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Press any key to continue August 1996

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	VK3BUF
Secretary	Ivan Blezard	VK3ARV
Treasurer	Paul Ash	VK3HSA
Event Queue Co-ord.	Helmut Inhoven	VK3DHI
Social Co-ordinator	Reg Goddard	VK3UK

Magazine Editors & David Campbell VK3XMF
Printing and Dispatch Cathie West Ph. (03) 9789 6401
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

Welcome home Dorothy! I bet you are glad to be back to easy going Melbourne after the hustle and bustle of Europe. The next time I'm in a traffic jam I'll think my self lucky. Compared to the one's you described the happen in Germany, ours don't even rate!

As editors we would like to thank Ian VK3BUF for part 4, the final part, of his Star Trek short story. It has an interesting twist to finish off an intriguing and unusual tale. (Hey! we'll publish anything here, so have a go!)

If you have any items of interest you would like to see published in your club magazine please post on 3.5" disk preferably, or fax or phone them through to me at least a week before the general meeting.

See you on the Clipboard... David & Cathie

STOP PRESS: Helmut VK3DHI has been in hospital after injuring his arm in a workplace accident. We wish you a speedy recovery, Helmut.

A WORD FROM THE PRES.

There are so many things happening this month that I don't know where to start, so I will start this months report by saying that I don't know where to start. Firstly (or perhaps secondly), I congratulate Reg, formerly VK3JRG on his successful attempt at getting his full license. Reg's name badge now bears the call VK3UK (Ubiquitous Klingon). Well Done.

The next time you come across some really funny jokes, save them up for when you next see Peter VK3KCW. He cracked some ribs last weekend while skiing with Scouts at mount Hotham. He says it only hurts when he laughs.

Our radio classes are coming along well, we have just completed week fifteen, receivers and all that stuff. With some help from Mike VK3KTO, I have contacted Barry Wilton of the W.I.A. and we are organising some exams to be held at the end of the course. I have applied for an exam accreditation, so that with the help of another examiner we shall be able to conduct exams for the GGREC from time to time. This would be done mostly in conjunction with classes that we run.

The computer training sessions have been coming along well so far, Last Prac Night we had Robin VK3TFA giving us a bit of an introduction to Windows '95. Although appearing to be easy and simple on the surface, it seems to be something of a labyrinth. A bit like scratching away at a beehive with a nail file, the deeper you dig, the more honey you find, but occasionally you get stung by an angry bee.

This Friday night Peter VK3VB will be doing a rig review for us, followed by Dave VK3XMF, who will be revealing the secrets of that fabulous wordprocessor program, Word for Windows.

- It shood tel us
- how two use all of the spel
- chequing fasiliteez and sum of the
 - fansee grafic opshuns.

Reg has received some information regarding the proposed trip to Moonee Valley for a Trots night in the near future. There appears to be two options. One where we pay \$17-18 after the \$10 entrance fee and have a sit down dinner in the lounge area, where regrettably there is no direct viewing of the track, and a second option is where we pay \$38 per head and dine at one of the elevated lounge 'inner circle' areas with direct track viewing facilities.

We shall briefly bring up this issue this Friday night so that a final decision can be made.

PS. If you have any old fossilised Thesaurus bones at home, bring them along for Dave.

EVENT - QUEUE

Friday	16.08.96		Club Meeting	
		Talk on HF rig by Peter VK3VB.		
		Talk on Word for Windows by David VK3XMF.		
Sunday	18.08.96	Working Bee at the Hall.		
	24.08.96	Social Night at Moonee Valley Races or Seaford Hotel		
Outurday	24.00.00	- to be announced.		
		- to be ann	iouncea.	
Friday	06.09.96	08.15 pm	Talk on the Internet - to be confirmed.	
		•		
Monday	09.09.96	08.00 pm	Committee Meeting	
Saturday	14.09.96	07.00 pm	Dinner and Cinema night in Dandenong.	
Friday	20.09.96	08.15 pm	Talk on PC hardware.	
•		·		
Tuesday	07.10.96	08.00 pm	Committee Meeting	
Saturday	12.10.96	•	Yarra River Cruise.	
Friday	18,10,96	•	Club Meeting	

RIG TALK this Friday 16 August 1996 at the Club rooms

Peter UK3UB will talk about his new multi-mode transceiver. Its an Alinco DX70, 100 watt HF and 10 watt 6 metre rig with removable control head.

(ED... I'm first in line to borrow this rig!)

MSWORD for Windows EXPLORED. this Friday 16 August 1996 at the Club rooms

David UK3XMF will talk about the ins and dels
of Word for Windows version 6.

Join the learning curve - come and see how to use this word
processor like you've never used it before
(and probably won't ever want to again).

White Elephant was a Golden Success

This year's GGREC White Elephant Day was a great success taking a total of \$441.95. Expenses came to \$256.20 leaving the Club with a nett profit of \$185.75. Thanks must be given to President Ian for all his organisational skills leading up to the event as well as coordinating on the day. Paul VK3HSA and Dianne did a bonza job raking in all the moola on the door while snags were sizzled successfully by the ever willing efforts of Reg VK3UK, Jenny, Helmut VK3DHI and Ivan VK3ARV. Colin VK3HR also lent a hand in the thankless task of cleaning up. We were able to attract a lot more people through the door this year despite the inclement weather conditions. This has surely increased the Club's profile in amateur circles. Nell done everyone!

Cathie

New Call. At Last...!!

Reg VK3JRG has finally relinquished the aforementioned call sign after successfully passing his 10 wpm and of course is now a full call. There is the mandatory couple of weeks before the new call is allocated but by the time you read this we will have all heard what that is many times, no doubt.

Congratulations Reg, a job well done.

Ivan VK3ARV.

Ed. Reg can now be contacted under the callsign of VK3UK. Congratulations!

Social Night

Saturday 24th August 1996

Escape the telly and meet your fellow Club members for a meal, a drink and a chat.

Be at this Friday's meeting to learn the location of this not to be missed evening.

Cinema Evening

Saturday 14th September 1996

This will consist of a dinner at Sizzlers in Dandenong then on to the cinema complex afterwards.

Be at Sizzlers by 7:00 PM.

THE DX 'ERS OF AMALFI - Part 4 A STAR TREK short story by Ian Jackson VK3BUF

eordi, the chief engineer of the Enterprise felt the mud squish under his knee caps as he knelt in the moist undergrowth, his chest heaving as he drew in each raspy breath. Although nearly exhausted, he realised that he could not rest for long as his pursuers, the finest trackers of Amalfi 4, were not far behind. It had been mere hours before, during the course of the foxbeast hunt that he had unknowingly violated one of the prime tenets of the Hunt by allowing the foxbeast to escape. Thus he had been ordered to take the beasts place and become the hunted.

Despite strong protest from Captain Piccard they stripped him to the waist and attached a transmitter device to the small of his back. They insisted that he retain the camera helmet so that the world might view his demise on broadcast television, Because of the local laws it was not possible for the Captain to just withdraw him to the safety of the Enterprise, not unless he wanted to be the instigator of war between the Amalfi and the Federation. The Captain and officers had soberly shook his hand in turn and stepped back to the viewing pavilion. When Lieutenant Riker shook his hand, he had felt the weight of a hard object pressed into his palm. Without looking at it he recognised it as a Comm badge which he quickly slipped into concealment under a broad waist band. Next Captain Piccard had looked him straight in the eye and said 'Put on a good show Geordi, a great deal depends upon it. He knew then that he was part of a plan.

Geordi heard some branches crashing with movement some distance away. He had

advantaae some had been born into radio

They were careless chased him. He bolted rest and undergrowth.

between him and terrain was foxbeast recent him into a new provided few а He burst through



over the natives who the silent world of communications.

about noises as they rose from his place of further into placing more distance his pursuers. The different to that of the hunt, they had steered direction. minutes head start.

the leafy vegetation

and found himself on the edge of a large reservoir. Not too far away a rocky curved wall stretched across the man made face of the dam for nearly one thousand metres. He was sorely tempted to make a dash along the open dam wall to the far side of the reservoir. but knew that they would expect him to try this. Instead he went to the waters edge and worked his way across a rock face that dropped to wet shale lapped by choppy waves.

As a starship engineer Geordi was familiar with the foibles of electromagnetic radiation. He knew that he could confuse his pursuers who would be tracking his radio signature. He worked his way around the shoreline under the overhanging grassline of the high water mark. After some five hundred metres he found what he was looking for, a narrow cove that dipped into the shoreline which would help shield his radiated signal by the sheer mass of earth around him. Above his head loomed a near vertical cliff face studded with protruding trees and grasses. He began to climb.

Like the quarry mere minutes before, the trackers emerged onto the shore of the reservoir, pausing to straighten the elements of their beam antennas that had been bent misshapen by the shrubbery. The signal was weak and confusing. They ventured out along the dam wall and milled around, perplexed, near its centre. The previously weak signal had become quite strong, but would weaken again as they ventured to the far side of the wall. They peered behind the larger rocks and panned around trying to get a stable bearing, not realising that the narrow cove along the natural shoreline shielded Geordi from all but the centre region of the dam wall.

Slowly he worked his way up the cliff face, sweat streaming into his eyes. Often his hand would grasp a waxy tussock, only to have it pull away from the cliff in his hand. He talked to himself as he climbed, reciting old stories and jokes to focus his attention away from the certain death that waited for him at the bottom of the cliff.

Panting and heaving he hauled himself over the lip of the precipice and dropped to the ground. He lay there on his back exhausted, hardly noticing the shadow that moved across his face, blotting out the sun. The Tracker was not one of the ambitious youths that milled around on the dam wall. His was a face that was creased with the experience of many years, he carried the four element beam antenna with ease, the triangular bayonet

at the end of the inlight. Geordi at and stood weakly defeated. The large toothless smile Perhaps it was the squint, but he thought before him flicker of the bavonet and plunged into his Geordi dropped to the aushina from this



beam gleamed in the hauled himself to his before his adversary, Tracker gave Geordi a and lunged forward. sun that made him that he saw the man briefly just as the end pierced his rib cage heart. Devoid of life ground, blood fatal wound.

VISOR unit fell from his face and white, sightless eyes stared the sky. The tracker raised his antenna hight above his head and shook it in triumph.

'Stardate 2370. Despite our brief interlude with the Annual Hunt, our visit to Amalfi four was a successful one.' Captain Piccard dictated to the ships log some days later as they departed from the Amalfi system. The President/King was impressed with the valour shown by our officers during the hunt and allowed for Geordi's burial with full honours. A memorial is to be erected at this site to commemorate the Hunt and the acceptance of the Federation by the Amalfi people. Preliminary arrangements for trade have already been made.'

Geordi La Forge entered the room with a tall drink in one hand and dropped into one of the large soft chairs. Piccard smiled at his presence and continued his report. I commend our engineer, mister La Forge for his part in the mission. He played a very envincing role as the valiant hunted. We used the Comm badge in his belt to maintain transporter lock during the Hunt. Our Doctor, Beverley Crusher was able to replicate Geordi's body from the transporters log file, and at the precise moment of the kill mister La Forge was substituted with the body of a lifeless, brainless clone by the ship's transporter beam. This small deception allowed us to maintain the Federation policy of non interference with provincial culture while ensuring the safety of our officers. Piccard Out.'

The captain picked up his own glass, touched it to the one in Geordi's outstretched hand and said 'Cheers'. Together they emptied them in a single gulp.

Brain Teasers?

Name three factors that effect the capacitance of a capacitor?

What would be the maximum safe R.M.S. voltage to apply to a capacitor with a 35 volt rating?

What is the total value of the following three capacitors in parallel; 47 uf, 10 uf, 33 uf?

What is the total value of the following three capacitors in series; 22 uf, 22 uf, 22 uf?

How long in seconds would it take for the voltage across a 47,000 uf capacitor to reach 63% of the applied voltage of a 50 volt battery after the switch is thrown (It is in series with a 10k ohm resistor)?

What is the TOTAL IMPEDANCE of a circuit consisting of a 68k ohm resistor, 22 uf capacitor, and a 39 mH inductor all in series across a 2,000 hZ A.C. supply?

If the frequency of a signal passing through a capacitor increases then the resistance (capacitive Reactance) of the capacitor will; (a) increase, (b) decrease, (c) stay the same?

If you place a capacitor across a car battery for a few minutes, will it (a) cause the battery to go flat, (b) charge up to the battery voltage, or (c) explode?

In a parallel tuned circuit will the impedance be (a) maximum at resonance or (b) minimum resonance?

What type of filter would best describe a series tuned circuit; (a) High Pass filter, (b) Low Pass filter, (c) a Band Pass filter or (d) a Band Stop filter?

In an INDUCTIVE circuit does the voltage LEAD or LAG behind the current curve?

In a purely CAPACITIVE or INDUCTIVE circuit what is the phase shift between the current and voltage curves; (a) 60 deg, (b) 90 deg, (c) 180 deg or (d) 270 deg?

Why are the cores of power transformers laminated?

If a transformer has a turns ratio of 8:1 what is the impedance ratio?

Name three common applications of transformers?

What is the secondary voltage in a circuit which has a transformer of 100 turns on the primary and 25 turns on the secondary when 240 volts A.C. 50 Hz is applied?

What is the output of a 10 dB amplifier fed by 20 mW?

What is the output of a 30 dB amplifier fed by 4 mW?

What is the gain of an amplifier with 2 mW in and 20 W out?

If a 24 metre length of coax cable has a loss of 0.25 dB per metre (on the operating frequency of your radio) and a transmitter is sending 40 W into it, how much power gets to the antenna at the other end?



Personality Profile Page



Full Name ? Paul James Ash Call Sign? VK3HSA Age? 44

When did you first join GGREC? Dunno

What do you like about Amateur Radio? A companionable hobby

What's your favourite band?

2 metres

What type of antennas do you have? Slim Jim

How tall is your radio tower?

Not quite finished yet, will be about 6 metres

What do you do for a job?

Futures Trader

Where do you do it?

From Home

What was your first amateur riq?

Icom IC22A

What made you become involved in Amateur Radio?

My intimate relationship with Colin Bishop

What's your favourite fast food?

Fish & Chips and Pizza What's your favourite drink?

Bianco and Lemonade

What was the most dangerous moment you had while building your house extension?

I slipped backwards on wet roof tiles, on to roof rafters, two storeys up.

As a child what did you want to be when you grew up?

A Millionaire

What does your family think of Amateur Radio?

Oh Yeah! (Yawn)

What rig would you buy if I gave you \$10,000.00?

Icom IC738

What would you do if you found yourself on stage and your trousers fell down?

Work it into the act and be very proud! (sic)

BLOWUP BLOWUP BLOWUP

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General Meeting 19 July 1996

Meeting Commenced: 20.32.

Chairman: Ian VK3BUF. Minute Taker: Ivan VK3ARV.

Present: (19) As per attendance sheet.

Visitors: Nil.

Apologies: Bobbie, VK3HR, Dorothy, Cathie, Dianne, Judy, Melinda, Noel Brennan,

VK3EXJ.

Correspondence: Famparc, Wansarc, APC, Airwaves, July AR.

Treasurers Report: Read by VK3HSA. Moved VK3BUF. Sec. VK3TEH. Carried. Yes

Income: \$428.41. Expenditure: \$419.46. Balance: \$5037.92.

Previous Minutes: Read by Vk3ARV. Moved VK3KCS Sec.VK3TEH. Carried: Yes

New Call Signs:Nil. General Business:

GGREC club magazine to be sent to :- AIRWAVES, Twin Cities Radio & Electronics club Inc., PO.Box.396, Albury, N.S.W. 2640.

Guide hall broken into the club cabinet was forced open fortunately there was nothing stolen. All the locks will have to be replaced as they were damaged. Security mesh will have to be fitted to the radio room window. This will be done on the day of the working bee along with the gutters being cleaned as requested by the Guides

Coming Events:

Social night at the Moonee Valley Trots 24th August must be there by 1900 hrs for the evening meal - approx 12 members indicated they would attend this event.

Coming club discussions, lectures :-

2nd August - Windows 95, 16th August - Word for windows, 6th September - Internet, 20th September - Computer hardware:

Next Meeting..16 August 96:

Meeting Closed: 20.57.

RADIO HISTORY - According to Grolier. Early Experimenters - continued.

In 1864, James Clerk Maxwell published his first paper that showed by theoretical reasoning that an electrical disturbance that results from a change in an electrical quantity such as voltage or current should propagate (travel) through space at the speed of light. He postulated that light waves were electromagnetic waves consisting of electric and magnetic fields. In fact, scientists now know that visible light is just a small portion of what is called the electromagnetic spectrum, which includes radio waves, X rays, and gamma rays.

Heinrich Hertz, in the late 1880s actually produced electromagnetic waves. He used oscillating circuits (combinations of capacitors and inductors) to transmit and receive radio waves. By measuring the wavelength (designated by the Greek lower-case letter lambda) of the waves and knowing the frequency of oscillation (f), he was able to calculate the velocity (v) of the waves using the equation v = f (lambda). He thus verified Maxwell's theoretical prediction that electromagnetic waves travel at the speed of light.