OXTALES

First published 1980

Club Nets on VK2RPM
146.700MHz
(CTCSS 91.5Hz)
Sundays 0900
Thursdays 1930

ORARC's forty ninth Anniversary Year

July 2020

PRESIDENT: **Henry Lundell**   VK2ZHE   6582 0534
VICE PRES: **Paul Colledge**   VK2ICQ   6580 9912
TREASURER: **Dennis Meade**   VK2DAM   6582 2998
SECRETARY: **Henry Lundell**   VK2ZHE   6582 0534
(act)

President's Report

July 2020

COVID-19

The COVID-19 pandemic is still having a global impact which all readers will be very aware of. The virus is still spreading in various parts of Australia so there are still mandatory restrictions in force despite restrictions being eased in some locations. Due to the evolving situation readers need to keep themselves informed on a daily basis.

It is hoped that face to face meetings of club members will be able to resume in August 2020 but this is dependent upon the COVID-19 restrictions in force at the times of the planned meetings. The July 2020 Monthly General Meeting was cancelled but the Committee did meet face to face and the Committee Minutes were emailed to members. The July Friday night gathering is cancelled. The Wednesday morning

ORARC VHF/UHF Repeaters

MIDDLE BROTHER
VK2RPM 2 metre (Voice - CTCSS 91.5Hz)
O/P 146.700MHz - I/P 146.100MHz

VK2RPM 70 cm (Voice - CTCSS 123Hz)
O/P 438.525MHz - I/P 433.525MHz
C4FM digital mode capability

VK2RPM-1 (APRS Digipeater)
SX 145.175MHz 1200bps

TELEGRAPH POINT
VK2RCN 2 metre (Voice)
O/P 147.000 MHz - I/P 146.400 MHz

VK2RCN 70 cm (Voice - CTCSS 123 Hz)
O/P 438.425MHz - I/P 433.425MHz

VK2RCN (6m Repeater)
O/P 53.800 MHz - I/P 52.800 MHz

VK2RCN-1 (APRS Digipeater)

Down The Coax
Monthly meetings & Friday Nights held in the S.E.S. Building Central Road, Port Macquarie.

Monthly General Meeting
Saturday 4 July 2020 2:00 pm – Cancelled due to COVID-19

Friday Night Get-Together
Friday 17 July 2020 7.00 pm – Cancelled due to COVID-19

Westlakes Amateur Radio Club Car Boot Sale
Saturday 18 July 2020, Westlakes club grounds in York Street, Teralba

Annual General Meeting
Saturday 1 August 2020 2:00 pm

Monthly General Meeting
Saturday 1 August 2020 after AGM

Friday Night Get-Together
Friday 21 August 2020 7.00 pm

Remembrance Day Contest
0300 UTC Saturday 15 August 2020 to 0300 UTC Sunday 16 August 2020
Camden Haven Airfield

International Lighthouse and Lightship Weekend 22 & 23 August 2020
Tacking Point Lighthouse

Monthly General Meeting
Saturday 5 September 2020 2:00 pm

Friday Night Get-Together
Friday 18 September 2020 7.00 pm

The 63rd Jamboree On The Air will take place on 17 and 18 October 2020.

Net Controllers' Roster
Nets on Voice Repeater VK2RPM 146.700 MHz

Sundays (0900 Local)		Thursdays (1930 Local)	
July 2020			
VK2FMGM	July 5	VK2ICQ	July 2
VK2FMGM	July 12	VK2EM	July 9
VK2FMGM	July 19	VK2ZHE	July 16
VK2FMGM	July 26	VKICQ	July 23
		VK2EM	July 30
August 2020			
VK2FMGM	Aug 2	VK2ZHE	Aug 6
VK2FMGM	Aug 9	VK2ICQ	Aug 13
VK2FMGM	Aug 16	VK2EM	Aug 20
VK2FMGM	Aug 23	VKZHE	Aug 27
VK2FMGM	Aug 30		
September 2020			
		VK2ICQ	Sep 3
VK2FMGM	Sep 6	VK2EM	Sep 10
VK2FMGM	Sep 13	VKZHE	Sep 17
VK2FMGM	Sep 20	VK2ICQ	Sep 24
VK2FMGM	Sep 27		

working bees are cancelled until further notice.

Membership Renewals

July marks the start of a new Financial Year for the Oxley Region Amateur Radio Club Inc. Membership renewals became due on the 1st of July. Please renew promptly. The simplest way to pay is by direct deposit but Treasurer Dennis Meade VK2DAM will always be pleased to receive payments in person at the club meetings when they resume. Cheques may be posted to the club at PO Box 712, Port Macquarie NSW 2444. If you are paying by cheque it would be appreciated if you could please add 50 cents to the cheque amount to cover the cost of depositing the cheque into the ORARC account.

The Committee is pleased to advise that again there is no rise in the cost of Membership Subscriptions for the 2020-2021 Financial Year. The fees are the same as those of last year. Ordinary Membership remains at $40 per annum. Associate Membership remains at $20 per annum. Distant Membership remains at $10 per annum. Family Membership remains as a single fee equal to the membership fee for the most expensive membership included in the members covered by the family membership. For example two Distant members covered by a Family Membership would pay just a single fee of $1**0.** An Ordinary Member and an Associate Member included in a Family Membership would pay just a single fee of $40. Two Ordinary Members covered by a Family Membership would pay just a single fee of $40.

It is important that all members renew their memberships and also encourage those who are currently not members to join or rejoin ORARC. The more members we have, the easier it is to keep our fees low. The club has a lot of fixed expenses and we rely on membership subscriptions to cover those expenses. Your membership subscription is greatly valued.

Annual General Meeting

COVID-19 restrictions permitting, the 2020 Annual General Meeting will take place at 2 pm on Saturday the 1st of August 2020 in the SES Building, Central Road, Port Macquarie. This will be the first face to meeting of Club members since March. Now is the time to consider nominating for one of the club office bearer positions. They all become vacant at the AGM. The strength of the club lies in having an active Committee to inspire and lead the club to do the many worthwhile things that enable the Oxley Region Amateur Radio Club live up to all of its objectives to serve its members and the community, and to promote Amateur Radio as a hobby. The formal Notice of the Annual General Meeting and a nomination form accompany this issue of Oxtales.

The current Committee has worked very hard to make the club's 2019 – 2020 Financial Year a very successful one. The continuing sound financial position has enabled the club to embark on a number of innovative projects to provide the infrastructure to support advances in radio communications. The club already has repeaters at Middle Brother Mountain and at Telegraph Point which support both analogue FM and C4FM System Fusion digital voice. EchoLink is available on the VK2RPM 146.7 MHz Middle Brother repeater. Both Middle Brother and Telegraph Point have APRS digipeaters for real time GPS tracking. The VK2RCN 53.8 MHz 6 metre analogue FM repeater will be reinstalled with new equipment shortly at Telegraph Point. Education has always been an important role of the club and it is significant that some members have already upgraded their licences to enable them to operate on 6 metres, and to use the digital modes which are becoming more popular, especially now that Foundation Licensees are permitted to use

them too. It is planned to hold a short August Monthly General Meeting at the conclusion of the AGM.

Club Projects

The major project is the establishment of a new repeater site for the VK2RCN Repeaters at Telegraph Point. The proposed site is a few kilometres along the ridge line from the existing VK2RCN site. The club has enjoyed a very generous usage of the existing site with excellent results for many years. While the current informal arrangement will happily continue for the time being under the present circumstances, the club must establish a new site with a formal site lease.

Much work has been done towards the establishment of the proposed new site. The setting up of the formal lease and obtaining a Development Approval from the Port Macquarie Hastings Council is currently in progress.

The club was fortunate in obtaining a partial grant towards the establishment of the new site but the funding requires satisfying all the criteria of the Funding Deed.

The club has made application for an additional grant towards the cost of connecting mains power to the site. The success or otherwise of this application will not be known until March 2021.

The success of the project to establish this major asset can only be achieved through the efforts of club members. As well as fund raising there are many tasks which need to be completed.

If you would like to contribute to the work of the sub-committee please contact the ORARC Committee.

The setting up of an additional UHF multi-mode digital voice repeater at each of the club's repeater sites has been delayed but Paul Colledge VK2ICQ set up and tested the equipment which will be installed at the new VK2RCN repeater site. Once the VK2RCN equipment is proven the Middle Brother Mountain VK2RPM installation will follow.

The new UHF digital repeaters will utilize Yaesu DR-1X repeaters fitted with MMDVM repeater controllers which support C4FM, Dstar, DMR, NXDN and P25 digital voice modes.

The intelligent linking of the VK2RCN and VK2RPM 2 metre repeaters utilizing hardware and software developed by Paul VK2ICQ is still being planned with the capability to also support a relay of the weekly VK2WI news broadcasts.

The repeater projects have been delayed by the ongoing extreme effects of the fires, storms, flooding, and the COVID-19 pandemic throughout the 2019 – 2020 Financial Year. The COVID-19 crisis is still continuing in the 2020-2021 financial year.

Club Activities

Normally ORARC runs a surprising number of activities and events each year. These range from the Monthly General Meetings, the Friday night get-togethers on the third Friday of each month, the weekly Sunday morning and Thursday evening club nets on the VK2RPM 146.7 MHz Middle Brother Repeater, the Wednesday morning working bees, and of course special events such as the Christmas Party, the annual Field Day on the June long weekend, and the Antenna Shootout. The club station VK2BOR participates in the John Moyle Field Day, the Remembrance Day contest, the International Lighthouse and Lightship

weekend, and the Jamboree on the Air. In addition, club members provide the safety communications for events such as the Beechwood Billycart Classic, the annual White Ribbon Walk in Port Macquarie, and car rallies in the area.

Many of the above activities have had to be cancelled due the restrictions imposed by the COVID-19 crisis. It is hoped that club face to face activities can recommence with the AGM on Saturday the 1st of August 2020 but the Committee is closely following the COVID-19 situation.

ORARC 2020 Annual Field Day

Sadly, the ORARC 2020 Field Day which would normally have been held on the Saturday and Sunday of the Queens Birthday June long weekend had to be cancelled due to the COVID-19 restrictions. Consequently, this issue of Oxtales is smaller than usual as we don't have a detailed Field Day report in words and photos.

The 2021 Field Day is only 11 months away. It will now be the 45th annual Field Day. The Wauchope Showground Hall has already been booked and paid for. The Golf Club Seaview Room has already been booked and paid for the Saturday night Field Day dinner. Fortunately, both the Wauchope Show Society and the Port Macquarie Golf Club were happy to transfer our paid 2020 bookings to 2021. Thank you to Gary Ryan VK2ZKT for agreeing to transfer his sponsorship of the Field Dinner venue to next year Field Day. 2021 marks the 50th anniversary of the formation of the Oxley Region Amateur Radio Club so next year's Field Day will be a special celebration.

Foundation Licence weekend and Assessments

The last Foundation Licence weekend and

Assessments were conducted on the 14 & 15 March 2020 just prior to the COVID-19 lock down. Four new callsigns were added to the area, Leo Mason-Hubers VK2FLUX, Jacob Deline VK2FWTF, Murray Smith VK2FLAT and Allan Mamo VK2FBIG.

Candidates who were unable to attend the 14 and 15 March weekend, and others who would like to obtain their Foundation Licence or upgrade, please contact Education Officer Larry Lindsay VK2CLL. This will help Larry to plan the next Assessment weekend which will be conducted when the COVID-19 restrictions are eased sufficiently. Once you have registered your interest, Larry will contact you as soon as it becomes possible to run another training and assessment weekend.

ARNSW Balun Building and Testing Day

The Balun construction and testing day at the SES Building in Port Macquarie had been planned for Sunday the 24th of May 2020 to coincide with the Balun Buildathon planned to be held at ARNSW at Dural on the same day. Unfortunately, both ORARC and ARNSW had to cancel the event due to the COVID-19 restrictions.

ARNSW very kindly still supplied the balun kits and Kevlar wire that ORARC members had ordered. These items were safe hand delivered to the individuals. Thank you to those members who assisted with this safe hand delivery. Most of the recipients have already built their baluns and constructed their antennas. If you have completed your balun and antenna the Oxtales Editor John Hansen VK2AYQ would welcome some photographs for inclusion in the next issue of Oxtales.

The balun construction day is an Amateur Radio NSW initiative to promote hands on construction by Amateurs. ORARC is indebted to ARNSW for so kindly supplying the balun kits and Kevlar wire at

a heavily subsidized price.

Many ORARC members are also members of ARNSW. Those who are not already ARNSW members are encouraged to consider joining. Please see the ARNSW web site https:// arnsw.org.au/ . The membership page is at https://arnsw.org.au/html/ page_membership.htm

Digital Radio

Several ORARC members have recently joined the ranks of those with Digital Voice radio capability. While the ORARC, Taree and Great Lakes VHF and UHF repeaters have had C4FM Yaesu Fusion digital voice capability for some time, several members have set up their own digital voice hotspots. DMR is the most popular protocol but DStar, C4FM and P25 are also being used. There have been several recent purchases of Retivis RT3S hand held VHF/UHF DMR radios but TYT MD380 and MD390 DMR hand held VHF and UHF radios are also popular. There are many mobile DMR commercial and amateur transceivers available too.

It is hoped to have an article on this subject in the next issue of Oxtales. In the mean time, join the ORARC Thursday evening and Sunday morning nets for an opportunity to meet up with some of those experimenting with DMR and other hotspots. More information on DMR may be found at https://vkdmr.com/

Coming Events

RD Contest

The 2020 Remembrance Day contest runs for 24 hours and commences at 1pm local time on the afternoon of Saturday the 15th of August, and finishes at 1pm on Sunday the 16th of August. This year the RD contest and International Lighthouse and Lightship Weekend are on separate weekends so it is planned that VK2BOR will operate in both the RD Contest and the ILLW for the full 24 hours from the club's communications caravan, COVID-19 restrictions permitting.

The RD rules permit contacts with stations in the same call area and there is the incentive of double points for contacts on 160 metres so operating the full 24 hours is a worthwhile strategy. See the WIA web site http://www.wia.org.au/members/contests/rdcontest/ for details.

The venue for this year's RD operation is planned to be the camping area on the banks of the Camden Haven River at the Camden Haven Airfield. The 160 metre dipole will be set up for the Saturday night to take advantage of the bonus points for 160 metre contacts.

2018 RD contest site with Bob VK2ZRE operating.

The club's barbeque will provide a sausage lunch and evening meal on the Saturday, and a bacon and egg breakfast on Sunday morning. The barbeque and tea, coffee and soft drinks will be free to those who attend. Please come along and help run the club station VK2BOR and enjoy a great social occasion.

The VK2BOR RD operation is dependent on a relaxation of the COVID-19 distancing restrictions as it is not possible to maintain physical separation within the confines of the communications caravan. The Committee is actively monitoring the situation and will advise closer to time if the operation can go ahead.

As well as helping to run the VK2BOR club station from the club's Communications Caravan, members are encouraged to participate in the RD Contest from their home stations as well. Most importantly, please submit your logs as every log that is entered helps the VK2 score.

ILLW

The International Lighthouse and Lightship Weekend (ILLW) https://illw.net/ takes place on the weekend of Saturday and Sunday the 22nd and 23rd of August 2020.

As mentioned above, and explained in May 2020 Oxtales, the ILLW and RD Contest are on consecutive weekends this year so it is planned that the club station VK2BOR will operate in the ILLW from the club's communications caravan to be located in the carpark below the Tacking Point Lighthouse, COVID-19 restrictions permitting.

Please come along and support this operation. Again, as usual there will be a free sausage sizzle lunch with biscuits, tea, coffee and soft drinks provided in the caravan. It is planned to continue to operate through the night and a sausage sizzle barbeque evening meal and a bacon and egg breakfast will be provided.

The VK2BOR ILLW operation is dependent on a relaxation of the COVID-19 distancing restrictions as it is not possible to maintain physical separation within the confines of the caravan. The Committee is actively monitoring the situation and will advise closer to time if the operation can go ahead.

Westlakes Amateur Radio Club Car Boot Sale

The Westlakes Amateur Radio Club 13th annual Car Boot Sale will take place in the grounds of the club premises in York Street Teralba on Saturday the 18th of July 2020. The annual car boot sale is an event not to be missed. The bargains are legendary. Enjoy the food from the club barbeque while enjoying the great social event. The bargains are a bonus! There is always a strong contingent of Westlakes members in attendance at the Oxley Region Amateur Radio Club Field Days so it is a great opportunity to reciprocate the interclub support. Note that COVID-19 distancing must still be observed at this event.

JOTA

The 63rd annual Jamboree on the Air will take place over the weekend of the 17th and 18th of October 2020. It is also the 24th annual Jamboree on the Internet. As in past years, the Oxley Region Amateur Radio Club is planning to set up the club station VK2BOR on Saturday the 17th of October in the club's communications caravan to be located adjacent to the 1st Port Macquarie Sea Scouts boatshed in McInherney Park on the bank of the Hastings River at Port Macquarie.

This year the 1st Port Macquarie Sea Scouts are again hosting a District Camp at McInherney Park in Port Macquarie. It will be a Lower Orama District event which will encompass groups from Coffs Harbour, Kempsey, South West Rocks, Wauchope, Camden Haven (Laurieton) and of course, Port Macquarie.

As a result, there will only be one JOTA station this year in the district with everyone coming to Port Macquarie.

It is a requirement of the Scouting Association that all volunteers must have a Working With Children (WWC) check number. Anyone who does not already have a WWC number can easily obtain one on line at https://www.kidsguardian.nsw.gov.au/child-safe-organisations/working-with-children-check

For volunteers there is no cost. Simply complete the on line form and you will receive an email. Print out the email and take it the RMS NSW Government Service Centre (In Port Macquarie it is in the building in Central Road that was originally the Motor Registry) where you will have to show your Drivers Licence for identification. The counter staff will verify the identification and you will receive the WWC number shortly afterwards by email.

Those who already have a WWC check number should check the expiry date of their certificate. Use the "Renew Your WWC Check Number" option. If your expiry date is prior to the 17th of October 2020 you will need to follow the above procedure to renew your WWC check number well before JOTA.

Please consider volunteering to participate in running the VK2BOR JOTA station. With the large number of Scouts and Guides expected at the District Event, Saturday the 17th of October will be a busy day.

The VK2BOR JOTA operation from the Club's communications caravan is dependent on a relaxation of the COVID-19 distancing restrictions as it is not possible to maintain physical separation within the confines of the caravan. The Committee is actively monitoring the situation with the 1st Port Macquarie Sea Scouts and will advise closer to time if the operation can go ahead from the caravan. In the event that COVID-19 distancing is still in force it may be possible to set up the radio equipment in the open.

Henry Lundell VK2ZHE is the ORARC co-ordinator for JOTA 2020.

Beechwood Billycart Classic

Members of the Oxley Region Amateur Radio Club provide the safety communications for this high profile event each year. The date this year is tentatively Sunday the 25th of October 2020. However, the Committee of the Beechwood Billycart Classic is still reviewing the COVID-19 situation and will soon make a decision as whether the Classic can be run this year. An announcement will be made when the decision has been made.

Fortunately, the tentative date for the Beechwood Billycart Classic this year is the on the Sunday of the weekend after JOTA so there is a week between the two events.

Assuming that the event can be run this year, please consider volunteering to be the co-ordinator for the Billy Cart Classic. The event will require a large number of volunteers on the day to man the radio check points, run the PA position at the finish, provide the radio communications in the Commentary Vehicle, and to act as net control station.

WICEN

WICEN (NSW) Mid North Coast Group

The WICEN (NSW) Mid North Coast Region group holds its monthly meetings after the conclusion of the ORARC Monthly General Meetings when they are able to resume in

the SES Building in Port Macquarie. Current and prospective WICEN members are invited to attend the meetings. Anyone interested in joining WICEN should come along to the meetings. For more information, visit the WICEN NSW website http://www.nsw.wicen.org.au/

The WICEN (NSW) Mid North Coast Region group conducts a net on the WICEN 80 metre frequency of 3600 kHz LSB at 7 pm local time on Thursday nights. The nets finish in time for members to participate in the ORARC Thursday night net at 7:30 pm on the VK2RPM 146.7 MHz 2 metre repeater.

WICEN NSW conduct a number of nets using DMR which can be accessed by those who have access to DMR or other digital radio hotspots. On the 2nd and 3rd Sundays of each month there is a net on the DMARC Talkgroup 3810, Timeslot 1, at 1830 hours local time.

As mentioned in May 2020 Oxtales, WICEN and other amateurs are experimenting using the FreeDV digital voice mode on HF. Bob Ecclestone VK2ZRE organized a bulk purchase of SM1000 stand-alone adaptors which enable any SSB transceiver to transmit and receive in the FreeDV digital voice mode. These have now all been safe hand delivered. It is hoped to conduct some on air testing as soon as enough of the adaptors have been interfaced to members'

transceivers. Of course FreeDV can be used on VHF and UHF in addition to the HF bands.

For more details on the SM1000 see http://www.rowetel.com/wordpress/?page_id=3902 For more information on FreeDV see the excellent YouTube video FreeDV Presentation at Gippstech 2015 by David Rowe VK5DGR https://www.youtube.com/watch?v=nAJ9s2Di084 Note that you can run FreeDV digital Voice using a PC. See the FreeDV website https://freedv.org/ for full details.

Bob Ecclestone VK2ZRE will be pleased to provide more information on the SM1000 and FreeDV.

Welcome New Member

The Oxley Region Amateur Radio Club welcomes new member Jamie Campbell VK2YCJ of Newcastle.

Henry Lundell VK2ZHE
President

Wanted
Raspberry Pi. Bruce Ekert VK2EM is looking for a unit. If you have one that you could part with please contact Bruce. An earlier model board would be also be suitable.

From the Treasurer Dennis VK2DAM

Membership Fees

Dear fellow ORARC members,

This is a reminder that annual subscriptions are now due for renewal.

The easiest way to pay subs, for members with computer access, is by direct deposit into the Club's account with the:

Regional Australian Bank
BSB: 932-000
Account Number: 500032744

The Original HCCU BSB and A/c number is still valid but will be phased out probably in the next 6 – 12 Months so please update as soon as you can

Don't forget to reference your call sign or name to identify your payment.

Alternatively, you can pay by a cheque (please add 50 cents to cover Bank cheque fee) made out to Oxley Region Amateur Radio Club and post it to PO Box 712 Port Macquarie 2444.

Finally, if you attend the AGM and monthly meeting on August 1*, you can pay then.

Fees remain the same as last year: $40 for ordinary membership, $20 for Associate Membership, $10 for distant membership and the family membership concession still applies.

*Assuming we are able to meet as per normal

Thank you

Dennis VK2DAM

Treasurer

Also from the Treasurer some information regarding the Regional Australian Bank's Community Partnership Program.

Regional Australian Bank Community Partnership Program

'Our Community Partnership Program allows our members to support the community groups they're passionate about, just by saving with an elected transaction account. If Oxley Amateur Radio Club becomes a recipient group of the program, our members and Oxley Amateur Radio supporters who have an account with us can choose to support Oxley Amateur Radio without costing you or them a cent!

All you need to do is save with an eFree, or Youth Account at Regional Australia Bank, and elect to support the Oxley Amateur Radio community group. Regional Australia Bank calculates the average annual balance of each of our supporters and Community Group and donates the equivalent of one percent to Oxley Region Amateur Radio Club.'

Treasurers note: If any of our club members who have accounts with the Regional Australian Bank decides to align one of their accounts it needs to be done in Branch not online or by phone!

73

Dennis Meade VK2DAM

Club Treasurer

200 Ohm Dummy load
## A constructional project by Larry VK2LJT

I had recently made an Off Centre Fed Dipole for 80 Metres and was having some trouble getting it to resonate. After discussing the matter with Henry VK2ZHE and with his encouragement I decided to construct a 200 Ohm dummy load to test the coax and balun.

Once I had the components, coffee tin, scrap tin, SO239 and 5 x 1000 0hm resistors, it did not take long to assemble. The SO239 was fitted into the centre of the coffee tin lid and 5 x 1000 ohm resistors were soldered in parallel between the coffee tin lid and another piece of steel tin cut into a doughnut shape as shown in the following photographs.

I then soldered a piece of copper wire between the centre of the SO239 to the bottom piece of tin. See photograph above and below.
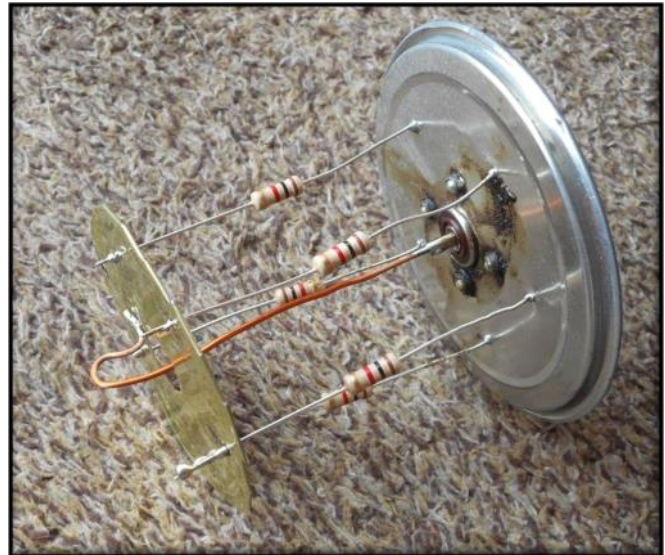
Multimeter measurement between the inner and outer of the SO239 indicated a resistance of 198Ohms. I have painted the dummy with undercoat grey but intend to apply a better colour at some later time. The coffee tin would also be needed to be filled with oil to dissipate heat.

73, Larry
VK2LJT.

President's note:

Thank you to Larry for a great contribution to Oxtales. A very useful piece of test equipment that isn't available off the shelf but is simple to build. An excellent use for some of the coffee tins that have been emptied during the COVID-19 lockdown!

50 Ohm dummy loads are more common however when you build a 4:1 balun you need a 200 Ohm dummy load to test the balun.

To use the dummy load make up a short 2 wire lead from the 200 Ohm terminals on the balun and attached it to the SO239 socket of the 200 Ohm dummy load.

It is very easy to attach two wires to a PL259 plug to make a neat secure connection to the dummy load. Of course it s important to put a label on the dummy load to identify it as a 200 Ohm dummy load so that it can't be inadvertently mistaken for a 50 Ohm dummy load as they would look the same on the outside.

Note that a 50 Ohm dummy load can be made using the same construction technique that Larry has demonstrated. Instead of connecting five 1k Ohm resistors in parallel as used in the 200 Ohm dummy load, to make a 50 Ohm dummy load simply connect twenty 1k Ohm resistors in parallel to make a 50 Ohm dummy load.

The construction would involve having to

drill many more small holes for the resistor pigtails but that's not too difficult.

NO QSL CARDS

The US Postal Servic(USPS) has temporarily suspended international mail acceptance for items addressed to certain destinations due to service impacts related to the COVID-19 pandemic.

This situation could result in the return or loss of mail, such as QSL cards, addressed to affected parts of the world. The USPS has posted a list of affected countries, which is updated regularly.

At present, 15 countries are affected due to their postal restrictions while a further 81 countries have no postal transportation facilities.

Construction Project

Morse Code Decoder

Submitted by Ian VK2IDL

Introduction

The idea of building a Morse decoder came about accidentally. I had studied Morse Code for my advanced AOCP many years ago and used it regularly enough to maintain a reasonable proficiency. However, after an absence from amateur radio my Morse had deteriorated significantly so I went looking for on-line Morse training websites in the hope of recovering some of my skills. In the process I noted that there were a number of hardware and software solutions for decoding Morse code, although reports on their performance varied.

I had written software for several amateur radio projects in the distant past, including the *VZ-200 RTTY Module* which was published in **ETI magazine** back in November/December 1984 and sold as a kit by Dick Smith electronics (K-6318). Since my code writing skills had also been inactive for a number of years, I saw this as a creative opportunity – and so the idea for building my own Morse decoder was born.

The **'VK2IDL' Morse Decoder** is actually based on an excellent open source design by Budd Churchward, WB7FHC. Budd's original project doesn't use an Arduino module, instead he incorporates an ATmega328 processor chip and associated support components directly onto a ready-made decoder PCB. For my project I've integrated Budd's audio filtering circuit with a standard Arduino module and modified his software for my own feature preferences. In fact Budd's software sketch will work just fine with my circuit although it will operate a little differently. You are of course welcome to try Budd's Arduino sketch in this project. Details of Budd's project are at http://wb7fhc.com

Before we go any further - What is an Arduino?

I'm glad you asked. An **Arduino** is an open-source prototyping platform used for building electronics projects. It consists of a small PCB containing a programmable microprocessor and a few associated support components that provides inputs to read sensors and outputs that control external devices such as motors, servos, LEDs etc. It can be programmed to do tasks using a language called C++. The good thing for those new to the Arduino is that there are so many websites and YouTube videos dedicated to the Arduino that you can easily build a useful project without ever needing to write any code. You will however need a PC (or Mac) and a free program called the *Integrated Development Environment* or "IDE" to upload the code into the Arduino. The Arduino IDE is a free download from the Arduino website at https://www.arduino.cc/en/main/software

There are a range of Arduino boards available of various sizes and features, however the one I have chosen to use in this project is the Arduino **Nano**. The Nano, as its name suggests, is a tiny device about the size of a USB stick, yet has all of the features we require for this project. Its small size allows it to be installed into a small jiffy box and not only that, its cheap at around $5 each. If you choose to use a different Arduino module (perhaps you already have something laying around), make sure it has the **ATmega328P** chip. There are ATmega168 versions of some boards available at almost the same price but they have only half the memory which is insufficient to

hold the programming code for this project.

The Project

The 'VK2IDL' Morse Decoder will receive Morse code directly from an audio source, decode it and display it on a built-in 4 line, 20 character LCD. It includes a software controlled noise impulse filter, an automatic input-frequency tuning circuit and a Farnsworth setting for receiving Morse that uses Farnsworth timing. All functions are controlled by three push buttons along the top of the unit. The unit automatically adjusts itself to the speed of the incoming Morse code and displays the speed on the LCD. It is power by a 5V USB source that plugs into the Arduino's USB port. Most people will have a spare USB charger laying around. For field use it can be run for many hours from a portable 'Power Bank' phone charger.

The Circuit Diagram
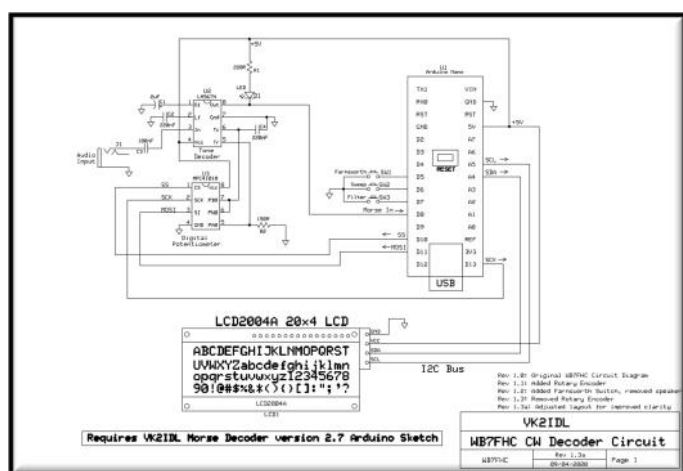
The circuit consists of an LM567 tone decoder, an MPC41010 digital potentiometer, an Arduino Nano and an LCD.

LM567

The LM567 is a tone decoder with its centre frequency set by a voltage controlled oscillator (VCO). The VCO frequency is set by capacitor (C4) and a variable resistor placed across pins 5 & 6. Capacitors C1 & C2 form a filter with the bandwidth set by the value of C1. Using the component values provided, the bandwidth and frequency range is selective enough that you can select one of several stations that are transmitting close together just by tuning that station to the correct tone. Audio tones from the receiver are fed into pin 3. The output pin 8 normally floats to a logic high due to its output load R1/D1, however if the audio tone at the input matches the frequency of the VCO, the output pin 8 switches low. Hence the LM567 is able to turn a correctly tuned Morse code tone at the input into a series of logic 0s and 1s at the output. D1 switches on whenever pin 8 switches low giving a visual representation of the incoming Morse code.

MPC41010

The MPC41010 is a digital potentiometer. It provides a variable resistance across pins 5, 6 and 7 simulating a normal 3 terminal variable resistor or potentiometer. The value of the resistance is controlled by serial input data from the Arduino applied to pin 3. Pin 2 receives serial clock timing pulses from the Arduino to control the timing of the incoming data. Pin 1 is the Chip Select pin used to enable the MPC41010 for data control. Since the outputs on pins 5, 6 & 7 perfectly simulate a variable resistor, they can be connected directly to the pins 5 & 6 on the LM567 to precisely tune the LM567's VCO frequency using serial data from the Arduino.

LCD

The LCD is a 4 line x 20 character backlit display. It can be purchased locally for under $10 shipped or even less from China. The one I used for this project incorporates an I2C interface board piggybacked onto the back of the LCD. This is important as most LCD's require a lot of wired connections, however the I2C adaptor allows the Arduino to communicate with the LCD

using serial data thereby reducing the number of connections to just 4. The LCD can be purchased with a range of backlight colours including Blue, Orange and White. The choice is yours.

Note, there is a small (blue) variable resistor (pot) on the LCD's I2C interface board. This is used to control the contrast and is often turned to minimum when the LCD is shipped. If your LCD backlight is lit but there are no visible characters on the display, adjust this resistor for the required contrast.
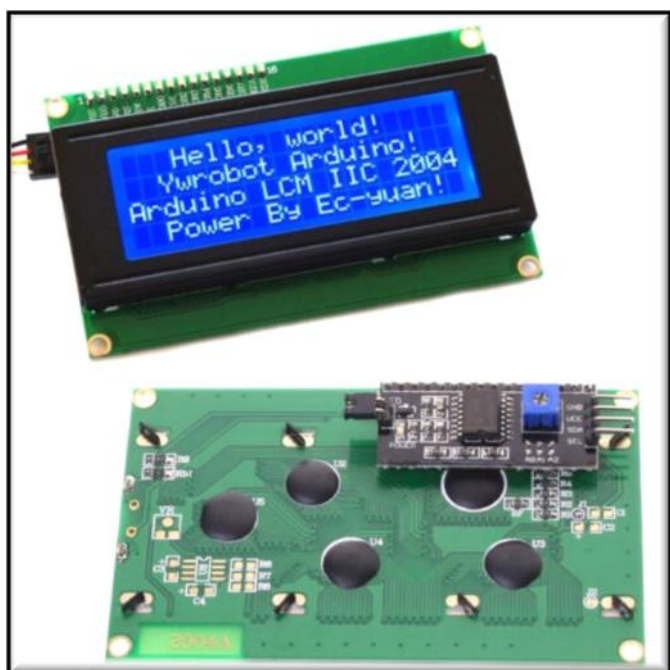
Control Switch Operation

Three switches are connected to the Arduino to provide controls for the user selectable options.

*   **SW1** controls the QRN filter settings. The QRN filter resamples the output from the LM567 after a set delay to help eliminate short burst noise pulses from appearing as erratic characters in the display. The filter value is displayed as fl=1 to 8

*   **SW2** automatically tunes the LM567 to match the frequency of the Morse input tone. With an input tone or Morse signal present at the input of the LM567, press SW2. The digital potentiometer will sweep the LM567's VCO frequency several times while monitoring the LM567's output pin. After several passes the LM567 will lock to the input frequency and the reference value used by the digital potentiometer will be displayed as T=xxx. The default value is 201 which matches the side-tone frequency of my Yaesu (around 615 Hz). The default value can be changed in the software to match your radio or your preferred listening tone.

*   **SW3** enables the Farnsworth set ting. Farnsworth timings are used for Morse training. The traditional method used for Morse training at slow speeds is to stretch out the timing to give the trainee time to count the dits and dahs for each character. Farnsworth timing allows the characters to be sent at a faster speed, but reduces the timing between characters so that the overall wpm speed is still slower.

Construction

I have not provided a PCB layout for this project. Layout is not too critical although the LM567 specification sheet recommends placing C1 and C2 close to the LM567 pins. The components were hand wired onto a prototyping PCB which has a series of plate-thru holds but no connected tracks. Simply solder the components into place then use some thin wire-wrap wire to provide the interconnections underneath. There aren't many components, so you should be able to keep the assembly quite compact.

A photo of my PCB assembly is shown below. I've mounted the Nano on the same PCB, however you can mount the Nano separately if you prefer. When mounting the Nano you will need to ensure the USB socket protrudes through the case otherwise you wont be able to plug-in the external USB power source. The LCD and switches are connected using normal multi-core hookup wire.
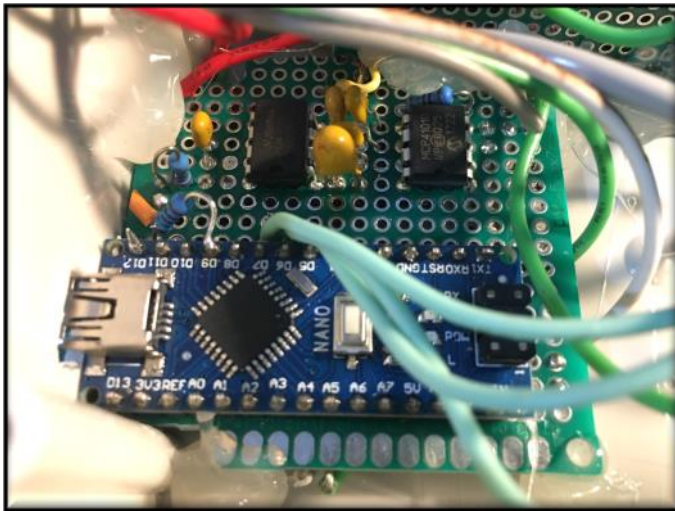
Main PCB assembly

Prototyping PCB

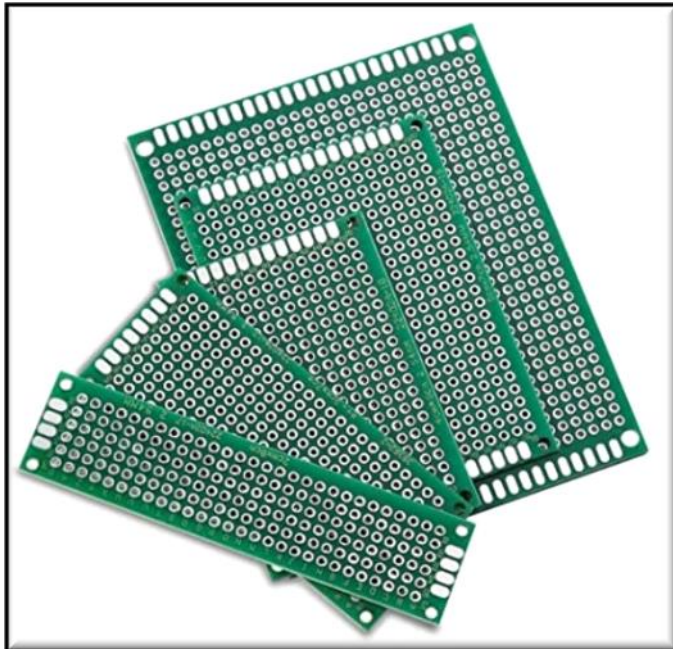You can package the Morse decoder any way that's convenient to you. I mounted mine in a 130 x 68 x 44 mm Jaycar jiffy box. The LCD was mounted in the lid along with the LED. The switches were soldered to a strip of prototype PCB then mounted along the top. The sockets for connecting the audio input and USB power connector were placed at each end.

As you can see I got lazy and didn't go to too much trouble with the mounting mechanics as there's not much mechanical stress. I made use of some hot melt glue to hold some of it in place. The only exception is the LCD and the switch PCB which should be mounted using stand-offs to ensure they can withstand normal handing in the field. As you can see the LCD is a snug fit inside the lid so check you have it centred correctly around the edges when cutting out the panel so that the box will clear the edges of the PCB during assembly.
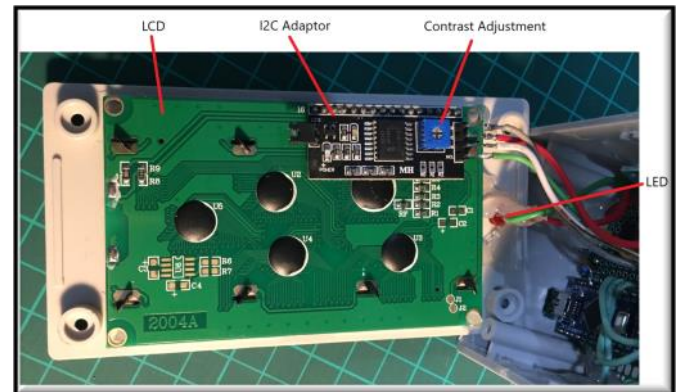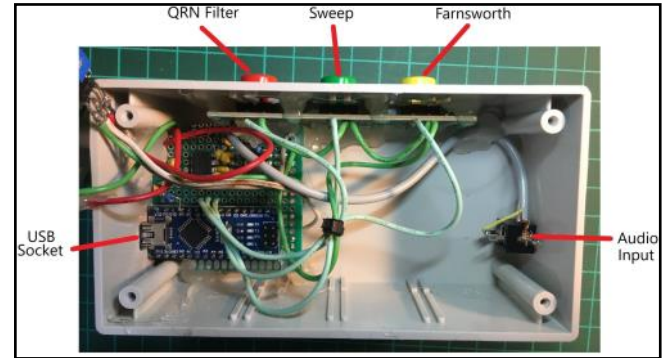
Installing the software and programming the Arduino

During development, I used WB7FHC's original version 2.4 Arduino sketch to test my hardware, after which I customised the software with a number of modifications before getting to my final version 2.7. This circuit will still work with WB7FHC's original software sketch so you are welcome to try both versions although the operation is quite different.

Download and install the Arduino IDE software from https://www.arduino.cc/en/main/software

The 'VK2IDL' Arduino sketch can be downloaded from here: https://github.com/ideal54/VK2IDL_CW_Decoder

1. Download and save the files to the downloads folder on your PC.
2. Go to your Documents folder and create a folder called "VK2IDL_Morse_Decoder_2.7". The folder must be called that EXACTLY as it must match the name of the .INO file. Now copy all the files you downloaded into that folder.
3. Run the Arduino IDE and select File Open.
4. Point it to the VK2IDL_Morse_Decoder_2.7 folder in the Documents folder and select the file VK2IDL_Morse_Decoder_2.7.ino
5. The file will open in the IDE and you will be able to view the code.

Edit your Call Sign

The Decoder will display your call sign on the LCD at startup. The call sign in the software presently defaults to VK2IDL. You should change this to your own call sign. Look for the line shown below and simply edit the text highlighted between the quotation marks.

#define myCall **"VK2IDL"**   // Callsign of User

You can now upload the program to your Arduino by clicking the circle Icon with the → symbol at the top of the IDE window. This will automatically save your call sign edit, compile the program and upload it to your Arduino.

At this point there are a number of things that can go wrong if your IDE is not setup to talk to your Arduino. If this is the case the following instructions should resolve them.

- The GeekCreit Arduino Nano requires the **Arduino Duemilanove or Diecemila** board drivers to be installed. These may not already be installed if your IDE is a new installation. To install them you will need to go to the IDE menu and select TOOLS, then BOARD, then BOARD MANAGER. Once in the "Board Manager", type **Arduino AVR Boards** in the search window. When they are displayed, select INSTALL to install them. Once they are installed, shut down and restart the Arduino IDE. You should now be able to select TOOLS then BOARDS and select the **"Arduino Duemilanove or Diecemila"** board from the list of boards.

- USB Drivers. Many alternate Arduino boards requires the **CH340 USB drivers** to be installed to communicate with your PC. If your PC doesn't recognise your Arduino Nano when you plug it in you will need to install these drivers which can be downloaded from http://www.wch-ic.com/search?t=downloads&q=ch340. Instructions are included on the website.

A few details about the code.

The following code defines some of the pin connections used by the Nano. If you use the NANO with the circuit supplied you will not need to make any changes to this part of the code. However if you have used a different Arduino module or you have used different I/O pins on the Arduino for the switches, simply locate the line for that switch and change the pin number.

Line 72: #define farnsBUTTON **5**   // Pin for Farnsworth Switch
Line 73: #define sweepBUTTON **6**   // Pin for LM567 Decoder tuning Switch
Line 74: #define filterBUTTON **7**   // Pin for QRN Filter Switch
Line 75: #define signalPIN **8**   // LM567 Tone Decoder output connects here
Line 79: #define slaveSelectPin **10**   // Connected to Pin 1 'CS' of the MPC41010

Operating Instructions

Power Source

The Arduino is powered by 5V via its USB connector and the entire project can be run from any USB power source. For portable use it will run for many hours on a portable mobile phone charger.

Plug the 5V power source into the USB socket. The unit will power up and display an introductory screen showing the software version and your call sign. If VK2IDL is displayed you will need to edit a line of code as described further above. After a few seconds the display will switch to the main screen.

Audio Input

Connect the audio output from the speaker of your radio or other Morse code source to the input socket on the decoder. Tune your radio for some Morse code and adjust the volume to a normal listening level. You may need to readjust the volume for best results once the decoder is actually decoding the Morse.

Manual Tuning

The LED is designed to light when the input tone matches the frequency setting of the LM567 tone decoder. The default tone frequency setting for the decoder is 615 Hz, which, as it happens, is the side tone frequency of my Yaesu. Unless your incoming Morse tone matches this frequency, the LED will not be lit and there will be no characters decoding on the display. Now tune the radio up or down in frequency to alter the frequency of the Morse tone. As the Morse tone approaches 600 Hz and enters the band pass of the LM567 tone filter, the LED should start to flash. Take a note of the upper and lower frequencies that start the LED to flash then set the frequency in the centre of these limits. This will give the most reliable decoding results. The bandwidth is quite narrow but should not be too difficult to tune. You should now be decoding Morse on the display. The relia-

bility of decoding will depend on the quality of the incoming signal and the accuracy of the sender.

Automatic Tuning

Tune the radio to a Morse signal and adjust for the most comfortable or preferred tone frequency. Now press the **Sweep** button. The Decoder will sweep up and down as it tracks values for the tuning process. Once the tone is locked, normal operation will resume and the LED will flash in time with the incoming Morse. The 'T=' value will now display the new tuned value.

In most cases you should find the automatic tuning gives better results as it can often centre the filter more accurately than manual tuning.

Changing the default Decode Frequency

As indicated above, the default input tone frequency is set to 615 Hz. You can easily change this to a value that matches your equipment as follows.

1. Feed a Morse signal into the Decoder at the preferred tone frequency.
2. Press the Sweep button and wait for the signal to lock.
3. Note the 'T' value on the display that shows the new tuning reference value.
4. Open the VK2IDL Morse Decoder program code in the Arduino IDE and look for the following line: int ToneSet = **201**;   // A value bumped up or down by the Sweep function
5. Replace the value **201** with the new value that was shown on the LCD display.
   Click the → symbol at the top of the IDE to save the code and upload it to the Arduino.

When the Decoder restarts the new 'T' value should be displayed as the default.

QRN Filter

'f1=' is the QRN filter setting. Under noisy conditions,

if you are hearing static crashes or noise that triggers random characters on the display, increase the filter value by pressing the Filter switch. Each press increases the value by 1 from 0 up to a maximum of 8, then recycles back to 0. The greater the filter value, the more risk of decode errors because the filter adds a delay which can affect the Morse decoding timing. With clear conditions you should set this to 0.

Farnsworth Setting

'FO' is the farnsworth setting. Farnsworth settings are used for Morse training by sending Morse characters at a higher speed (say 10 wpm) while the character spacing is slower (around 5 or 8 wpm). This allows a student to learn to recognise the pattern of the incoming characters at a more realistic speed while still allowing enough time to think between characters. The farnsworth setting is displayed as Fx where x is the wpm spacing between characters. Values are: FO (Off), F5 (5 wpm spacing) or F8 (8 wpm spacing).

When code with farnsworth timing is received on the Morse Decoder, the spaces between each character are incorrectly decoded as word spaces because the farnsworth timing makes them appear much longer that expected. This creates unwanted spaces on the display which makes the text more difficult to read. Pressing the **Farnsworth** switch adjusts the timing of the character spaces to be more inline with the expected timing. This removes the unwanted spaces making the text more readable on the display.

WPM

The WPM=xx value represents the calculated speed of the incoming Morse code in words per minute. It is calculated based on the measured timing of the incoming characters. In fact the software initially tracks the length of the dah's, so the more dahs you receive at the beginning of the mes-

sage, the sooner it locks onto the speed.

That just about covers most of the detail of this project.

Parts List

Below is a list of parts. Apart from the special parts listed below (i.e. the Nano, LCD and digital Potentiometer), all of the other parts can be bought from your local Jaycar store. I have provided references for the special parts below.

Arduino Nano

The Arduino Nano I recommend is the GeekCreit ATmega328P V3. I recommend this not because it is better but because I have bought and used quite a few of them and they are very low cost and very reliable. Having said that, any Arduino Nano with an Atmega328P chip should work fine but each may require slightly different selections in the IDE before you can upload the program.

I bought mine from Banggood in China. If you are not familiar with Banggood, I can highly recommend them as I have used them for many years and they provide an excellent and reliable service to Australian customers. To find the Nano simply go to www.Banggood.com and search for "Geekcreit ATmega238P Nano V3". You can buy them with or without the headers attached (See images below)
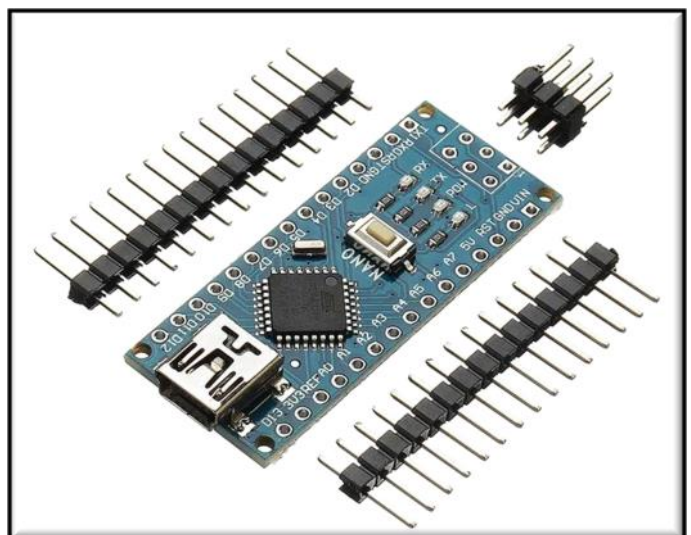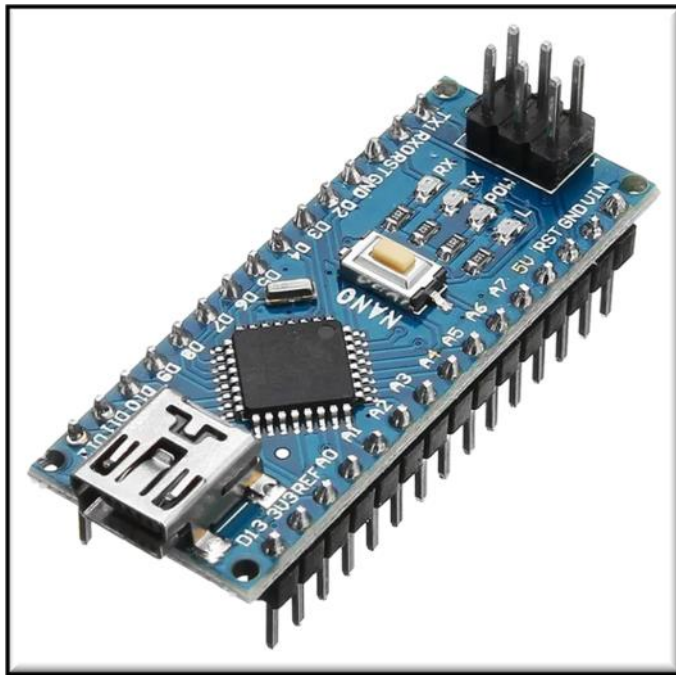
Liquid Crystal Display

I purchased my LCD from an Australian eBay distributor for less than $10 delivered. You can also purchase them from Amazon or Banggood if you wish. Simply make sure you get one with the I2C adaptor board attached. Apart from that, the main differences you will find between suppliers is the colour shades may vary slightly and they may use different I2C addresses.

The address issue can easily be resolved but it is another complication for somwho isnew to Arduino projects.

Search **ebay.com.au** for "**20x4 Blue HD44780 LCD I2C**". At the time of writing, the seller's name was "**servicewell**" and the price was $8.99 delivered from Sydney.

MPC41010

I searched a number of places for this little IC and found the best deal was with RS Components in Sydney:
https://au.rs-online.com

The only down side was that I had to purchase 6 pcs at a time, so I suggest you or-
der some as a group.

Prototyping PCBs

These can be purchased from a number of sources such as Banggood or Amazon Au. I bought mine from Amazon Au as a pack of 32 pcs of various sizes. They are currently out of stock. You will probably need to order a bunch of 10 or so, so once again I recommend ordering as a group. The price varies depending on the size, quality and quantity.

Part	Qty	Circuit Ref	Source
Arduino Nano	1	Nano	See Text
LCD 20x4	1	LCD2004A	See Text
LM567N	1	LM567N	Jaycar
MPC41010	1	MPC41010	RS Components
3.5mm jack	1	J1	Jaycar PS0132
2uF Tantalum capacitor	1	C1	Jaycar
220nF Capacitor	2	C2, C4	Jaycar
100nF Capacitor	1	C3	Jaycar
Red LED	1	D1	Jaycar
220R Resistor	1	R1	Jaycar
150R Resistor	1	R2	Jaycar
Momentary Switch	3	SW1, SW2, SW3	Jaycar
Jiffy Box 130 x 68 x 44	1		Jaycar HB6023

Editor's note: Many thanks to Ian for presenting this constructional project complete with photographs to Oxtales. To view a larger picture of the circuit diagrams please enlarge your image of the Oxtales pdf file.

WIA Notice of Annual General Meeting
Date : 02 / 07 / 2020

Author : Peter Clee - VK8ZZ

The Annual General Meeting (AGM) of the Wireless Institute of Australia (WIA) was to have been held in Hobart Tasmania on 10 May 2020. Notification of this was included in the January / February Edition of Amateur Radio magazine.

Government restrictions on travel and accommodation due to COVID-19 meant that the AGM was postponed to a date to be determined. Notice of the postponement was published on the WIA news,

The 2020 postponed Annual General Meeting of the Wireless Institute of Australia will be held at the WIA National Office at Unit 20, 11-13 Havelock Road, Bayswater Victoria on Saturday 25th July 2020 commencing at 10.00am (9.30am CST and 8.00am WST)

Due to new COVID-19 restrictions members attendance in person will not be possible. The Australian Securities and Investment Commission has agreed that hybrid meetings may be held.

The AGM will be streamed live, and members will be able to follow proceedings online. Members will need to register to receive the streamed broadcast. Online Registrations will be accepted on and from Friday 17th July and will close at midnight on Friday 24th July 2020.

WIA directors will be present either in person or by electronic means.

All voting will need to be completed prior to the AGM. Voting will be recorded on Proxy Voting forms which need to be lodged at least 24 hours prior to the start of the AGM.

Questions and discussions will be by electronic means on the day.

The secretary advises that motions put at the meeting will be passed by a count of proxy votes. All members wishing to vote at the AGM will need to record their vote on the proxy form available on the WIA web site, or by contacting the national office.

Proxy forms will need to be lodged at the national office at any time up until 24 hours prior to the commencement of the meeting.

By order of the board
Peter Clee VK8ZZ
Secretary of the WIA

ACMA Announces Amateur Radio E-Bulletin

Date : 10 / 06 / 2020
Author : ACMA Website
Are you an amateur radio user? Sign up for our new amateur radio e-bulletin to get updates on a range of amateur radio issues.

ACMA supports amateur radio users by providing access to frequency bands.

We do this while balancing other demands for spectrum.

Consulting with the amateur radio community is also an important part of our role. This means we review submissions from amateur radio clubs, representative bodies and individuals as part of our work.

Get the latest news about amateur radio, changes to regulations, and invitations to have your say on upcoming consultations.

Sign up today by visiting the following Link: https://www.acma.gov.au/subscribe-our-newsletters

Tony Hutchison VK5ZAI AM recipient

Date : 08 / 06 / 2020
Author : Shane Lynd VK4KHZ

Congratulations to Tony Hutchison VK5ZAI in being recognised and awarded as a Member of the Order of Australia (AM) in today's Queen's Birthday honours list.

The Queen's Birthday Honours list states the award was given to Tony -

For significant service to amateur radio, particularly to satellite and space communication.

Well done Tony!

New Special Event Callsigns VI110WIA and VK20HOME Now On Air.

Date : 04 / 06 / 2020
Author : Lee Moyle - VK3GK

Two new WIA Special Event Callsigns VI110WIA and VK20HOME have recently been granted by the ACMA for use on the amateur bands.

VI110WIA is for activation in commemoration and celebrating the WIA's 110 Years of operation, first established 11th March in 1910, it is still the oldest Amateur Radio Society in the world.

Commencing June 1st and ceasing December 31st 2020, VI110WIA will be available for use by WIA affiliated clubs and all WIA members. For more information on the history of the WIA and the previous 100 year centenary celebration information see the WIA website via this Link

VK20HOME has been issued for use until at least December 31st 2020 and its activation on air adds to the many other countries now participating in the "STAYHOME" activities due to the Covid-19 restrictions, which in some countries are finally being eased.

The WIA applied for the VK20HOME callsign after an official request from Martti Lane OH2BH who asked if the WIA would like to participate in the global stay home event endorsed by the IARU.

Equipment from the Past

Yaesu FT-817 Series

The **Yaesu FT-817** is one of the smallest MF/ HF/VHF/UHF multimode general-coverage amateur radio transceivers. The set is built by the Japanese Vertex Standard Corporation and is sold under the Yaesu brand. With an internal battery pack and on board keyer, it has an all mode/all band capability and with flexible antenna, the set is particularly well suited for portable use. The set was first produced in 2001 at a price of $670 US.

The upgraded **FT-817(N)D** was launched in 2004. The difference between the two models was the addition of 60 meter band coverage in 5 fixed channels (USA model only), other display lighting options, modifications in the RF stage, the included FNB-85 battery-pack and NC-72B charger.

The radio was designed for use either from an external DC source or internal batteries and provided up to 5 watts of power output when on external DC power. When using the battery pack or 8 AA cells the radio automatically switches to 2.5 watts. The multi-function LCD screen included selectable blue or amber backlighting which could be disabled for battery conservation.

The radio was supplied with Hand mic,1400 mAh battery, Battery case (for 8 x AA batteries, AC wall charger, YHA-63 Whip antenna for 50/144/430 MHz, external DC cable and shoulder strap.

The FR –817 Series is still in production and has been modified during its long production life to an ND model and then to the current FR-818 ND range with an increase in output power to 6W and a larger internal battery capacity.

Many amateurs used these sets for QRP operation and shortwave listening and as a small travel set. The supplied internal battery was relatively quickly drained and a popular modification was to make up an external portable power supply.

A large range of accessory items are available for the FT 817 ND ranging from specialist backpacks, to larger batteries automatic antenna tuners, additional filters and computer interfaces.

FT-817 Specifications

RX:100 kHz - 56 MHz; 76 - 154 MHz; 420 - 470 MHz

TX: Amateur bands 160-10 meter amateur band plus 6 meter, 2 meter and 70 cm bands.

Operating modes SSB, CW, AM, FM and digital modes.

Antenna Impedance:
50 Ohms, Unbalanced (Front: Type BNC, Rear: Type M)

Case Size: 5.31 x 1.5 x 6.50 inches (135x38x165 mm)
Weight (Approx.): 1.17 kg (with Alkaline battery, antenna, without Microphone)

RF Power Output:
5/2.5/1/0.5 W

Blast from the Past

Blast from the Past' is the section of Oxtales where we reflect on what the club was doing in years gone by. This months 'Blast' is taken from the 2010 July edition of Oxtales.

In July 2010, Henry VK2ZHE was President, Jim VK2VIV was Vice President/Secretary Secretary and John VK2KHB Treasurer. The club had 50 financial members.

The main activity reported in that month's Oxtales was on that years field day which was held in the Sea Scouts Hall in William Street.

The following is an extract from Henry VK2ZHE's president report that month which highlighted the importance of the field day as a club fund raiser.

'Thank you to the many members who made the Oxley Region Amateur Radio Club's 35th annual Field Day such a great success, both as an event, and as a fund raiser. It takes a lot of effort to run a field day and with some of the usual workers unavoidably absent it meant everyone had to do a little extra. The media coverage helped to raise the profile of Amateur Radio in its 100th year. It brought some additional visitors to the Field Day, and perhaps we might gain some new Amateurs from amongst those who expressed interest in the Foundation Licence. Thank you also to all the visitors and traders who supported the Field Day.

We look forward to another great Field Day next year. 2011 will be the club's 40th year and we invite everyone to help us celebrate this milestone. The 2011 Field Day will be held at the Tacking Point Surf Club. The change of venue is necessary as the 2011 Wintersun Festival will take place in the Port Macquarie central business area over the 2011 June Long Weekend and will make access to the Sea Scout Hall too difficult.

It is even more important than previously that the Field Day should be a financial success. The club now has an additional annual financial burden which is CPI adjusted so will continue to grow each year. As many members will be aware, the NSW Land and Property Management Authority has recently begun to individually charge rent for all facilities located on Crown Land. The club's VK2RPM repeater installation on Middle Brother Mountain falls into this category and while the rent is charged at a concessional rate for not-for-profit organizations such as our club, the current rent is still in the order of $500 per year.

Unfortunately, the club now has a smaller financial reserve than we have had in the past. This is due in part to having recently paid the invoiced retrospective rent for three back years to the NSW Land and Property Management Authority for the Middle Brother Mountain site. Despite our protestations and negotiations we had no option other than to pay this account. It is cold comfort that our club is not unique in having had to bear a burden of this nature.'

Bruce VK2HOT (photograph below left) was the event coordinator. Trevor (photograph below right) the Chief Judge.

Michael Owen VK3KI (SK) President of the Wireless Institute of Australia (WIA) was able to attend and present an overview of WIA matters.

A feature of many of the earlier field days was a trailer filled with odds and ends donated by Fettell Communication from which members could select items for a nominal fee to the club.

The famous Fettell Communications Ute getting a work out. Is that John (VK2KC) seeing a lost treasure?

Lewis (VK2AG) and Charleen daughter of VK2FBRG (VK2LBG) feeding the multitude.

Arthur (VK2ATM) demonstrating various digital technologies at VK2BOR for Prime TV.

Barry (VK2FBRG) (VK2LBG), in his usual willing and able performance on the BBQ on both days, was assisted by a number of members including Joe (VK2IEV), and Paul (VK2UPR).

Ah, the fox is over there. Jeff (VK2BYY)

Editor's note Jeff VK2BYY has been supporting our Field Days, fox hunting and winning prizes for more than 10 years!

A young fox hunter Cameron sets off under the watchful eyes of OM Chris (VK2YMW) and Bruce (VK2HOT)

American Radio Relay League Organization

The American Radio Relay League is the largest membership association of amateur radio enthusiasts in the USA.

ARRL is a non-profit organization, and was co-founded on April 6, 1914, by Hiram Percy Maxim and Clarence D. Tuska of Hartford, Connecticut. The ARRL represents the interests of amateur radio operators before federal regulatory bodies, provides technical advice and assistance to amateur radio enthusiasts, supports a number of educational programs and sponsors emergency communications service throughout the country.

The ARRL has approximately 161,000 members. In addition to members in the US, the organization claims over 7,000 members in other countries. The ARRL publishes many books and a monthly membership journal called QST.

Editor's note: The following two articles are from the ARRL's home page.

Maritime Mobile Service Network Comes to the Aid of Vessel in Distress
07/06/2020

The Maritime Mobile Service Net (MMSN) on 14.300 MHz came to the assistance of a sailing vessel on June 25. MMSN control operator Steven Carpenter, K9UA, took a call on 20 meters from Ian Cummings, KB4SG, the skipper of the Mystic Lady, then some 40 miles east of Florida.

Cummings reported that his engine had failed as he was attempting to return to his home port of Stuart, Florida. He not only had insufficient wind, but a strong current was carrying the vessel out to sea. Cummings had been unable to reach any station via his VHF marine radio, since he was too far from the coast.

Assisting in the call was Robert Wynhoff, K5HUT, also an MMSN net control operator. Cummings said his vessel, with one passenger on board, was drifting northwest toward the South Carolina coast.

"A major concern was that the vessel was heading directly towards a lee shore," the MMSN reported. "Lee shores are shallow, dangerous areas which are a hazard to watercraft. Vessels could be pushed into the shallow area by the wind, possibly running aground and breaking up."

Carpenter contacted Cummings' family, who had already called the Sea Tow marine towing service. Sea Tow advised Carpenter to tell the captain to head closer to shore by sailing west, if possible.

Carpenter told Cummings that if he was unable to get nearer to shore, he would notify the US Coast Guard, *Continued on next page*

which was already monitoring the situation.

As the MMSN reported, "The Mystic Lady was able to make some headway, but it was very slow. Members of the MMSN made additional calls via landline to the captain's family as to the ongoing status of those on board. The family was concerned but relieved that communication was established and that all were well."

Several hours later, the captain advised that the wind had picked up, allowing him to head close enough to shore for Sea Tow to reach the vessel and take it back to port.

The Pacific Seafarers' Net, which monitors 14.300 MHz from the West Coast after the MMSN secures at 0200 UTC, kept in touch with the Mystic Lady into the night while it was under tow.

The tired, grateful captain later messaged the net, "A million thanks to everyone last night who helped rescue us on 14.300.

Everyone chipped in as we drifted north in the Gulf Stream 60 miles headed to a lee shore. The MMSN net control and several others stayed with us for hours, phoned people, and were immensely helpful. The situation on board was dangerous. We are now safely under tow home. You folks are amazing!"

In operation since 1968, the MMSN monitors 14.300 MHz 70 hours a week to assist vessels and others in need of assistance. — Thanks to MMSN Net Manager Jeff Savasta, KB4JKL

Russian-Ukrainian "Radio War" Remains at a High Level
07/10/2020

The June newsletter of the International Amateur Radio Union Region 1 Monitoring System (IARUMS) reports that what's being called "the Russian-Ukrainian radio war" continues apace.

"The Russian-Ukrainian radio war remained on a high escalation level also in June," IARUMS Region 1 Coordinator Peter Jost, HB9CET, said. "Almost every day, we heard the massive spiteful and provocative broadcasts. In June, they used more frequencies than before, affecting our bands very hard. It is a great annoyance and a big shame!"

Jost points out that the IARU Monitoring System has little opportunity to stop the on-the-air conflict.

"Only national authorities can hopefully do something against international complaints," Jost said. "It is very important and very helpful that many other [IARU] member-societies also observe these frequencies and make complaints to their regulators. We have to coordinate this well within IARU and act together. This is the only way we have a certain power."

In May, Jost reported that the radio war has raged "for years" at 7055 kHz LSB (as well as on 7050 or 7060 kHz).

Jost also reported continued daily transmissions from the Russian over-the-horizon radar known as "Contayner" in the 40- and 20-meter amateur bands and elsewhere. The Chinese "V" has been reported on 20 meters, from 14,246 to 14,256 kHz.

MEMBERSHIP REGISTER

Membership List as at 16, March 2020

No.	Cat	Surname	Given Name	Spouse	Call	Location	Phone
1	O	BAILEY	JOHN	(FLORENCE)	VK2KHB	PORT MACQUARIE	02 6582 2192
2	D	BLACKMORE	MARK	-	VK2XOF	BAULKHAM HILLS	02 9639 0663
3	L	BLYTH	BOB	-	VK2XIQ	TELEGRAPH POINT	-
4	O	BREWSTER	DAVID		ZL3DS	LAKE CATHIE	0407 749 748
5	D	BRICE	GRAHAM	(CYNTHIA)	VK2VV	SCONE	02 6545 0411
6	O	BRUCESMITH	SANDY	(KAY)	VK2WH	PORT MACQUARIE	0435 356 466
7	D	CAMPBELL	JAMIE		VK2YCJ	HAMILTON	0418 628 321
8	O/F	COLLEDGE	PAUL	(PAULA)	VK2ICQ	PORT MACQUARIE	02 6580 9912
9	O/F	COLLEDGE	PAULA	(PAUL)	VK2FPDC	PORT MACQUARIE	02 6583 8829
10	O	COOPER	GORDON	(GLENDA)	VK2GFC	LAKEWOOD	02 6559 6502
11	O	COURT	RICHARD	(LINDA)	VK2CHC	PORT MACQUARIE	02 6581 5658
12	D	DORAHY	ALEX	(ANNE)	VK2HBF	TOORMINA	0400 849 098
13	O	ECCLESTONE	BOB	(DIANA)	VK2ZRE	KEMPSEY	0419 414 412
14	D	EKERT	BRUCE	(YULIA)	VK2EM	FORSTER	0414 532 496
15	O/F	FLETCHER	CAROLINE	(PETER)	VK2CZF	PORT MACQUARIE	02 6584 5191
16	O/F	FLETCHER	PETER	(CAROLINE)	VK2HPF	PORT MACQUARIE	02 6584 5191
17	O	FROGGATT	DARREN	(KRISTY)	VK2MIA	PORT MACQUARIE	0488 01 8102
18	O	FROST	ROBERT	(SUSAN)	VK2CRF	PAPPINBARRA	02 6587 6129
19	D	GARLAND	JOHN		VK2CJG	JEWELLS	02 4948 1950
20	O	GILSON	BARRY	(FAY)	VK2LBG	PORT MACQUARIE	02 6583 8814
21	L	GREEN	LEWIS	(PAMELA)	VK2AG	PORT MACQUARIE	02 6584 9162
22	O	HANSEN	JOHN	-	VK2AYQ	PORT MACQUARIE	0427 407 973
23	L	HARDING	DAVID	-	VK2AIF	WAUCHOPE	02 6586 1947
24	D	HARPER	JOHN	(VIVIANE)	VK2LJ	SYDNEY	0417 254 763
25	D	HIRSCHEL	ALLAN	-	VK2OK	DOUBLE BAY	0415 259 777
26	D	HUTCHESSON	COLIN	(PAULINE)	VK5DK	MT. GAMBIER	08 8725 5527
27	D	JANES	LES	(BEVERLY)	VK5JL	SALISBURY HEIGHTS	08 8281 3878
28	D	KEIR	ANDREW	(BARBARA)	VK2AAK	DARAWANK	02 6554 3498
29	D	JOHNSON	STEVE	-	VK2SJJ	BELLINGEN	0466 334 626
30	O	JONES	PAUL	(SANDRA)	VK2DEL	PORT MACQUARIE	02 6584 3772
31	O	KOPPEL	HORST	-	VK2FHKO	LAKE CATHIE	02 6585 5992
32	O	KUCERA	PETER	-	VK2MPK	WAUCHOPE	0429 229 290
33	L	LINDSAY	LARRY	(PENNY)	VK2CLL	HUNTINGDON	02 6587 1155
34	O	LINDQUIST	IAN	(BERNADETTE)	VK2IDL	PORT MACQUARIE	0414 419 462
35	L	LUNDELL	HENRY	-	VK2ZHE	PORT MACQUARIE	02 6582 0534
36	D	MACNAUGHTON	JENNY	-	VK2BA	MUDGEE	02 6372 4053
37	O	MCDONAGH	JOHN	(KARIN)	VK2VY	PORT MACQUARIE	02 6582 0020
38	O	MARE	HANS	-	VK2MRK	PORT MACQUARIE	02 6582 7080
39	O	MARTIN	CRAIG	(JENNY)	VK2CSM	SANCROX	02 6585 3452
40	D	McADAM	PETER	-	VK2EVB	COFFS HARBOUR	-
41	O	McGUIRE	MARK	-	VK2FMGM	PORT MACQUARIE	02 6583 8875
42	O	McLEAN	JOHN	(CORRINE)	VK2KC	PORT MACQUARIE	02 6584 6220
43	O	MEADE	DENNIS	(SUE)	VK2DAM	PORT MACQUARIE	02 6582 2998
44	D	MEEHAN	TERRY	-	ex-VK2KL	KEMPSEY	-
45	D	MELVILLE	STUART	-	VK2KSM	NORTHERN RIVERS	0419 043 316
46	O	MESSINA	TOBY		VK2XTX	PORT MACQUARIE	0417 293 377
47	L	MONCK	ARTHUR	-	VK2ATM	PORT MACQUARIE	02 6581 0960
48	O	MULLINS	RAY	(LYNNE)	VK2JU	PORT MACQUARIE	0432 559 400
49	O	NEIL	JIM	(CAROL)	VK2VIV	PORT MACQUARIE	0487 812 481
50	O	NEWHAM	LAURIE	(ROBIN)	VK2ELN	PORT MACQUARIE	02 6583 5387
51	D	NIVEN	TREVOR	(BETH)	VK5NC	MT. GAMBIER	08 8723 2432
52	D/F	O'BRIEN	GRAHAME	(JUDY)	VK2FA	CARDIFF	02 4954 8688
53	D/F	O'BRIEN	JUDY	(GRAHAME)	VK2HZV	CARDIFF	02 4954 8688
54	D/F	PETTET	JOHANNA	(STEVEN)	VK2FJMM	ILARWILL VIA MACLEAN	02 6645 5290
55	D/F	PETTET	STEVEN	(JOHANNA)	VK2ZVG	ILARWILL VIA MACLEAN	02 6645 5290
56	L	PILLEY	DAVID	-	VK2AYD	KING CREEK	02 6585 2647
57	O	PISANI	VIC	(MEREDITH)	VK2UVP	BONNY HILLS	02 6584 8361
58	D	PRATT	PETER	-	VK2PX	PENNANT HILLS	0418 965 962
59	O	RAE	THOMAS	-	VK2ATR	PORT MACQUARIE	-
60	D	RAY	ROBERT		VK2ZWZ	SINGLETON	0412 573 86
61	D	ROMAINE	PAUL	-	VK2UPR	PORT MACQUARIE	0428 466 075
62	O	TERRY	COL	(KATHLEEN)	VK2LCT	YIPPIN CREEK	0429 002906
63	O	SANDERS	BILL	(SUELENE)	VK2FWHP	REDBANK	0437 004 228
64	O	SMALL	ROBERT	(LYNN)	VK2BIG	LAKE CATHIE	02 6584 8148
65	D	SWINDLEY	RON		VK2DDQ	KEMPSEY	0417 299 397
66	O	SMITH	LYLE	(JEANNINE)	VK2SMI	WAUCHOPE	02 6585 2497
67	O	SOUTHWELL	IVAN	-	VK2IJS	PORT MACQUARIE	0439 611 452
68	L	THATCHER	TREVOR	-	VK2TT	WAUCHOPE	02 6585 1240
69	D	THOMPSON	DES	(BETTY)	VK9FLHI	LORD HOWE ISLAND	02 6563 2152
70	O	THOMPSON	LARRY	(KATHLEEN)	VK2LJT	TUNCURRY	02 6555 7994
71	O	WALKER	BRUCE	(GWEN)	VK2HOT	PORT MACQUARIE	02 6583 8360
72	D	WALKER	STUART	-	VK2BMX	BEECROFT	02 9869 0515
73	O	WALSH	STUART	(JENNIFER)	VK2FSTU	WAUCHOPE	02 6586 4490
74	O	WARD	MICHAEL	(SEREENA)	VK2FMDW	PORT MACQUARIE	0418 291 276
75	O	WINCHESTER	JOHN	(PAULINE)	VK2NJJ	PORT MACQUARIE	02 6580 3031
76	O	WYNN	STEPHEN	(LYALLE)	VK2ZSW	YIPPIN CREEK	02 6585 3327
77	D	YORSTON	ROBERT		VK2CAN	ROSEVILLE	02 9426 3727

Cat Key : A = Associate D = Distant F = Family L = Life O = Ordinary