code and cashed both call-signs in for the VK3BUF full license. The old P&T department were up to the VK3BU's by then and gave me a choice of either F or G as the last letter. Unclothed or insectoid? What a difficult decision it was.

I only joined one club, honestly. But it's ok, I didn't inhale.

What aerials/towers did I build, ahhh, this is a leading question. When I was 15 and still on CB, I put an illegal vertically polarised 3-element 11metre beam on mum's clothesline, at least until a visiting radio Inspector wagged his finger at me. A year later, armed with a fresh Novice licence I constructed a cubical quad antenna, with 3 elements on 15 metres and 4 elements on 10 metres. Fabricated from plastic coated curtain rod and ex-Telecom wax lacing twine, this concoction occupied about the same spatial volume as a shipping container. It was about 10 metres up on a guyed bit of 1 inch water pipe and had an 8 metre boom. (anything worth doing is worth overdoing) I rotated it with a very small and unhappy Tandy TV rotator.

What can I say? The wind blew and the pipe became something other than straight. I needed a *real* tower, but on \$68 per week as a first-year apprentice, the numbers were against me. But with the help of a local radio friend, Andrew Wilson, I scrounged new and used steel and fabricated a Nally Tower clone. This was my first welding experience.

Continued over

From previous page **PROFILE** Ian Jackson

(I bartered the big tilt-over pole for a slab of beer from a scrap merchant.) I could only paint the tower at this time as galvanising was prohibitive, but 15 years later Doug VK3KMN helped me out with that little problem. Two moves later, the same tower is still in the air today, a few metres from where I now sit.

Well, as a Novice, 10, 15 and 80M was our lot. I could reach all these bands with my trusty Yaesu 101E. When I gained the Limited ticket I added the ubiquitous Icom IC22S to the pile for 2 Metres and put both under the dashboard of the newly acquired 1000cc Mini. This was the high-power version of the brick with the luxury wind-up windows, not the crappy 850cc version. The car had no heater! I had to run carrier somewhere on 80M and use the fan on the back of the rig to warm my feet. (The car was \$100 cheaper than the radio!) Yes Megan, if you're reading this, the 2M rig is the very same 22S you have now!

Umm...I still use the same 101E, which I guess is a sort of favourite. After my 4WD trips I take it to petrol stations and blow all the dirt out with compressed air before putting it back on the bench. Nothing but



the best for this radio. I don't think I could sell it now. It would be like the Louvre throwing out the Mona Lisa because it was too old.

I don't have any favourite aerials. They're all just bits of wire and aluminium really. It is the idea of antennas that I

find attractive. Standing in the yard looking up at them the way Daryl Kerrigan of 'The Castle' looks up at power lines, is a constant reminder of man's ability to generate electricity. Is there a self-help group for this sort of affliction?

Cont'd opposite page

From page opposite **PROFILE** Ian Jackson

My favourite frequency is 146.225MHz of course, although it's not the sort of thing you can hammer a flag into to claim it as your own. Dave Game VK3BJV and myself picked it back in 1980 after some amateurs kicked us off the old 'Channel A' frequency because they wanted to use it for satellites. For us, soldering a fresh cluster of diodes into the 22S for frequency selection was pretty much a declaration of occupancy. Back then I had an old MTR13 on 2 metres as well. This was a 12V, valve based taxi radio: 9 Amps transmit, 7 Amps receive and all the inverter whine you could hope for. Wonderful. The last time I used this rig was to hold up one end of the tower while I painted it.

I'm sure you have a window at home you look out of to see what's going on outside. The 2 metre rig is like that window. You turn it on to see what's going on. You turn it off when you've seen enough. I don't believe that Amateur Radio is much of an end in itself. It's when using it in conjunction with other activities that it really shines. For me, it's at its best when using it with travel, where it takes on the role of a sixth sense (the ability to know what's happening somewhere else).

I don't sell or get rid of anything unless it breaks or my original reasons for getting it have changed. I once installed a phone in a cage full of red back spiders. In high school I memorised Pi to 28 places because my maths teacher had a heart attack and I got bored. I can't touch my nose with my tongue. I had cats named RTTY and ASCII, but they both eventually got squashed by cars. I can remember the details of about 2000 SciFi books I have, but I forget peoples names about one minute after introductions. I don't like watching sport or competition because I could never care less if Team A defeats Team B. Watching cricket is more boring than watching a dollop of 8-hour Araldite go hard. (*Go epoxy Go!, Yeah, lets have a Mexican wave as we add Part A to Part B*) I once wired a 300V variac to an aluminium cat flap as a (surprisingly effective) deterrent for my neighbour's cat. I drive an old Mitsubishi van which keeps avoiding destruction despite my best efforts. I have discovered that Whiskey and Creamy Soda are a great mixer. When I sit in front of a keyboard to type stuff, I don't know when to stop, except at this time of night, 11.24 pm, I'll make an exception. *Ian VK3BUF*

RUSS's Why did the chicken cross the road?

BARACK OBAMA:

The chicken crossed the road because it was time for a change! The chicken wanted change!

JOHN MC CAIN:

My friends, that chicken crossed the road because he recognized the need to engage in cooperation and dialogue with all the chickens on the other side of the road.

HILLARY CLINTON:

When I was First Lady, I personally helped that little chicken to cross the road. This experience makes me uniquely qualified to ensure -- right from Day One! -- that every chicken in this country gets the chance it deserves to cross the road. But then, this really isn't about me.....

DR. PHIL:

The problem we have here is that this chicken won't realize that he must first deal with the problem on 'this' side of the road before it goes after the problem on the 'other side' of the road. What we need to do is help him realize how stupid he's acting by not taking on his 'current' problems before adding 'new' problems.

OPRAH:

Well, I understand that the chicken is having problems, which is why he wants to cross this road so bad. So instead of having the chicken learn from his mistakes and take falls, which is a part of life, I'm going to give this chicken a car so that he can just drive across the road and not live his life like the rest of the chickens.

GEORGE W. BUSH:

We don't really care why the chicken crossed the road. We just want to know if the chicken is on our side of the road, or not. The chicken is either against us, or for us. There is no middle ground here.

COLIN POWELL:

Now to the left of the screen, you can clearly see the satellite image of the chicken crossing the road...

CNN spokesperson

We have reason to believe there is a chicken, but we have not yet been allowed to have access to the other side of the road. *Cont'd page 2*

GENERAL MEETING MINUTES MAY 2008

Date: 16th May 2008

Start time: 08:00 PM.

Location: Guide Hall Cranbourne.

Chairperson: Ian Jackson VK3BUF

Minute Taker: Graeme Brown VK3BXG

Present: See attendance sheet

Visitors and Guests: Henry

Apologies: Phil VK3YB, Helmut VK3DHI & Dorothy, Ron VK3EXJ & Judy, David Wright VK3FW, Graham Brennan VK3KCS, Stephen VK3EGD & Maria Harding

Correspondence Received:

Famparc News

Correspondence Sent:

Nil

Treasurer's Report: as tabled. Read by Albert VK3BQO Moved Albert VK3BQO

Income: \$ 1244.00 Expenditure \$ 562.60 Balance \$ 710.04

Moved Ian VK3BUF, Seconded Russ VK3MWR, Accepted

Previous Minutes: As printed in the Magazine.

New Call Signs Nil

Business Arising from Previous Minutes:

Albert VK3BQO moved that the financial report as per previous meeting be accepted.

Seconded : Henry VK3FHTV Carried

Video Projector - Ian requested approval for \$1700 towards a better model of projector – a Toshiba

Moved by Albert VK3BQO, Seconded by Geoff VK3HGG. Carried

Foundation course - cancelled due to lack of interest

Mid Year Dinner - Reminder 14th June

New Business:

A laminated map of Victoria purchased for the shack.

Foxhunt Day deemed a great success on trial. Club can now purchase 4 units (4 x transmitters and 4 x receivers for foxhunting type events. The other 3 sets may be sold individually

Ian moved that the club spend \$520 to purchase the units. Seconded by Bruno VK3BFT. Carried.

Hamfest Sale. Need a food handler for the day. Vendor tables going fast.

Ideas needed for field visits ie places of interest to visit.

Pub Night Friday 30th May at Baxter Tavern

Donations to the club must be arranged formally through a committee member first.

Brian to display pneumatic telescopic mast.

Membership fees now due.

Meeting Closed at around 8.30pm.

Next Committee Meeting: May 26 **Next Prac Night :** June 6

Next General Meeting : June 20

GGREC
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CRANBOURNE
3977