



GATEWAY

October 2008

NEXT MEETING Friday October 17 2008 at 8 pm

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

SPEAKERS : Albert Hubbard VK3BQO & Phil Pavey VK3YB

This month's meeting will feature a couple of talks by Phil and Albert who will be unpacking the Club's projector and giving instructions on how to set it up and use it for displaying various media. *"Although its use is not hard at all, it is easier to be shown than to read all the manuals . (And as amateurs, the last thing we do is read the manual.)"*

To fill in the remainder of the night, Phil's talk will be practical discussion and demonstration on using irlp through the club repeater. This will be aimed at getting more members using our own Club's irlp repeater based in Cranbourne or if traveling, using other irlp enabled repeaters to link back to home. You will even get a chance to try it yourself on the night.



GATEWAY MAGAZINE IS THE OFFICIAL JOURNAL OF THE GIPPSLAND GATE RADIO AND ELECTRONICS CLUB inc.

The Family Tree of Vincent Van Gogh

The dizzy aunt ----- Verti Gogh
 The brother who ate prunes ----- Gotta Gogh
 The brother who worked at a convenience store— Stop n
 Gogh
 The grandfather from Yugoslavia ----- U Gogh
 The cousin from Illinois ----- Chica Gogh
 His magician uncle -----Where-diddy Gogh
 His Mexican cousin ----- A mee Gogh
 The Mexican cousin's American half-brother— Gring Gogh
 The nephew who drove a stage coach----- Wells-far
 Gogh
 The constipated uncle ----- Can' t Gogh
 The ballroom dancing aunt----- Tang Gogh
 The bird lover uncle ----- Fla min Gogh
 The fruit loving cousin----- Man Gogh
 An aunt who taught positive thinking----- Way-to-Gogh
 The little bouncy nephew----- Poe Gogh
 A sister who loved disco----- Go Gogh
 His niece who travels the country in an RV--- Winnie Bay
 Gogh

I saw you smiling ----- there ya Gogh !

A-nony-mus

At the WORKING BEE

Pictures by Ian Jackson VK3BUF



"Albert VK3BQO working in his element"



"New mobile scaffolding for those hard-to-reach places"

For story see over

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 [TBA] 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

Disclaimer. The opinions expressed in this publication do not necessarily reflect the official view of the GGREC Inc and the GGREC Inc cannot be held responsible for incorrect information published.

Incorporation Number A0016893M

September's working bee—high fives not high frequency.

By Albert Hubbard *VK3BQO*

An impromptu working bee was organized by the Committee for Saturday 13th September.

The agenda was to repair the HF antennas which had fallen into disrepair for whatever reason and with JOTA only weeks away, we figured a bit of maintenance was due.

It turned out to be a glorious day with about 7 members on hand. Strange as it may seem, we never got around to fixing the HF antennas at all. This was due to the club being donated some LDF450 heliax cable to run the UHF repeater on.

After measuring the input power to the existing RG213 coax and then being shocked at how much (in this case how little) power was being transferred to the antenna, we installed the heliax which luckily had come supplied with "N" connectors already terminated at the ends—anyone who has terminated these connectors to heliax will understand.

A second set of power measurements saw us picking ourselves up off the ground and asking why this had not been done in the first place.

We should do a practical demonstration one night to show how much power really is lost in coax especially at UHF.

Anyway, by the end of the day, which was broken in half by a great tasting BBQ cooked by El Pres., we had only achieved the installation of the heliax plus a weather seal for the rotator thrust bearing at the top of the tower.

Although there was a sense of great achievement, this still leaves the repair of the HF antennas.

Another day has been arranged for a few workers to do this prior to JOTA, and then with a bit of luck, we can operate maintenance free for a few months.

Thanks to those who helped on the day. You know who you were. I believe Ian has included a photo from the day somewhere in this edition. If it is the one I am thinking of, I hope Worksafe don't get hold of it.

Albert VK3BQO

From the president ... *Ian Jackson VK3BUF*

Last month's general meeting saw the demonstration of a software based HF transceiver. It is a remarkable feat and testament to what is possible with an integration of old and new RF technology. There are several layers of knowledge at work here and the scale of the job is not for the faint-hearted. Still, it would be a remarkable challenge to embrace.....

In November many members will have access to four consecutive days off around Melbourne Cup day. There has been some interest shown in returning to Kilcunda, a fine location by the ocean for a camp at the caravan park there. With a major lack of certainty in people's ability to attend one month in advance it is hard to organise this as a formal outing. If you are interested in going to this location, make a direct booking with the caravan park and discuss this with other Club members as soon as possible.



In my own case I am likely to go to a bush camp somewhere North of Licola for a quiet couple of days along the Barkley river. This too is an informal option. By the time you receive this magazine I will have checked out some potential spots within 2wd access range. I should have more to say about this at the upcoming meeting.

Last month I went for a short drive in the Bunyip forest for a look around with a few other blokes in their 4wd vehicles. I wanted to make sure they didn't do anything stupid. Along the way I found a way of making a Mitsubishi van sit up and beg. So far I haven't been able to make it roll over and play dead, but there's time yet...

From the president cont'd

Work is still underway to prepare a questionnaire and forum for members to establish club directions over the next few years. This is a great opportunity for everyone to use their imaginations and shape the sort of club they would like to have in the long term. It will be introduced in November and finalised in January.

The Christmas Breakup party-bbq will be an afternoon affair at Graeme Brown's QTH in Drouin once again. More on this will show up in the November mag, but it is already something to look forward to. Graeme has also coordinated this years JOTA event with the Guides. If you wish to help out with this event, consult with Graeme first as he must schedule a fixed timetable of operators during the day.

Cheers for now, *Ian VK3BUF*

HISTORIC CHANGE TO CONTEST

A Team Amateur Radio Victoria was submitting an entry for the club plaque in this month's Oceania DX contests.

Members were encouraged to take part in either or both the SSB Contest, 4 October 2008 and 5 October 0800-0800 UTC, and the CW Contest, 11 October and 12 October 0800 - 0800 UTC.

For the first time in the contest's 72 year history there was an Australia Club Competition Plaque sponsored by the VK Contest Club. It went to the club with the greatest number of members participating who logged 50 or more QSOs.

The club plaque rules can be found at:

http://www.oceaniadxcontest.com/KCC_plaque_rules_rev4.pdf

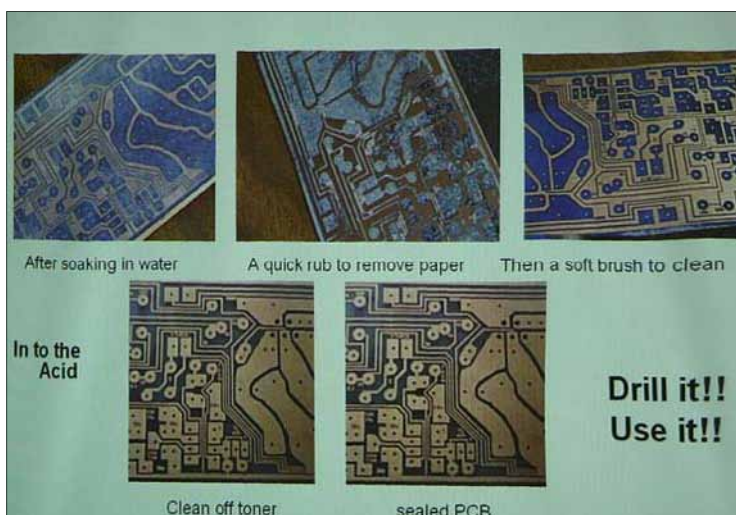
The contests are jointly run by the WIA and NZART.

PAUL ENGERS PRESENTS HIS PIC-A-STAR TO GGREC IN SEPTEMBER



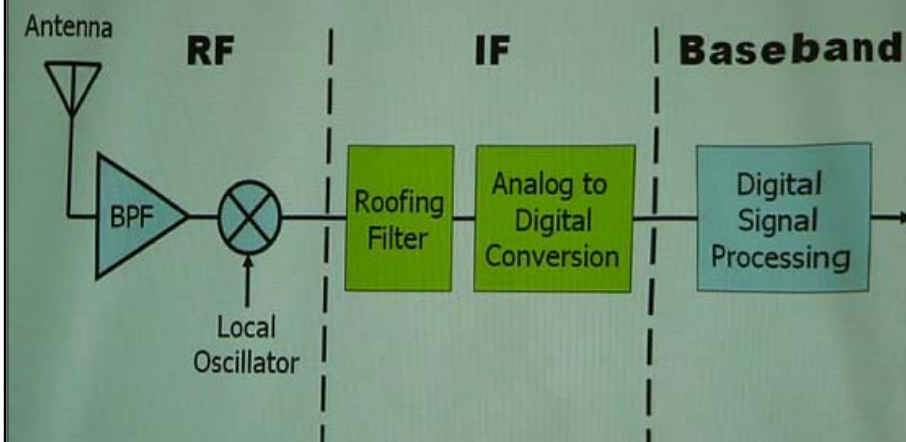
(Pics & words by Paul Stubbs VK3-TGX)

"How to create PCBs from laser printout."



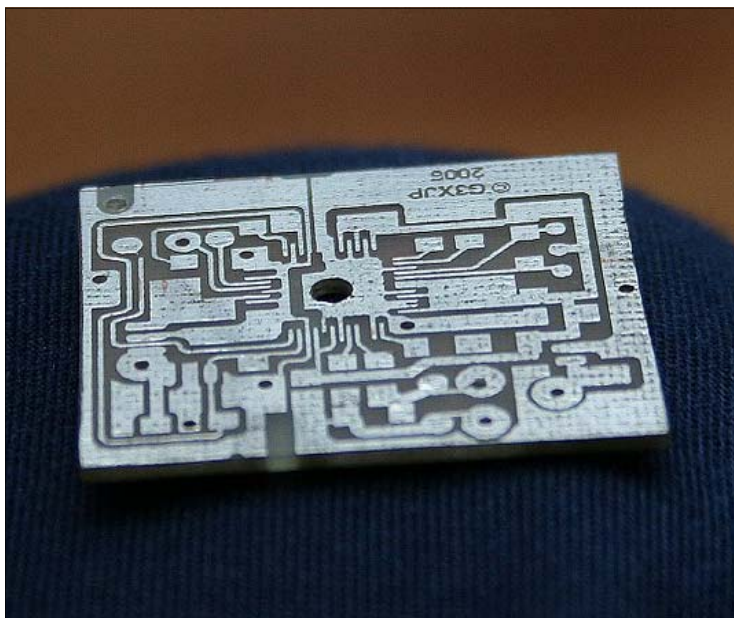
Software Defined Radio

Block Diagram



"One of the sample PCBs sent around the group, photographed on my knee."

*Cont'd
Over.....*





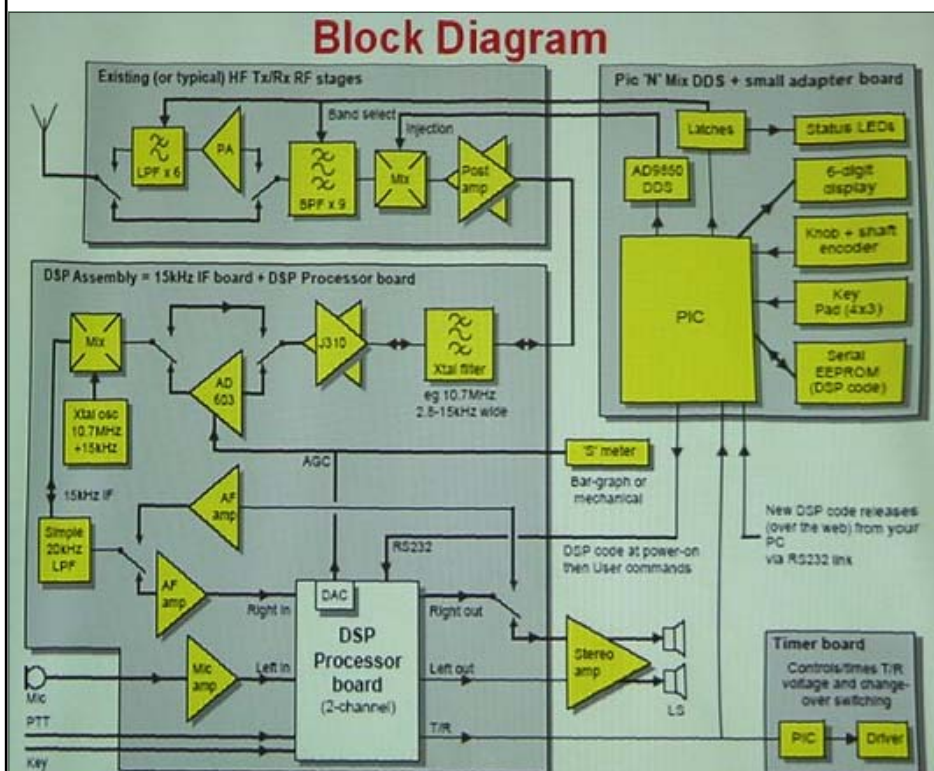
*(Words
and
photos
by
Paul
Stubbs
VK3-
TGX)*

PIC-A-STAR

Rohde & Schwarz software-defined transceiver

MR3000H - 1.5 MHz to 108 MHz
 High data rate up to 72 Kbit/s for real
 time data and video
 Internet/Intranet access via IP-interface
 Software configurable and
 reprogrammable
 Integrated GPS time and position
 reporting
 ALE to MIL-STD-188-141B, App.A,AM,
 FM, SSB, STANAG 4285, SECOM-H
 SECOM-V, HaveQuick I/II
 Line of sight, 30-88 FM, VHF/UHF
 Civil waveforms, VHF ATC (25/8.3
 kHz), VHF airband AM, VHF/FM public
 services (12.5/5 kHz)
 Digital voice Vocoders adapted to
 mode of operation and bandwidth







(Photos by Paul Stubbs VK3 TGX) "Pity I didn't bring a USB memory stick to pinch the slides"

GGREC UPCOMING EVENT LIST

Oct 17 3rd Friday General Meeting

*Training on how to use the GGREC Video projector
And instruction on IRLP (Internet Linked repeater) operation.*

Oct 18 Jambooree on the Air (JOTA) see Graeme VK3BXG for details

Oct 27 Committee Meeting at Club Shack

Dec ??? Xmas break-up event at Graeme VK3BXG's QTH in Drouin
(Details to follow)



Cont'd over

PIC-A-STAR

General Dynamics software-defined transceivers



Technical Specifications

General Radio Characteristics

Frequency range² 118-125 MHz;
275-320 MHz;
340-390 MHz Tx, 7.8
406 SARSAT³

Tuning increments 25 KHz steps
5 KHz steps

Frequency stability ± 1 ppm

Modulation AM voice
AM swept-tone beacon
Transpond mode
BPSK/OOK
HOOK mode
MSK 1200 BPS

Data burst 455 ms

Operating modes Voice
Swept-tone beacons:
• 121.5 MHz
• 243 MHz
DME transpond
GPS Interrogation
406 SARSAT
UHF SATCOM

Weight 31.8 oz. (0.9 Kg)
w/o battery (typical)

Size 7.7 x 3.8² x 2.1 in.
(19.56 x 9.3 x 5.33 cm)

Operational temp. -40°C to +55°C⁹

Storage temp. -40°C to +80°C⁹

Battery¹⁰ 1794A50953A/U

Battery life¹⁰ >4 days, predicted
CSAR operational
Scenario

Receiver Characteristics

Sensitivity (dBm) -100 (MF/AM voice)
-104 (3F/AM voice)
typical -138 (3F/SATCOM
data)

IF selectivity <-6 dB @ f_o \pm 30 KHz
>50 dB @ f_o \pm 140 KHz

Spurious response Typically 50 dB

Image response -40 dB min.

Audio response 500 Hz to 3500 Hz

Distortion Typically 5 percent

Audio output 50 milliwatts

Transmitter Characteristics

Average power output¹¹ 1 Watt - UHF
100 mW Tx - VHF

406 SARSAT 5.0W min.

UHF SATCOM 5.0W \pm 2.0B

Modulation 86% AM

Harmonics -30 dB below carrier

Distortion 10% typical at
86% modulation

GPS General Characteristics

Type 12-channel parallel
L1, CA code

Navigation up to 250 waypoints

Coordinate system Geodetic (lat./long.)
GEO, GEO2,
UTM, MGRS

Accuracy < 25 meters
without SA⁶

Megan
adjusts
her
kindly
sup-
plied
aerial



Ends

Alara meet '08 ULVERSTONE, TASMANIA A

Pictures by Maree Vandelight VK3FSAT and Grahame Coleman VK3XK



GGREC
contin-
gent.....

below
VK3 YLs



Above President Marilyn Syme VK3DMS
cuts the ALARA 30-year cake *Cont'd
over*



Alara meet'08 contd

Maree meets young Tassie Devil with surrogate dad at Trowunna Wildlife



Tassie's
'best'
creamed
honey



Giant
platypus
at Axeman's
Hall of Fame



On the open road!



Could have been in England!

LETTER TO THE EDITOR**RADIO OPERATORS WANTED FOR CANOE MARATHON**

I am now taking bookings for radio operators for this year's Red Cross Murray River Canoe Marathon. This year's is the LAST the Red Cross is sponsoring. It is the 40th event, and what the future holds as far as WICEN is concerned is not yet known. However, if another sponsor can be found to manage and co-ordinate it, and take all the risks with medical support, insurance, safety, communications, then WICEN could still be involved, but at this stage, after the close of this year's marathon, this will be the final the end ...no more ... kaput !!

The last day (New Year's Eve) will be a celebration in Swan Hill, and all volunteers are invited to part-take of this more about this later. At this stage I need a minimum of 28 operators, and we welcome former operators as well as our current members to join us in this historical event. Foundation Licencees are very welcome!

The event runs from 26 Dec to 31 Dec incl, starting at Yarrawonga on 27 Dec and finishing at Swan Hill on 31 Dec. Operators for Day 1 are required to be in camp at Tocumwal on Boxing Day, 26 December. Our heaviest days for operator numbers are Days 1, 2 and 3. One less checkpoint is required on Days 4 and 5. Even if you can give us two or three days, that will be of great assistance.

At least two more boats are being utilised this year, and we have been asked to man ALL of the "Passage Control" points, that is points between the official check points. Some of these are on a boat, and others are land based "Duck Points". The land based "Duck Points" are in remote places, and for the safety of our members we will require TWO operators for each.

They will be required to record the number and time of each canoe passing these points, and when requested, transmit this information to the Net Controller. We are taking on the role of both radio operator and "number taker" at these land based "Duck Points".

It is recommended that binoculars be part of your kit. As normal, we do not know what points will be manned until the night before, so all I can do is allocate the numbers, and make a re-shuffle each day to fit in with the Chief Safety Officer's requirements. Overnight camp sites are the same as last year.

Dec 26 Tocumwal All Day 1 operators to be in camp for briefing at 8.30 pm

Dec 27 Tocumwal Day 1, start at Yarrawonga Weir, finish at Tocumwal *Cont'd over*

Dec 28 Echuca Day 2, start at Tocumwal, finish at Picnic Point

Cont'd from previous page

Dec 28 Echuca Day 2, start at Tocumwal, finish at Picnic Point

Dec 29 Echuca Day 3, start at Picnic Point, finish at Echuca

Dec 30 Cohuna Day 4, start at Echuca, finish at Torrumbarry

Dec 31 Swan Hill Day 5, start at Murrabait, finish at Swan Hill

A fuel allowance will be paid by the treasurer after the event. This will be approx 50 percent of the actual overall cost, as per normal. Breakfast and lunches will be available from Red Cross catering services as in previous years, at excellent prices. Approx \$12 per day, more information to come later.

Evening meals are usually held at local hotels etc, or you may simply look after yourself at the camp sites with BBQs etc. Briefing each evening at approx 8.30 pm. Please read the standing orders, if you want a copy, contact me by phone or email. **HEALTH and YOUR SAFETY IS PARAMOUNT.** As well as the normal items for camping and equipment as noted in the SOPS, please bring:- at least 15 litres of fresh water for drinking from your home, **DO NOT** drink the local water. Remember it is usually **HOT, DRY and DUSTY ...you WILL need to be fully refreshed with water.** Also, don't forget strong insect repellent Bushman's is recommended.

Because of the varying heat conditions this event is quite unsuitable for young children and babies. Also, animals are not allowed at the Swan Hill or Echuca camping sites. No alcohol is to be consumed while on duty. Portable radio equipment to include HF AND VHF, batteries, masts, antennas (dipoles / long wires for HF)... use of vehicle antenna (verticals) on HF is usually next to useless due to the terrain. Several of you will be allocated to travel in cars with the health support (MFAR 1 and 2) teams, possibly the doctor, and the chief safety officer (CSO). Please ensure your power leads are terminated with standard connectors, no clip leads... T plugs are barely acceptable these days, **BUT** the preference is now (30 amp/ 12 v) Anderson Powerpoles, especially on boats and in cars. Bring a 35AH (min) battery for VHF mobile use, also magnetic mounts, and 2mx verticals. A 2mx / 70cm handheld will be useful for campsite communications. A battery charger is also useful as well, normally we have access to 240 volts AC for overnight charging.

If you can help: initially, please indicate to me :- your full name and callsign, home address, your availability - the number of days, availability for allocation on a boat Y/N, type of vehicle – ok for remote allocation Y/N, breakfast and cut-lunches required, contact telephone numbers, next of kin and their contact details. Thank you
Bruce Bathols VK3UV, OIC Communications 2008, Tel: (03) 9772 8867 Mob: 0418 386 030 brucebathols@optusnet.com.au, or brucebathols@gmail.com

GENERAL MEETING MINUTES SEPTEMBER 2008

Date: 18 July 2008
Start time: 08:00 PM.
Location: Guide Hall Cranbourne.
Chairperson: Ian Jackson VK3BUF
Minute Taker: Megan
Present: See Attendance Sheet
Visitors and Guests: Paul Engers

Apologies: - Tim VK3FTD
 - Ron & Judy VK3EJ. Mike & Anne VK3ATO
 - Bill Ross VK3ZAP Helmut & Dawn VK3DMI.
 - Dave VK3AMP
 - Doug VK3KMN
 - Evan VK3ARV.
 -

Treasurers - P/L AUG 15 - SEPT +\$96.00, -\$288.95
 NET -\$227.95.

* Moved By Albi, Secor: Reg - PASSED.

PREVIOUS MINUTES read by INV., Second: Max (Tmk)
 Passed.

- BAPPM: John - Work in progress.
 - BOM.

- MOTION - When BBL ACC.
 Moved: ALBERT.
 Second: RUSSEL.

Closed. 8:42 pm.