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CHARLERS.EXE	SEB68E.BDF	SEB68E.SCF	101106.BDF	TEB1106L.EXE
MINFILE.HLP				CLIBEDL.EXE
CONTROL.EXE				CLIBW16.HK
PIPED17.EXE				MINCHN.EXE
CLARIC.HK				CONTROL.HK
WIKI.CHF	ACCESOR.GR	GAMES.CHF	STANDUP.GR	APPLIC1.CHF
gBASIC.PIF	ED17.PIF	MINFILE.1	BOGFF.HK	ENWICK.HK
EXCEL16K.HK	EXCEL4.HK	EXCEL.SLB	FILLWIN.HK	1000.PIF
FOOTGOLF.HK	IGDEO.HK	MINI11.U31	SYSTEM.U31	256COLOR.BDF
MINWELP.EXE	EM36G.EXE	RED.EXE	WING.WAP	INCT.HK
CHOCRE.PIF	REEG4E.PIF	JURIBOX.HK	SYSTEM.HK	LENCHNL.HK
HOUSE.HK	CHKLCT.HG	APPCEDL.CHF	WFLAYER.HK	EDNE.WAP
WENCH.HK	RED.HK	REDRAW.HK	REPAN16F.HK	RETIENE.HK
ROSTCOX.HK	ROH1RCE.WAP	LATCHOPL.WAP	SHUTTLE.BDF	THUNDER.WAP
CONCOM.HK	WPR.HK	WPCN.HK	WDRCHDF.HK	MINI6G.LEG
WONON.PIF	WPR.GR	WPCG.GR	WPCG.HK	WPCG.HK.231

The Official Journal of The Gippsland  
Gate Radio and Electronics Club Inc.

QE.HK				W.CLF
COL.HK				W.LEG
TRWK.DL				253
SYSTEM1.HK	TIMECOT.HG	CENTC.GR	CHPTCBLR	STREED.HK
VIEWER.HK	SYSTEM.OLD	WIK.BDF	SYSTEM.HK	TRONIAL.DLL
POWERIPY.DLL	100WENDR.SLS	WINDA.HK	WINDA.OZ.QCC	SYSTEM.HG

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February 1997



## 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	Ian 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 & Printing and Dispatch	David Campbell Cathie West	VK3XMF 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 Editors

Thanks are due this month to the following members for their contributions to this edition of Gateway. Thanks very much Dianne for your Australia Day Weekend 1997 article, Helmut 3DHI for your Australia Day Weekend in Ballarat article, the Event Queue and DX News, and Ian 3BUF for the outline to the Rubicon weekend and also the Presidents report.

Of interest to all you photographer/computer buffs is a new service available by National Photos that I have tried successfully. They offer to process your film, print it as usual but also provide these photos on floppy disk which you can later incorporate into any software you own. At about \$6.00 to copy 24 shots to disk I thought it was good value.

Yours in print... David & Cathie

## THE PRESIDENTS REPORT

This month I have plenty of topics to write about. Firstly I would like to thank those members in the Club who helped out last prac night in the assembly of the circuit boards that will form our two 70 cm television transmitters. I was pleased to see everyone add a little bit to the project. A bit more work has been done since then and we hope to have them both operational before March.

Don't miss our meeting THIS FRIDAY NIGHT when Michael Bisak, VK3RO shall be demonstrating WIN RADIO, the exciting windows based general coverage receiver system capable of listening from D.C. to Light. (Well, almost)

We have a minor conflict of dates around the labor day weekend. We had gazetted a prac night for Friday the 7th of March with the intention of playing with our ATV transmitters. As that night is the evening before many of us will set off to camp in the Rubicon Ranges, we have decided to defer the ATV session until Friday the 4th of April. (It is possible that we take a transmitter with us to the camp to experiment with it there)

The Weekend at the Rubicon Ranges should be a lot of fun. The area is full of history as the mountains contain the remnants of an early hydro electric station and tramway system. As our camp is a mere 1hr 20 minutes away from Dandenong, many who are not in a position to camp may care to make a day trip of it.

Another change to our diary is the postponement of the day trip to Williamstown from Saturday the 22nd of Feb (the day after WIN RADIO) to a new date yet to be announced. It seems that this is to be a busy weekend for many, and it also conflicts with the Avalon Airshow weekend. Rather than have a poor turn out, it is best to reschedule the trip.

Six members have ordered a 4 stage telescoping mast similar to that seen at the last general meeting. I am still organising all of the bits as they come from a variety of sources. I cannot guarantee that they will be ready for this meeting, but I will give it a try.

Helmut VK3DHI will be embarking on a trip to Tasmania in the near future, keep an ear open for him while he is on the road. We are going to try and link up on 2M when he is on the north coast.

To those of you who thought that amateur radio was a nice safe hobby, let me point to Peter VK3VB and say 'Behold...' Sadly Peter's tower turned into a bit of a pile driver while being lowered during windy conditions last month and the runaway winch handle took a chunk out of his arm. I am happy to say that the tower, antenna and rotator have all recovered nicely, and oh yeah, Peter's arm is getting better too. The Americans have an expression that says 'What goes around, comes around'. This should be amended to 'What goes around, can hurt like hell!'

I cannot neglect to mention a person who shall remain nameless (except to say his first name is Colin) who was delayed with an engine problem while coming to our last general meeting. That is until a very astute RACV gentleman discovered that his secret 'engine kill' switch had been activated by accident. But like the programmer said to the sailor, 'Worse things happen at C.'

See you this Friday night. **DE, Ian VK3BUF**

# EVENT QUEUE - 02/97

Information supplied by HELMUT VK3DHI

FRIDAY 21.02.97 08.15 PM

CLUB MEETING,  
INTRODUCTION INTO WINRADIO -  
COMPUTER BASED RADIO -  
BY MICHAEL BISAK

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MONDAY 03.03.97 8.00 PM

SATURDAY 08.03.97

COMMITTEE MEETING  
LABOUR DAY WEEKEND AWAY,  
CAMPING AT RUBICON, SOUTH OF  
LAKE EILDON  
CLUB MEETING

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FRIDAY 21.03.97 8.15 PM

FRIDAY 18.04.97...8.15 PM

CLUB MEETING

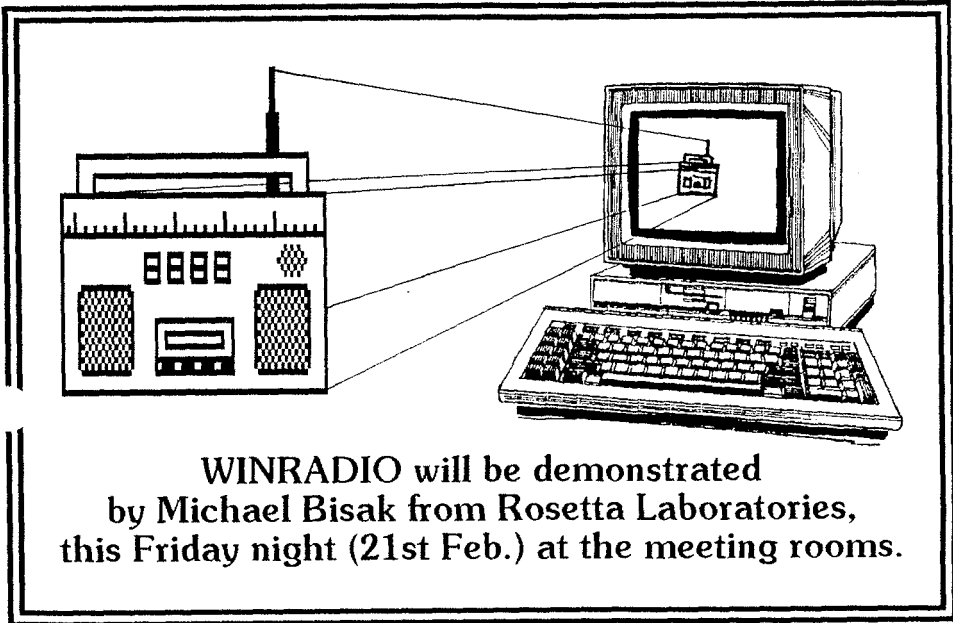
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LABOUR DAY WEEKEND  
CAMPING AT RUBICON  
NEAR LAKE EILDON

MEETING POINT  
CARPARK AT  
STAMFORD HOTEL, CNR.  
WELLINGTON & STUD  
ROADS  
9.00 AM

Helmut and Dorothy will be on holiday  
in Tasmania from 19.02.97 to 07.03.97  
We will be QRV at 20.00 on 80 Meter  
3.575 KHZ or 3640 KHZ +/- QRM



**The Williamstown Railway Museum  
visit on Saturday 22 Feb.**

This event is NOT going. This event is NOT going.

Would all passengers please disembark until a later date.

This event is NOT going. This event is NOT going.



Yes that's right it has been cancelled for the moment. See the Presidents Report for more detail.

*Some interesting facts? lifted from*  
*“Pigeon Poo, the Universe & Car Paint and*  
*other awesome science moments”*  
*by Karl Kruszeinicki*

We will skip the chapters ‘Pigeon Poo, the Universe & Car Paint’, ‘Insect ball of fire’, ‘Sex, smell & separation’, ‘Silk stops bullets’, ‘Plants make plastic’ and concentrate on ‘Ancient information highway & fax’.

Ancient fax technology.

Many people worked on the concept of the fax machine. In 1826, Sir Humphrey Davey proposed the idea of a fax machine. He even managed to send electrical signals a short distance, but he did not come close to actually building a fax machine incorporating a transmitter and receiver.

One of the earliest to do so was Alexander Bain, a Scotsman, who invented the first electric clock. He was born in 1810, in the days when hardware stores were quite rare. So experimenters had to make practically everything themselves. The story goes that not only did he make his own batteries by burying metal plates in the ground, but he also used sprigs of heather as primitive springs --- and for hinges he used the jaw bones of cattle! He actually sent the first fax in 1842, but patented his facsimile machine on 27 May 1843 (Patent No. 9745). This was 33 years before Alexander Graham Bell patented the telephone.

For his first fax machine, Bain used the same principal that is used today both in modern fax machines and in TV’s.

If you stand a few metres away from a TV, the picture looks smooth. But if you get up close, you can see the individual dots that make up the picture. Each dot is called a ‘pixel’ (short for ‘picture element’) or ‘pel’. On a TV screen, there are about 600 dots vertically (up and down the screen).

They are written onto the TV screen by an electron gun, which writes the first line by starting at the top left, and scanning across to the top right. It then jumps down by a distance of one dot, and back to the extreme left, and paints another 1,000 dots onto the screen. The gun then continues this process until it gets to the bottom of the screen, having written some 600 lines in 1/25th of a second. Then the electron gun writes another 600 lines in the next 25th of a second.

Bain used the same left-to-right and top-to-bottom scanning method in his fax machine.

At the transmitter, he arranged standard lead printers’ type to make up a message of a few words.

When printers prepare metal type for printing, using old-fashioned pre-computer technology, they usually place a thin layer of ink on the type. The ink covers the raised sections of the type, but there’s not enough of it to run into the hollows. When the type is pressed against paper, a clear imprint of the letter is transferred to the paper.

But Bain did not use ink. Instead, he used electricity at the transmitter to read the page, and chemistry at the receiver to write the page.

**continued at rear of magazine....**

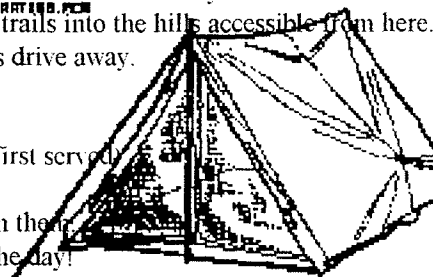
# FIELD WEEKEND - RUBICON STATE FOREST

Join us on **March 8, 9 and 10** at the **Rubicon Ranges** for the upcoming Labor Day long weekend. Explore, play radio or just relax on the fringe of the spectacular mountain country to the South of Lake Eildon.

Our destination is at a place called Kendall's Camp, a short distance away from Camp Jungai at Rubicon. (Camp Jungai was the headquarters for the horse endurance rides that the Club did communications for in the 80's)

## The Facts:

- Only 1hr 20 min travel time from the Stamford Hotel in Stud rd.
- The camp is on the Rubicon River. (designated 'safe drinking water')
- The camp is only 800metres from sealed road access.
- Shops and Hotel at Thornton are only 12 minutes drive away.
- There are many tracks and bushwalking trails into the hills accessible from here.
- Lake Eildon township is only 20 minutes drive away.
- A small toilet block is at the campsite
- Campfires are ok on non fire ban days.
- No booking required for sites. (First in, first served)
- No fees are charged at the campsite
- Campers must take all rubbish away with them
- If you cannot go camping, come up for the day!



The Camping area is reasonably roomy on level ground and divided into two main areas. These areas are well grassed and shaded with lots of room for antennas. You can probably get a caravan in ok if you wanted to, though if you have a choice, it would be a good opportunity for tenting.

## How to get there:

- Drive north along the Maroondah highway through Healesville and over the Black Spur. Keep driving until you get to Taggerty.
- When you reach Taggerty, take the right hand turn signposted to Lake Eildon.
- About two kilometres before Thornton take a turn to the right into Rubicon rd.. (just before a medium sized bridge on the Rubicon River) The turn is also signposted 'Camp Jungai'.
- Follow this road for about ten kilometres, until it becomes a gravel road.
- Keep going 800 metres (by my odometer) along this gravel rd. and immediately on your left you may turn directly into the Kendall's Camping area.
- Look for the yellow GGREC banner. (I will be up there on Friday the 7th, and listening out on 146.225.)

If enough interest is shown, we will take the Club 12 x 24' tent with us as a communal eating area. For more information call Ian VK3BUF on 97765000.

## AUSTRALIA DAY WEEKEND 1997

by Dianne Jackson

This years GGREC Australia day weekend to Ballarat was a great success. We arrived at our Motel to find Reg and Jenny already settled in, and by the time we unpacked the van, Peter and Pat had also arrived. After exchanging pleasantries, Ross strapped on his knee pads, elbow pads and skates and gave us a demonstration of his skills on his new roller blades. Reg pulled out a pair of binoculars and a special frame he had made and showed us how to look for sun spots.

Later that evening we all went into town and had a lovely meal at one of the local restaurants. I still don't think that I have ever seen dinner plates quite as big as those. After the meal we went for a walk among the shops, we found a discount book shop that was still open so we all went in and had a look around. We came out with lots of bargains.

Next morning we got up bright and early after a brief look at the Eureka stockade we headed off to Sovereign Hill. The Hubbards, who had been driving all morning from Nyora, were already at the Sovereign Hill car park when we arrived. While putting on our sun screen and hats, Reg, Jenny, Peter and Pat joined us.

It's been a long time between visits to Sovereign Hill for me, so I was pleasantly surprised by the many changes that had taken place. Upon entering the building we encountered the "Voyage to Discovery" information center where we found visual, audio and static displays that gave us a very good look at life in the gold rush days at Ballarat.

After viewing the display we stepped outside the building into the sights and sounds of Sovereign Hill. The sun was shining and the horse drawn coaches were whizzing around the streets. Trish and the girls tried their hands at some gold panning, but didn't have much success so they ended up buying a small nugget at the store. Dorothy and Helmut had just driven up from Pakenham and they joined us while we were shopping for souvenirs. Dorothy and Peter each bought a harmonica and they played a duet for us.

We visited the blacksmith where horse shoes are made for the teams of horses that pull the coaches. At the Printers office, Ross and Hal both had "wanted" posters made for them. For lunch we purchased some very tasty sausage rolls, cakes and biscuits from the bakery. After lunch we made our way up the main street and went on a coach ride around the town. Next on the list was the foundry where a demonstration of gold being melted down was in progress. They poured a golden ingot worth thirty eight thousand dollars. I wouldn't mind slipping one or two of those in my pocket.

Next was the bowling saloon where we had a go at nine pin bowling, the only trouble is, you have to reset the pins yourself by hand every time you bowl.

At the furniture warehouse Ross purchased a fabulous spinning top made from wood. After the furniture store we popped into the schoolhouse and got ink all over



our fingers from practising script with an old style pen and ink well. Very messy but lots of fun.

There was a large coach building works where they made authentic spoked wheels from wood. I found out later that this was the only wheelwrights plant in the world that still used original methods of construction. This was the last place we visited at the Hill, exhaustion overtook us, so we returned to the motel.

That night the entire group went to a hotel in the town where they had an 'all you can eat' bistro meal. I don't know about anyone else, but I had two soups, two main courses and four deserts. They had the ideal mix of quantity and quality. A place worth remembering.

On Sunday morning many of our group went to McDonalds for Breakfast. We had a quick breakfast in our motel room and returned to Melbourne. On the way home the kids told us how much they had enjoyed themselves and would like to go back to Sovereign Hill another time. Though the weekend went quickly, it was regarded by all who went as a worthwhile adventure.

## **Australia Day Weekend in Ballarat**

This year's Australia Day weekend was spent by some members of the GGREC in Ballarat. A visit to Sovereign Hill was scheduled for Saturday morning. Already on Friday Reg & Jenny, Ian, Dianne with Ross and Hal as well as Peter and Pat arrived in Ballarat. A stroll through the city and a very nice dinner concluded this day. Other arrivals on Saturday were the Hubbard and Inhoven families who went direct to Sovereign Hill.

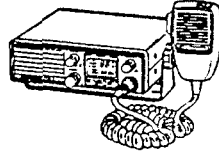
Of course, there is no real fun without Reg. During our visit to one of the many souvenir shops, Reg detected a trumpet and advised the whole bunch of us about his excellent skills as a trumpeter. But when he blew this device together with Dorothy on a harmonica, it must be said that Reg's play was a LITTLE BIT out of tune. We are sure he gave his best because the last time Reg played was quite some years ago.

Within the grounds we also visited the Gold washing area, had a wagon ride and went to the bowling house on top of the hill. In between we had lunch at the hut near the playground. In the end it was very well worth this visit to Sovereign Hill. In the evening all of us went for dinner. The next day, Australia Day, some of us wanted to go for a cruise on the lake, only to learn that the only boat was hired out for that day. Instead we went to the Botanic Garden and for a stroll through the city looking for the parade that never appeared. Nevertheless it was a very nice and HOT 35C weekend.

Helmut VK3DHI

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## GRAHAM VK3KCS

...continued from before.

At the transmitter, he slowly scanned a metal point across a row of printers' type letters. The metal point was part of an electrical circuit. When the point touched the raised part of the lead letter, it completed the electrical circuit. This created an electrical signal, which was sent off to the receiver. When the point was over a 'valley' in the lead type, it did not complete the circuit, and no signal was sent to the receiver. When the point got to the end of a 'line', it zipped back to the beginning of the next line. There were several scanning lines in each letter.

Wires carried the electrical signal from the transmitter to the receiver.

At the receiver, a chemical process was happening. A metal point was moving across a sheet of paper soaked in potassium ferrocyanide. Whenever the metal point at the distant transmitter made electrical contact with a letter, at the receiver electricity jumped from the metal point onto the chemically-soaked paper, and turned it black!

The metal point at the receiver had to scan in exact synchrony with the metal point at the transmitter. It used watch-maker technology to control how long it took for the left-to-right scan, and how big each downward step was.

First, both metal points (transmitter and receiver) had to scan across at the same rate. Second, both metal points had to jump down to the next 'line' at the same time, and had to jump down by the same amount. This was made possible by Bain's skill as a clockmaker. Modern tests show that if the scanning rates differ by as little as one part in 10,000, you immediately get gibberish at the receiver. Bain was a very careful, and precise, worker.

By 1846, he was able to send information at 253 words per minute --- which was the world speed record for several years. He eventually went bankrupt after a series of very nasty patent battles with Charles Wheatstone in England and Samuel Morse in America, who were both working on similar devices.

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**\*\*\* 4 2 5 D X N E W S \*\*\***

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- 7X - This year Enrique, EA5AD is active as 7X0AD on all bands SSB. QSL via EA4URE.
- 8P - From 27 February to 4 March AA4NC and K4MA will operate from the 8P9Z station on all bands and all modes including RTTY. They will participate in the ARRL DX SSB contest. Calls unknown at this time. All QSL via K4MA.
- 8P - Bob (AA1M), Jim (W1HL), Mike (W1USN, ex-NW1J) and Tim (KA1MID) will be QRV (all bands CW and SSB) from Barbados from 17 to 24 February.  
Call signs not available as of this time. QSL via bureau or direct to operators' home call.
- 8Q - From 12 February to 4 March Dieter, DF5JR will be active from Maldives as 8Q7CR. QSL via DF5JR.
- 8Q - From 15 to 23 February Gianni, I8RIZ will be active (all bands, 160 metres included) from Maldives possibly with his old call 8Q7AF. QSL either via bureau or to P.O.Box 200, 80100 Napoli-NA. Italy.
- C6 - Bill, KM1E will be active (6-160 metres) until 20 May as C6AGN from Green Turtle Cay (NA-080). QSL via KA1DIG.
- EA - EA4ENK/P will be active from Isla La Hoya (DIEI BA-27) on 2 February. QSL via EA5OL.
- EA\_ssh - Currently there are only two people at the Spanish Antarctic base Juan Carlos (WABA EA-01, Livingston Island, South Shetlands), but more are to arrive soon. It is hoped one is a licenced amateur who can operate from ED0BAE. In the meanwhile Dany (LZ0A), who is only 2 km away, is trying to help fix the equipment.
- F - Didier, F5VCR will be active from some DIFM islands (MA-59, MA-60, MA-61) on 25 January.
- FG - On 10/11 February DL3LAR, DL8OBQ and DL6LAU might be FG/ from Guadeloupe before going to Dominica. QSL via DL6LAU.