



# OXTALES

First published 1980

Newsletter of the Oxley Region Amateur Radio Club Inc.,

PO Box 712 Port Macquarie 2444

Club e-mail address: vk2bor@orarc.org

Club Website: <http://www.orarc.org>

ORARC's Forty-third Anniversary Year

Club Nets on VK2RPM  
146.700MHz  
(CTCSS 91.5Hz)  
Every Sunday at 0830  
Every Thursday at 1930

## November 2014

Compiled by VK2TT & VK2AYQ

PRESIDENT: Lyle Smith VK2SMI 6585 2497  
VICE PRES: Charles Edmondson VK2KCE 6584 0495  
TREASURER: Larry Lindsay VK2CLL 6587 1155  
SECRETARY: David Hogan VK2FRAB 6582 3006

### President's Report

We have had a busy October with Jamboree on the Air (JOTA) and the Bunnings BBQ fund raiser.



Firstly JOTA. This year we operated three stations, McInherney Park Port Macquarie, Wauchope Scout Hall and Laurieton Scout Hall. This was a feat of organisation and contribution from the members getting equipment and operators to these locations.

**Port Macquarie:** Henry, VK2ZHE and Barry, VK2LBG, took charge of Port Macquarie with the Club's Communication Van, VK2BOR, both heading out early to avoid the traffic hassles of the Ironman's weekend activities. The setup included a 20/40 metre dipole on the sunny shores of the Hastings River. Thanks to Mark VK2FMGM, Richard VK2CHC, Henry VK2ZHE, Barry VK2LBG, Paul VK2ICQ, Bruce VK2HOT & Paul VK2UPR. For full details refer to Henry's report on Page 6.



### 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

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-1 (APRS Digipeater)  
SX 145.175MHz 1200bps

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The ORAC Christmas Party will be held on Saturday 6 December 2014. The Club's 2015 Calendar may be purchased at the party. The club has a limited number of 2015 Call Books on sale for \$27.00. Don't miss out buy yours now.

## Down The Coax

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

Monthly General Meeting  
Saturday 1 November 2014 2:00 pm

35<sup>th</sup> Annual Beechwood Billycart Classic  
Sunday 16 November 2014

Friday Night Get-Together  
Friday 21 November 2014 7.00 pm

ORARC Christmas Party  
And Monthly General Meeting  
Saturday 6 December 2014  
Settlement Point Park  
From 9 am for set up.

Friday Night Get-Together  
Friday 19 December 2014 7.00 pm

Monthly General Meeting  
Saturday 3 January 2015

Friday Night Get-Together  
Friday 16 January 2015 7.00 pm

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email Directory

## Net Controllers' Roster

Nets on Voice Repeater VK2RPM 146.700 MHz

**Sundays**  
(0830 Local)

**Thursdays**  
(1930 Local)

### November 2014

VK2TT	Nov - 02	VK2ZHE	Nov - 06
VK2CHC	Nov - 09	VK2ICQ	Nov - 13
VK2TT	Nov - 16	VK2EM	Nov - 20
VK2CHC	Nov - 23	VK2ZHE	Nov - 27
VK2TT	Nov - 30		

### December 2014

VK2CHC	Dec - 07	VK2ICQ	Dec - 04
VK2TT	Dec - 14	VK2EM	Dec - 11
VK2CHC	Dec - 21	VK2ZHE	Dec - 18
VK2TT	Dec - 28	VK2ICQ	Dec - 25

### January 2015

VK2CHC	Jan - 04	VK2EM	Jan - 01
VK2TT	Jan - 11	VK2ZHE	Jan - 08
VK2CHC	Jan - 18	VK2ICQ	Jan - 15
VK2TT	Jan - 25	VK2EM	Jan - 22
		VK2ZHE	Jan - 29

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email Directory (cont'd)

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## Vale Dee Pilley

Members of ORARC recently attended  
the funeral of Dee Pilley.

The club extends sincere sympathy and  
support to David Pilley VK2AYD dur-  
ing this sad time.

(from page 1)



The Club's caravan set up next to the picturesque Hastings River. Bruce VK2HOT, Barry VK2LBG and PaulVK2UPR survey the scene.

**Wauchope** was set up by 09:30am using my mobile ham shack and a half-wave dipole mounted on a squid pole, adjacent to the Scout Hall. With the club being ready on air by 10:00am, Bob VK1ZRE, Stuart VK2FSTU, Stephen VK2HOO and Lyle VK2SMI started making contacts for the Scouts. However, propagation was poor and even us old timers were having trouble with the noise level. Despite these difficulties, contacts were made and all the Scouts went through their first QSO before lunch. After lunch, we started again but with a low success rate until mid-afternoon. At that time, a Hunter valley group came on the air, cycling tens of potential Amateurs with our remaining three Scouts.

Overall, the attendees had a great time, and, at our end, included several Scouts showing great interest in Amateur Radio. WIA brochures were distributed and a follow up visit is planned for November. Wauchope Scouts have already indicated interest in next year's JOTA.



The 'Palace' set up for business.



Lyle and scout make a contact at Wauchope

**Laurieton** took some organising. Initially, Laurieton was the planned venue but was later, with the plans moving from Laurieton to Kendall and with only 2 days notice it was moved back to Laurieton with a start time of 14:00 hours due to a prior booking of their hall. I left Wauchope to arrive in Laurieton in time for setup with Dennis VK2FEAT and Keith VK2FPTL. Table and chairs were outside (the echo in the hall a problem) radio and power supply connected firstly to a multi band vertical antenna, signals started to be received but no one returned our CQ. We tried a 40 metre half wave dipole with the same results and after liaising with VK2BOR via 2-metres for a report, it was established that we had RF distorting our HF audio. The Scouts were getting restless and the decision was made to fallback to 2 metres to allow VK2BOR to satisfy the hoards. It was still a success with great interest shown by one particular Cub ready to talk to anyone about anything (I think she could out-talk a politician).



Lyle VK2SMI, Dennis VK2FEAT and Keith VK2FPTL assisted by cubs get ready for contact.

Thanks to Bob VK1ZRE, for travelling to all three locations and taking the photos.  
(continued page 4)



**BBQ fund raiser:** It's Sunday morning, 7:30, and we are at a hardware store, but we are not here to buy a hammer or new flyscreen or blades for the mower, we are here to sell sausage-sandwiches and soft drinks! It was the Bunnings BBQ Fundraiser event, and our planning went into action. The marquee was raised; the BBQ setup, with tables, food and the chef standing ready for the first sizzle from the hot plate.



*Charles VK2KCE taste tests the sausages watched by Rob VK2CRF and Jessica while Larry VK2CLL cooks up a storm.*

Once the customers started to arrive we were in full swing of cooking and ready for sales. It was with apprehension that we stood there as potential sales walked in and then out of Bunnings without a sausage leaving the hot plate. It was after 8:30am and all were talking about it being too early after breakfast and it will pick up, it was a hot day and we should at least sell drinks... but then came the first sale, and then another, we all started breathing again as further sales followed. Sausages were flowing off the hot plate, at conveyor-belt speed at times, and the queue grew, and shrunk, and at times disappeared completely!

Shift changes went smoothly and all members put their shoulders to the

grindstone.



*The team hard at work supervised by Lyle VK2SMI, Rob VK2CRF and Dennis VK2FAET with Sue serving.*

At closure time, only 10 sausages and one carton of drinks were left over! A well supplied BBQ! We did have to make a run to the shops for more bread and onions. Thanks to Henry, VK2ZHE, for his timely shopping skills.



*John VK2KHB, Barry VK2LBG, Trevor VK2TT and Lyle VK2SMI discuss the day.*

The results were 295 sausage sandwiches and 182 drinks sold with gross sales of \$952.70 and a net profit of about \$535.

A hot, long day, put in by all, but considering the outcome, was well worth the effort to keep our membership fees down. A big thank you to Richard VK2CHC, Rob VK2CRF, Charles VK2KCE, Barry VK2LBG, Larry VK2CLL, Henry VK2ZHE, Mark VK2FMGM, Dennis and Sue VK2FAET, Trevor VK2TT, John VK2KHB, Stuart VK2FSTU, Keith VK2KHB, Arthur VK2ATM

*(from page 4)*

Lyle VK2SMI and his daughter, Jessica. Also, thanks to David VK2FRAB, although not there on the day, organised most of the pre-BBQ supplies.

**Billycart Derby:** Don't forget the 35th Annual Beechwood Billycart Classic on Sunday 16 November. This will be a good demonstration of our radio skills to the public and a fun day. Please contact Lyle VK2SMI if you are interested and have not already signed up.

**VK2RPM:** The 2 metre repeater on Middle Brother is acting up again and plans are in motion to send another crew up the mountain to, firstly, replace the old coax to the antenna. Although this is not expected to resolve the intermod issue, it is an essential maintenance item to be done. Armed with a spectrum analyser we are hoping to find the cause of the intermod.

Once we have established the cause, whether it is another service provider mechanical problems in or around the tower, we will be in a position to act on this information. Hopefully, by the time this edition of Oxtales goes to print, there will be light at the end of the tunnel.



*View from the old hang gliding take off point on middle brother above, below Steve VK2HOO Keith VK2FPTL and Paul VK2ICQ survey the site.*



*Lyle VK2SMI looks for inspiration*



*Arthur VK2ATM and Rob VKCRF work on the repeater.*



*Arthur VK2ATM checks for grass growth!*

Presidents Report by  
Lyle Smith, VK2SMI.  
President ORARC Inc.

# JOTA REPORT

## Port Macquarie Location by Henry VK2ZHE



The ORARC Communication Caravan was set up in front of the Port Macquarie Sailing Club adjacent to the 1st Port Macquarie Sea Scouts boatshed at McInherney Park on the Hastings River at Port Macquarie for the 57th annual Jamboree on the Air on Saturday the 18th of October 2014. Thank you to Barry Gilson VK2LBG who towed the caravan to the site at 7 am and to Paul Romaine VK2UPR and Bruce Walker VK2HOT who assisted Barry Gilson VK2LBG and Henry Lundell VK2ZHE to set up the caravan and erect horizontal dipoles for 40 and 20 metres.

VK2BOR was fully operational by 8:30 am. Thanks to Mark McGuire VK2FMGM and Richard Court VK2CHC who assisted with operating and explaining Amateur Radio to the Scouts and Guides who all said they enjoyed their on-air JOTA experience. The new waterproof annexe for the caravan worked well and provided excellent shade



*Barry VK2LBG and Bruce VK2HOT enjoy the shaded area provided by the annex*

throughout the bright sunny day. There was no sign of the forecast rain!

The 1st Port Macquarie Sea Scouts were responsible for running JOTA and JOTI at their McInherney Park Boatshed this year. The Scouts kindly provided morning and afternoon tea as well as lunch and a sausage sizzle dinner at the end of the day so no-one went hungry at VK2BOR.

There were many other activities during the day. Sailing and canoeing were particularly popular. Many of the Scouts and Guides contacted during JOTA were envious of the Port Macquarie on-water activities!



*Sailing and canoeing down the Hastings on a bright sunny day.*

The McInherney Park location was much better for HF radio communications than the much more electrically noisy 1st Port Macquarie Sea Scout Hall location in Buller Street used for JOTA in previous years. It was a simple matter to erect the common feed 40 and 20 metre dipoles at McInherney Park using a 6.2 metre collapsible flagpole to support the feed point. As can be seen from the attached photos the ends of the 20 metre dipole were supported by 6 metre fibreglass squid poles.



*Barry VK2LBG and Henry attaching dipoles*

One squid pole was held in a sand screw on the beach and the other one was attached to a star stake driven into the ground on the river bank. One end of the 40 metre dipole was supported by an aluminium pole attached to the upstairs railing of the Sailing Club building. The other end was supported on a long halyard attached to a 10 metre squid pole fixed to a sign post on the river bank on the upstream side of the Sailing Club beach. One of the attached photos below shows that even at high tide there was ample clearance for the sailing dinghy mast to safely pass beneath the antenna and halyard.



*Above Henry VK2ZHE supervises a cub's contact.  
Below Stuart VK2FSTU sets up a contact for enthusiastic scouts.*



Excellent signal reports were received on 40, 20 and 15 metres using the dipoles. There was almost no detectable interference from the laptop computers used for JOTI in the tent set up adjacent to the caravan. See photo below.



At 4:30 pm Barry and I were treated to sausage sandwiches hot off the barbeque marking the end of the day's activities. By 5:30 pm we had everything dismantled and packed into the caravan which Barry then towed back to its usual parking spot.

## Joke

from Lyle VK2SMI

*Two elderly hams had been friends for many decades.*

*Over the years they had shared all kinds of activities and adventures on the ham bands. Lately, their activities have been limited to meeting a few times a week to play cards.*

*One day they were playing cards when one looked at the other and said, Now don't get mad at me.....I know we've been friends for a long time.....but I just can't think of your name and your call.! I've thought and thought, but I can't remember them. Please tell me what they are.*

*His friend glared at him. For at least three minutes he just stared and glared at the grey haired old man. Finally he said, How soon do you need to know?*

**Silent Key: Kevin Coulter  
VK2MAM**



Kevin passed away peacefully on Saturday, November 1, 2014 at the Port Macquarie Private Hospital, aged 90 Years

Kevin was born on the 30<sup>th</sup> of September 1924. He grew up at Gladstone with two older brothers and an older sister, all of whom predeceased him. He attended Kempsey High School.

In the second year of World War 2 Kevin enlisted in the RAAF. He particularly valued the time he spent in Canada and the USA. At the end of the war he returned to live with his parents who had moved to Kempsey after selling their business in Gladstone. He joined the ANZ Bank in Kempsey and met June who was a nurse at Kempsey Hospital. They were married in 1954.

Kevin remained with the ANZ Bank throughout his working life and spent many years as manager of various branches throughout NSW. His last posting before retiring to Port Macquarie in 1984 was as manager of the Queanbeyan Branch.

For his retirement Kevin obtained his Amateur Radio Licence to fulfil a lifelong ambition. He was an active member of the Oxley Region Amateur Radio Club for 25 years until recently, sadly missing out on life membership eligibility by just one year. This was not noticed at the time as Kevin looked younger than his years, and his date of birth was not included in the club membership records. He was a past Treasurer of the club. His culinary skills were well remembered by those who enjoyed the Field Day dinners that he cooked on several occasions.

Kevin continued his culinary interests in community service supporting the St Thomas' Church soup kitchen in Port Macquarie.

Kevin is survived by his wife, June, and their children David and Sarah, and their families.

His funeral was held in the Chapel of the Innes Gardens Memorial Park in Port Macquarie on Friday the 7<sup>th</sup> of November 2014.

Vale : Kevin Coulter VK2MAM  
*Submitted by Henry Lundell, VK2ZHE*



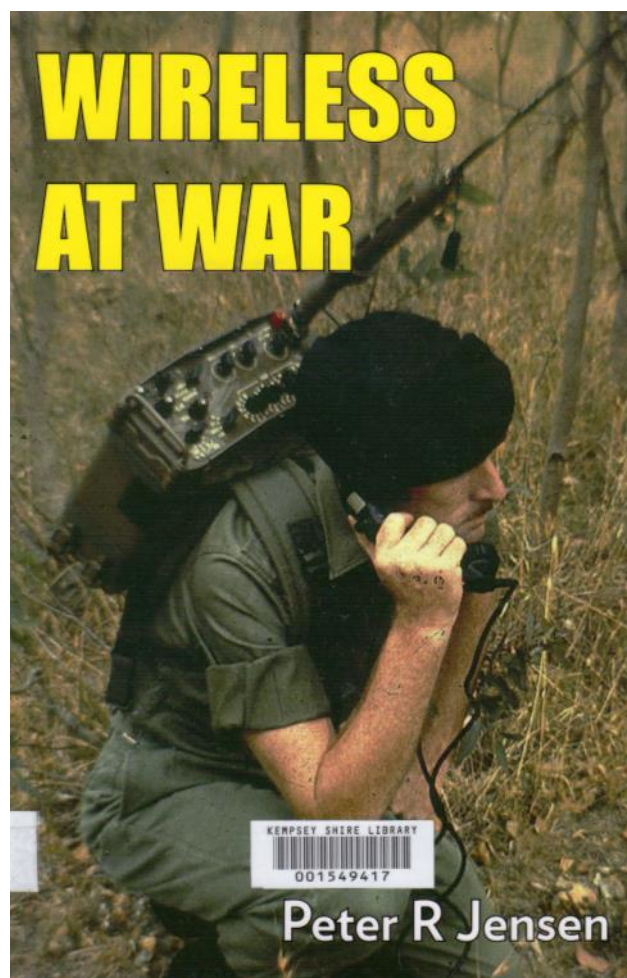


## MINUTE SUMMARY FROM THE SECRETARY David VK2FRAB

Dennis VK2FAET has made a suggestion that items from the Monthly Minutes be included in Oxtales to give those who were unable to attend meetings an idea of what has transpired. So this is a trial run and if the feedback is positive, the column will become a regular feature.

### September - November Minutes

- \* Club Key Register has been set up
- \* 6 metre Repeater workshop team working on assembly
- \* Position of Member Liaison Officer title changed to Email Liaison Officer
- \* Annual Summary of Financial Affairs submitted to Dept of Fair Trading
- \* Purchase of second hand VHF & UHF collinear antennas & folded dipoles
- \* Family Membership applicable to Distant members defined via By-Law to Constitution
- \* VK2RPM Middle Brother Repeater licence renewed
- \* Terry Meehan VK2KL granted Honorary Membership
- \* Comms Caravan Registration renewed
- \* Club made net profit of \$507.33 at Bunnings BBQ
- \* WIA Call Books ordered
- \* VK2RCN Telegraph Point Repeater licence renewed
- \* Purchase of new, bigger Awning for Caravan
- \* Draft copy of Standard Operating Procedures for Caravan completed.
- \* John VK2KC completed repairs to antenna vertical base for Comms Caravan
- \* Club successfully operated stations at Port Macquarie, Camden Haven, Wauchope for JOTA



Peter Jensen has put together a very interesting account on the types of radio communications used in the various conflicts during the past 100 or so years. Peter includes circuit diagrams of early spark transmitters and has sourced some remarkable photographs of radio equipment complete with circuit diagrams in some cases.

The description of the building of several replicas are also fascinating in terms of the detail supplied. Many members will probably have operated and even owned some of the equipment shown.

I found that the section on future developments in radio communications very thought provoking.

The book can be reserved at any of the libraries in the Hastings and Kempsey districts.

John VK2AYQ

## Hygain HF Vertical

Maintenance by John VK2KC

This was originally posted to the clubs Facebook page. However as many members have not signed up to Facebook it is reproduced here for all members.

Maintenance work has been carried out on the Hygain HF antenna mount as fitted to the Comms Van.

The base for the Hygain HF vertical fitted to the Oxley Region Amateur Radio Club's Comms Van was in poor shape, so with a couple of hours on the lathe and milling machine along with some Delrin and 6061 aluminium, bead blasted the mounting bracket managed to make a silk purse out of a sows ear!

Modified the bottom mount to be a better fit to the mast with two mounting screws as well. Top mount is a better fit to the mast as well as heavier duty too.

Attached is a photo of the completed Hygain mount.



Cheers  
John VK2KC

## Blast from the Past

This first appeared in the March 2010 edition of Oxtales.

*Dave VK2AYD*

*Is telegraphy faster than SMS ? Yes*

*Reading through December QST I had a nostalgia moment when I read the results of the World High Speed Telegraphy Contest. Back in 1951, long before bugs and electronic- keyers were in vogue I was in Germany and had an opportunity to participate in such a test. At that time reaching speeds in excess of 40 wpm was considered exceptional – today that is considered Novice speeds.*

*Each year, somewhere in Europe this contest is held. In 2009 it was at Obzor, Bulgaria where contesters from around the world met to compete.*

*The HST competition is divided into three types of events. Transmitting, Receiving and a Practicing Test. To make it more interesting the competitors are divided in various divisions such as Male and Female, Under 40 years of age, over 40 etc..*

*For the transmitting test the objective was to send 5 character letter/figure groups for 60 seconds. El-keys permitted. Errors can be corrected but of course they lose points. Speeds around 50 wpm are often reached.*

*The Receiving test uses the German software Rufzeichen-Hoeren. This starts off easy and as you log each station so the speed increases by 10 cpm. This was won by DJIYFK who averaged close to 800 characters per minute which translates to*

*about 200 wpm across 50 calls. Morse code at 800 cpm sound like a 20 millisecond burst of noise!*

*The Practicing test used the software Morse Runner and starts with a pile up of 4 stations and as you log a station another automatically takes its place. Unfortunately they are not spread out over 150 Hz and have different call sign lengths. This was won by LZ4UU who averaged 72 QSO's in a 10 minute period which equates to about 8 seconds per QSO at a rate of 430 per hour. All this copied through non-stop four-station QRM.*

*Belarus, Russia and Romania took out the gold.*

*Acknowledgement to ARRL QST  
de David VK2AYD*

*David  
2AYD*

From the editor VK2AYQ



*After reading the book Wireless at War I remembered that I had a photograph of a complete number 19 station (Australian War Memorial Canberra)*

It would be interesting to know if any members remember using the old number 19 radio set. Even better if any member

could write an article on their experiences with the radio 19 radio set. Please contact the editor if you would like to write a story for Oxtales.

### **A bit of 1940's History**

The following story was sent in by Bill VK2ZCV it is an interesting piece of History.



In 1933, a beautiful, young Austrian woman took off her clothes for a movie director. She ran through the woods, naked. She swam in a lake, naked. Pushing well beyond the social norms of the period.

The most popular movie in 1933 was King Kong. But everyone in Hollywood was talking about that scandalous movie with the gorgeous, young Austrian woman. Louis Mayer, of the giant studio MGM, said she was the most beautiful woman in the world. The film was banned practically everywhere, which of course made it even more popular and valuable. Mussolini reportedly refused to sell his copy at any price.

The star of the film, called Ecstasy, was Hedwig Kiesler.

She said the secret of her beauty was "to stand there and look stupid." In reality, Kiesler was anything but stupid. She was a genius. She'd grown up as the only child of a prominent Jewish banker. She was a math prodigy. She excelled at science. As she grew older, she became ruthless, using all the power her body and mind gave her.

Between the sexual roles she played, her tremendous beauty, and the power of her intellect, Kiesler would confound the men in her life including her six husbands, two of the most ruthless dictators of the 20th century, and one of the greatest movie producers in history. Her beauty made her rich for a time. She is said to have made - and spent - \$30 million in her life.

But her greatest accomplishment resulted from her intellect, and her invention continues to shape the world we live in today. You see, this young Austrian starlet would take one of the most valuable technologies ever developed right from under Hitler's nose. After fleeing to America, she not only became a major Hollywood star, her name sits on one of the most important patents ever granted by the U.S. Patent Office.

Today, when you use your cell phone or, over the next few years, as you experience super-fast wireless Internet access (via something called "long-term evolution" or "LTE" technology), you'll be using an extension of the technology a 20-year-old actress first conceived while sitting at dinner with Hitler.

At the time she made Ecstasy, Kiesler was married to one of the richest men in Austria. Friedrich Mandl was Austria's leading arms maker. His firm would become a key supplier to the Nazis. Mandl used his beautiful young wife as a

showpiece at important business dinners with representatives of the Austrian, Italian, and German fascist forces.

One of Mandl's favorite topics at these gatherings - which included meals with Hitler and Mussolini was the technology surrounding radio-controlled missiles and torpedoes. Wireless weapons offered far greater ranges than the wire-controlled alternatives that prevailed at the time. Kiesler sat through these dinners "looking stupid," while absorbing everything she heard. As a Jew, Kiesler hated the Nazis. She abhorred her husband's business ambitions. Mandl responded to his willful wife by imprisoning her in his castle, Schloss Schwarzenau.

In 1937, she managed to escape. She drugged her maid, snuck out of the castle wearing the maid's clothes and sold her jewelry to finance a trip to London. (She got out just in time. In 1938, Germany annexed Austria. The Nazis seized Mandl's factory. He was half Jewish. Mandl fled to Brazil. Later, he became an adviser to Argentina's iconic populist president, Juan Peron.)

In London, Kiesler arranged a meeting with Louis B. Mayer. She signed a long-term contract with him, becoming one of MGM's biggest stars. She appeared in more than 20 films. She was a co-star to Clark Gable, Judy Garland, and even Bob Hope. Each of her first seven MGM movies was a blockbuster.

But Kiesler cared far more about fighting the Nazis than about making movies. At the height of her fame, in 1942, she developed a new kind of communications system, optimized for sending coded messages that couldn't be "jammed." She was building a system that would allow

torpedoes and guided bombs to always reach their targets. She was building a system to kill Nazis. By the 1940s, both the Nazis and the Allied forces were using the kind of single-frequency radio-controlled

technology Kiesler's ex-husband had been peddling. The drawback of this technology was that the enemy could find the appropriate frequency and "jam" or intercept the signal, thereby interfering with the missile's intended path. Kiesler's key innovation was to "change the channel." It was a way of encoding a message across a broad area of the wireless spectrum. If one part of the spectrum was jammed, the message would still get through on one of the other frequencies being used. The problem was, she could not figure out how to synchronize the frequency changes on both the receiver and the transmitter.

To solve the problem, she turned to perhaps the world's first techno-musician, George Antheil. Antheil was an acquaintance of Kiesler who achieved some notoriety for creating intricate musical compositions. He synchronized his melodies across twelve player pianos, producing stereophonic sounds no one had ever heard before.

Kiesler incorporated Antheil's technology for synchronizing his player pianos. Then, she was able to synchronize the frequency changes between a weapon's receiver and its transmitter.

On August 11, 1942, U.S. Patent No. 2,292,387 was granted to Antheil and "Hedy Kiesler Markey," which was Kiesler's married name at the time. Most of you won't recognize the name Kiesler. And no one would remember the name Hedy Markey. But it's a fair bet than

anyone reading this newsletter of a certain age will remember one of the great beauties of Hollywood's golden age ~Hedy Lamarr. That's the name Louis B. Mayer gave to his prize actress. That's the name his movie company made famous. Meanwhile, almost no one knows Hedwig Kiesler – a/k/a Hedy Lamarr - was one of the great pioneers of wireless communications. Her technology was developed by the U.S. Navy, which has used it ever since.

Why wasn't this in the history books? kate

You are probably using Lamarr's technology, too. Her patent sits at the foundation of "spread spectrum technology," which you use every day when you log on to a wi-fi network or make calls with your Bluetooth-enabled phone. It lies at the heart of the massive investments being made right now in so-called fourth-generation "LTE" wireless technology. This next generation of cell phones and cell towers will provide tremendous increases to wireless network speed and quality, by spreading wireless signals across the entire available spectrum. This kind of encoding is only possible using the kind of frequency switching that Hedwig Kiesler invented.

And now you know the rest of the story.



*Hedwig Kiesler*



## WIA Issues

The WIA via Fred Swainston VK3DAC, has released the first draft of plans for 2015 commemoration of ANZAC Day.

The plan is quite extensive and is in a nine page document which can be found at:  
\*<http://www.wia.org.au/newsevents/anzaccentenary/about/>\*

Here is a brief but you really do need all nine pages and if you want to be part of it, YOU NEED TO DO IT NOW!

## VK100ANZAC Callsign

With Ministerial approval of the use of ANZAC the callsign VK100ANZAC has been applied for, via the WIA Office to ACMA. This application will request a full licence from April 25, 2015 for specific days of ANZAC related activity. This callsign will be used only on special days/occasions during the commemoration of 100 years since the Australian and New Zealand force landed at Gallipoli.

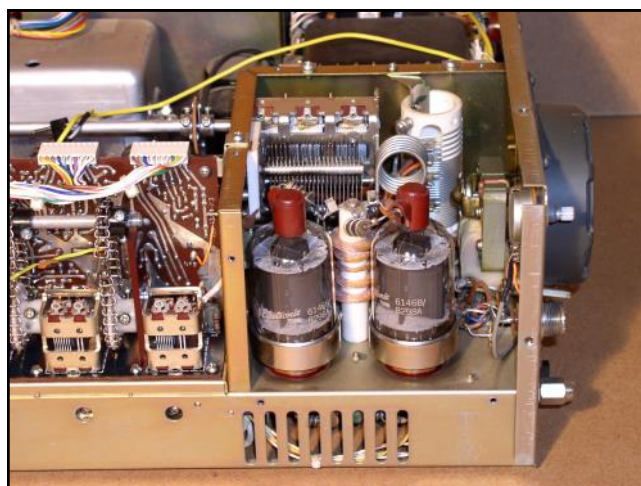
Expressions of interest to use this callsign are to be made in writing (on line) to the WIA Office September 2014 and close in February 2015. This allows time for ACMA to be advised of the locations of the stations and the responsible amateurs for licensing purposes. The WIA Office will coordinate the expressions of interest and advice to the

Board. The WIA Board will advise applicants of the success or otherwise of their application for VK100ANZAC.

## Amateur Radio Equipment from the past.



This months old equipment features a Kenwood TS820 and TS820s from the 1970's and 1980's these sets were basically identical except the TS820s had a factory fitted digital display. The sets were called 'hybrids' as they had valves for the transmitter outputs, a 12BY7 driver and a pair of S2001A (6146B equivalent) final amplifiers. The basic design of these radio's continued for 25 years.



The TS-820 is an upgrade to the TS-520S. It incorporated additional features. It covers the most popular amateur HF bands (160, 80, 40, 20, 15 and 10 meters) with 100 watts CW power output and somewhat more SSB peak envelope power. WWV can be received at 15 MHz for frequency and

time synchronization. The receiver sensitivity is excellent -- 0.5 microvolts for a 10 dB signal plus noise to noise ratio, typical of the entire line of Kenwood hybrids.

Normally powered from 120 or 240 Volt power mains, an optional 13.8 Volt DC power module can be installed. Like its predecessors, it is easy to tune and operate, and frequently used functions are accessible from the front panel.

Source of the above: The Old Ham Dave website. David Lyndon AK4AA

### Additional Photographs from JOTA and the Bunnings BBQ



*Barry VK2LBG and Henry VK2ZHE setting up the dipoles at Port Macquarie*



*Henry VK2ZHE and Cub and mother operating at Port Macquarie*



*Steve VK2HOO, Stuart VK2FSTU and Lyle VK2SMI and with scouts and leaders at Wauchope*



*Another shift at the Bunnings BBQ  
Rob VK2CRF with Sue serving and Larry VK2CLL cooking.  
Below Jessica and Dennis VK2FAET at the BBQ*



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**7/148 Lake Rd Port Macquarie**

**Ph. (02) 6581 4476**