

## Gippsland Gate Radio and Electronics Club Inc. Club Meetings are held on the third Friday of each month at the Cranbourne Girl Guide Hall in Grant Street.

The doors open at 8:15 PM \& the meeting commences at 8:30 PM.
Visitors are most welcome.
Committee Members 1996/1997

| President | lan Jackson |  |
| :--- | :--- | :--- |
| Secretary | lvan Blezard | VK3ARV |
| Treasurer | Paul Ash | VK3HSA |
| Event Queue Co-ord. | Helmut Inhoven | VK3DHI |
| Social Co-ordinator | Reg Goddard | VK3JRG |

Magazine Editors \& David Campbell VK3XMF
Printing and Dispatch Cathie West Ph. (03) 97896401 Deadlines for articles is Thursday week prior to the Meeting.

Club Station VK3BJA Located at the Guide Hall Club Repeater VK3RDD Freq. in 52.575 , out 53.575 Mhz Call in Freqs. are HF on 28.325 Mhz , USB
VHF on 146.225 Mhz , FM and UHF on 438.850 Mhz , FM

## Current GGREC Inc Membership Fee Schedule

Full Member $\$ 25.00$, Pensioner Member $\$ 12.50$
Junior Member \$12.50, Extra Family Member \$7.50
Fees due after each April Annual General Meeting.

## Notes From The Editor

Thanks this month go to lan VK3BUF for part 3 of his Star Trek short story which leaves us with only next month for the exciting conclusion. Thanks also to Helmut once again for preparing the Event Queue, Propagation Report and Contest Calendar.

Once again if you have any items of interest you would like to see published in your club magazine please post on $3.5^{\text {" }}$ disk preferably, or fax or phone them through to me at least a week before the general meeting.

As we mentioned last month Ron VK3EXJ and Judy have left on an extended trip north, so you might like to give them a call. Crank up your HF rig on a Tuesday or Thursday night at 8:00 PM on about 3.610 Mhz . I'm sure they would be pleased to hear from any of the Club members.

Ctrl/AIt/Del.... David VK3XMF and Cathie

## THE PRESIDENTS REPORT

Last week one of the kids looked up from the telly to ask 'Hey Dad, did Mc Donalds invent the Olympic Games?' I was appalled but not surprised. Sometimes it seems that history is not so much being re-written as ignored. It is fine that we embrace new lifestyles and technologies, but surely it is equally important that the past is not forgotten. The art and theory of rigging a sailing ship or manufacturing a steam loco, in its own way is no less complex than modern electronics that surrounds us. One of the most interesting features of old technologies is that within them lies many concepts that have modern applications. Amateur Radio is one such technology. If you can, have a good lo' at some of the 'electrical' manuals from earlier this century, you will be suipilised at the depth of knowledge that existed then. Like the Olympics, just because it looks new, it doesn't mean that its foundation hasn't been there for a long long time.

Back to the Radio Club scene and you will notice from the event queue that some interesting items are afoot. We are about to embark on a series of educational sessions on computer topics. We plan to have a number of speakers over the next few months, but I will be setting the ball rolling with an introduction to MS DOS this coming meeting night.

Our White Elephant Sale is coming up fast, If you would like to set up a stall, then ring me to reserve a table. If you only have a couple of things to sell, then bring them along anyway, the Club will have a table of its own available to members.

Another little item of news that has surfaced this week is the break in that took place at the Guide Hall on Tuesday night. Some kids pried open the main door, and all the other doors within, including our Club rack. Apparently nothing has been taken, but there will be a bit of work to repair some lock mechanisms. Th ther buildings nearby were also raided on the same night. It seems that if they did not find cash, then they were not interested in taking anything else.

This Friday night will consist of a brief general meeting followed by the first of our computer training sessions, 'An introduction to MS DOS', with myself in the hot seat. Before long we will be printing a timetable for a number of these sorts of lectures.

See you there.

## EVENT - QUEUE

Prepared by Helmut VK3DHI

| Friday | 19.07 .96 | O8.15 pm Club Meeting <br> Talk on the FT 2400 by Mike, VK3KTO. |
| :--- | :--- | :--- |
|  |  | Talk on MSDOS by lan VK3BUF. |
| Saturday | 20.07 .96 | O7.30 am GGREC WHITE ELEPHANT SALE |


| Friday | 02.08 .96 | 08.15 pm |
| :--- | :--- | :--- |
|  |  | Talk on Windows 95. |
| Tuesday | 09.08 .96 | 08.00 pm Committee Meeting |
| Friday | 16.08 .96 | 08.15 pm Club Meeting |
|  |  | Talk on Word for Windows. |


| Friday | 06.09 .96 | 08.15 pm <br> Talk on the Internet. |
| :--- | :--- | :--- |
| Tuesday | 09.09 .96 | 08.00 pm Committee Meeting |
| Friday | 20.09 .96 | 08.15 pm Club Meeting |
|  |  | Talk on PC handware. |

THE GGREC WHITE ELEPHANT SALE WILL BE HELD ON 20.07.96 AT: GIRLS GUIDE HALL, GRANT STREET, CRANBOURNE MELWAY RE. 133 J6
CHARGES: FULL TRESTLE $\$ 8.00$
HALF TRESTLE \$4.00
ENTRANCE FEE $\$ 2.00$
SELLERS ADMITTED 7:30AM BUYERS ADMITTED 9:00AM

## MSDOS EXPLAINED

this Friday 19 July 1996 at the Club rooms
lan UK3BUF will talk about the ins and outs of the Microsoft Disk Operating System.
Watch as he trashes his new Notebook computer.
Marvel at how he deletes whole programs with a single key stroke. Don't miss it !


# Personality Profile Page <br> Full Name? <br> Patricia Pacey <br> Call Sign? <br> VK3OZ 

Age?
Still young enough!
When did you first join GGREC ?
Just before the Flinders Ranges Trip.
What do you like about Amateur Radio ?
Overseas contacts.
What's your favourite band ?
17 metres.
What type of antennas do you have ?
A G5RV, a 6 element Log Periodic, a Ringo \& a 2 metre Quad.
How tall is your radio tower ?
About 30 feet.
What do you do for a job ?
As well as managing the home, I provide Home Care for the disabled, new mums, elderly and hospital outpatients.

Where do you do it ?
Tooradin, Canons Creek, Clyde \& Cranbourne areas.
What was your first amateur rig ? TS830F
What made you become involved in Amateur Radio? If you can't beat them, join them!
What's your favourite fast food ?
I can't come up with anything. (sic) What's your favourite drink ?

White Coffee
What's the most unusual CW contact you've made?
Roast meat envy by a baked beans eater.
As a child what did you want to be when you grew up ?
A wife and a mother.
What does your family think of Amateur Radio?
The youngest isn't keen on the CW tones.
What rig would you buy if I gave you $\$ 10,000.00$ ?
Yaesu 1000 MP (I'll have two as they're only $\$ 4,500.00$ ).
What do you do when you lose your kayak paddle in the middle of
Westernport Bay?
Send SOS in CW with your hand on the side of the boat!

## THE DX ‘ERS OF AMALFI - Part 3 A STAR TREK short story by lan Jackson VK3BUF

Captain Piccard and his officers materialised on a broad path that lead from the city to the adjacent forest. The path was lined on either side with townspeople who had come out to see the annual spectacle of The Hunt. They silently waved small pendants each bearing the national symbol, the four element beam antenna. As official guests of the state, they were escorted down the path to a large rotunda by the local militia in their full dress regalia and enormous peaked caps. Commander Data carried the Language translator, which would occasionally erupt with snippets of conversation from the spectators as they quietly transmitted among themselves.
'God! these visitors/aliens are ugly/low-gain.' That pale faced one looks kind of cute/strong output.'

Captain Piccard tired of the comments. Turn that thing off Data, save it for when we meet the President, er.. "Fred".
They were lead up the broad steps of the rotunda where the President and his aide "Joe" awaited them. Each of the officers from the Enterprise were introduced in turn and took a seat overlooking the forest. A bank of video monitors showed other action around the rotunda, evidently linked to cameras carried by servants.

Joe turned to the guests and began to describe the proceedings. We have selected four fox-beast/quarry from our kennels, each renowned for its stamina and loud voice/strong signal. Like all beings on our world, these beasts talk to each other on a frequency unique to their species that we are able to detect. Ten of our nations finest trackers have come/assembled here today to track these animals through the forest. Each tracker carries a four element beam-spear equipped with a meter to show their proximily to the beasts as they communicate with each other. There is much prestige/gain to be had by the tracker who can return with the head of a foxbeast on his antenna. If the animal reaches the clearing at the far side of the forest then it is permitted to go free.'

The monitors showed increased activity of the terrified fox-beasts in their cages and of the trackers sharpening their spears and calibrating their signal strength meters. The President gestured to Joe with some silent dialogue. He had been observing the guests with a keen interest. Joe returned to Captain Piccard and the translator box spoke. 'President Fred wonders how skilful the officers of your Federation are under pressure. He insists that one of your people join the hunt.'

Piccard nodded thoughtfully and locked eyes with Commander Riker. Riker was aghast 'Captain, Sir, you can't be serious. This practice is barbaric!'

I agree wholeheartedly number one.' He replied. 'But it must be done if we are to maintain face with these people.' He turned to his security chief. 'Lieutenant Worf, you are no doubt the most qualified for this task.'

Joe, listening to the translation, interrupted. 'No! President Fred has already made a selection/choice.' He pointed to their Engineer, Geordi. He is curlous about this one and that strange appliance/equipment he wears over his eyes.'

You mean his VISOR unit.' Piccard replied. It is simply an electronic device to replace his normal vision which was lost many years ago. Geordi, how do you feel about this?'

Ahh....sir | agree with you, the practice is barbaric but I am willing to give it a try. I doubt that I would catch anything, but we would loose considerable face for the Federation if we were to refuse.'
'Very well then.' Captain Piccard turned to Joe and spoke to the translator box. 'My officer accepts the challenge, he will go with you now.'

Geordi was lead to the preparation area. He was supplied with a helmet on which was mounted a camera unit, so that millions of Amalfi citizens could watch the event. Also provided was a compact four element beam antenna and signal strength indicator prefunned to the natural broadcast frequency of foxbeasts. At the head of the hand held antenna was a wicked looking triangular bayonet, the tip bearing the stains of previous encounters.

An amber flag was dropped, the lid of four electrostatically shielded cages were lifted. Four creatures shyly looked about and bolted for the undergrowth. Geordi was surprised at the similarity of these foxbeasts to their Terran counterparts, they bore the same pointed snout, but the bony dipole embedded in their forehead was distinct. It glowed brightly in brief pulses as the electromagnetic radiation was detected by his VISOR unit. He watched the trackers hold their antennas low and pan around for signals. Two minutes passed and a violet flag was dropped. The trackers leapt up as one and silently followed the signals into the bush. Geordi assumed this to be the start signal and trotted after them.

The forest was dense with undergrowth, but he moved quickly. He recalled some training he had at the Academy on the pursuit of enemy spacecraft. Triangulation of an enemy by taking multiple bearings was a luxury during pursuit situations, when in a single craft it was always far more prudent to move fast and chase their exhaust signature. He used this method now by following the strongest signals on the meter. After a while he noticed that he had passed to the far side of the forrest and was adjacent to the cleared corridor that marked the freedom line for the beasts.

He heard some commotion nearby and watched as a group of five trackers closed in on two of the beasts from all sides. He saw a bright flash of radio energy as one of the creatures met its demise on the end of an antenna. The other made a break between the trackers and darted for freedom. Geordl was startled as the creature ran towards him. It spied him and stopped mere metres away, quivering and panting for breath. Suddenly Geordi had lost all taste for this travesty of gamesmanship. He slowly lowered his weapon to the ground, the animal followed his motions. It briefly stared straight at him, then darted past his legs for the freedom that lay beyond the clearing.

The trackers walked over with venom in their eyes. One by one they lifted their antenna-spears and pointed them at his waist. His communicator badge chirped loudly. Captain Piccards voice broke the silence. 'All hell has broken loose over here, they all saw you let the animal go and they're hopping mad!' There was a pause for a moment. 'I've just been told that as a matter of ancient Amalif law that you must fake its place...' another pause. This is preposterous!... They want to strap a transmitter to you and cast you into the forrest.'

Suddenly Geordi felt very much alone.
Final episode - next month.



COMTEST CALEMDER


## 19/20. AUGUST

 19/20. AUGUST 02;03. SEPTEMBER3. SEPTEMEER
4. SEPTEMBER

09/10. SEPTEMBER 16/17. SEPTEMBER 23/24. SEPTEMBER 23/24. SEPTEMBEA

SAENET SSB DX CONTEST
KEYMAN'S CLUB OF JAPAN CW
ALL ASIA DX PHONE CONTEST
BULGARIAN DX CONTEST
PANAMA ANNIVEASARY CONTEST
WORKED ALL EUROPE PHONE CONTEST
SAC DXCW CONTEST
SAC DX PHONE CONTEST
CO WW RTTY DX CONTEST

## BREAN TEAERRE?

What is the speed of light in metres per second?
What are the frequencies (in megahertz) of the following parts of the radio spectrum - VLF, LF, MF, HF, VHF, UHF, SHF?
As the frequency of a radio wave increases, is the physical size of the antenna likely to become larger or smaller?
How many cycles per second (hertz) are there in - one kilohertz, one megahertz, one gigahertz?
Which commercial television stations are closest to these amateur bands - six metre band, two metre band?
Name three different types of conductor?

- me three different types of insulator?

Ivame three different types of resistor?
How many ohms in $4.7 \mathrm{~K}, 5.6 \mathrm{M}, 390 \mathrm{~K}$ ?
How many 1 K resistors in parallel would it take to make a 50 Ohm dummy load?
When using jumper leads to jump start a car, why does it sometimes help if two sets of leads are used in parallel?
What is the total resistance of $4.7 \mathrm{~K} \& 220 \mathrm{~K} \& 39$ Ohms all in series?
What is the total resistance of $10 \mathrm{~K} \& 10 \mathrm{~K} \& 10 \mathrm{~K}$ all in parallel?
What is the total resistance of $100 \mathrm{~K} \& 100 \mathrm{~K}$ both in series and in parallel with $100 \mathrm{~K} \& 100 \mathrm{~K}$ both in series?
To measure the current flow in a circuit you would use: (a) an ammeter, (b) an ohmmeter, (c) a voltmeter, or (d) a power meter?
An electric soldering iron draws 500 milliamperes from a 240 volt supply. The resistance of the iron's element is: (a) 4.8 ohms, (b) 48 ohms, (c) 480 ohms, or (d) 4,800 ohms?
Which of the following formulae could be used to find the resistance of a circuit when only the power, voltage and current is known? (a) $\mathrm{E} 2 \times \mathrm{I}$, (b) $\mathrm{P} \times \mathrm{I}$, (c) $\mid \times \mathrm{E}$, or (d) $\mathrm{E} / \mathrm{I}$.
When a current of 20 milliamperes flows through a resistance of 50 ohms, the vnitage drop across the resistor will be: (a) 100 millivolts, (b) 10 millivolts, (c) 10 s, or (d) 1 volt?
What is the main difference between primary and secondary cells?
What is the total voltage of a five cell battery if all the cells are: (a) dry cells, (b) lead acid cells, or (c) rechargeable Nickel-cadmium cells?
With a 20 volt A.C. sine wave, what is the: (a) peak to peak voltage, (b) peak voltage, (c) average voltage, and (d) RMS voltage?

How long (in milliseconds) would it take for a 50 Hz A.C. signal to complete one cycle?

When measuring a 50 Hz A.C. voltage with a multimeter, will the meter display: (a) peak voltage, (b) RMS voltage, (c) peak to peak voltage, (d) average voltage, (e) D.C. component, or (f) smoke?

## gawlis PLOWIIP BLOW'IP

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## GENERAL MEETING 21 June 1996

Meeting Commenced 20.45 .
Chairman: lan, VK3BUF.
Minuter Taker: Ivan, VK3ARV.
Present: As per attendance sheet.
Visitors: VK3PIV.
Apologies: Peter VK3KCW, Cathie, Noel Brennan, Scott.
Correspondence: Nil
Treasurers Report: Not tabled.
Previous Minutes: Circulated in Monthly Magazine.
New Call Signs: Nil
${ }^{-}$'siness Arising from Previous Minutes:

## General Business:

Video Adaptor: lan VK3BUF moved to purchase a video adaptor, seconded by Reg VK3JRG. Passed. Robin VK3TFA is looking in to prices regarding video adaptor. Doug VK3KMN to bring to next meeting more items in relation to video adaptor.
Re: Ron VK3EXJ trip - contacts can be made on 80 metres Tuesday and Thursday evenings 20.00 hours approx., also on travellers net during the day. Guest Speaker: Mike VK3KTO will deliver a rig talk on FT2400 2 metres at the July meeting.
Next Meeting: 19th July 1996 Meeting Closed: 21.20.

## RADIO HISTORY - According to Grolier. Early Experimenters

The principles of radio had been demonstrated in the early 1800s by such scientists as Michael FARADAY and Joseph HENRY. They had individually developed the theory that a current flowing in one wire could induce (produce) a current in another wire that was not physically nected to the first.
rians Christian OERSTED had shown in 1820 that a current flowing in a wire sets up a magnetic field around the wire. If the current is made to change and, in particular, made to alternate (flow back and forth), the building up and collapsing of the associated magnetic field induces a current in another conductor placed in this changing magnetic field. This principle of ELECTROMAGNETIC INDUCTION is well known in the application of the TRANSFORMER, where an iron core is used to link the magnetic field of the first wire or coil with a secondary coil. By this means voltages can be stepped up or down in value. This process is usually carried out at low frequencies of 50 or 60 Hz (Hertz, or cycles per second). Radio waves, on the other hand, consist of frequencies between 30 kHz and $300 \mathrm{GHz}(1 \mathrm{GHz}=1$ billion Hz ).

