



In this issue

- The Rotary Club of Lae
- Social Media—Greg Newling
- This Week: Graham Timms
- Last week
- BBQ at West Pymble Pool a Great Success
- From Emyr—Bradfield Comedy Debate
- Jo Harris—First Wireless Message
- Pymble Players

Back Pages

- Guest speakers
- Market roster
- Door team
- Happy days

Meeting Apology

Please use the club web-site **before 3 pm** on meeting day to apologise or add a guest, or you will be required to reimburse the club for your meal cost.
<http://www.kuringgairotary.org.au>

The Rotary Club of Lae

The Rotary Club of Lae during it's last weekly meeting proposed an International Toast to your Club.

We do this to generate a sense of International Fellowship and also to acknowledge the spirit of service amongst all Rotarians. Please find attached a copy of the Toast sheet completed on the evening.

Regards,

Robert Schilt
Secretary,
Rotary Club of Lae
Papua New Guinea
<http://www.rotarylae.org/>

ACHIEVEMENTS: *Chartered in same year. Strong commitment to community service. Highly awarded for achievements*

Social Media—Greg Newling

Hi Tony,

Here is the link to the video I showed a couple of weeks ago.

The statistics are astounding and show why any business needs to be involved with Social Media, and so does the Club.

RI has been for a couple of years at least.

We don't have to like it, but its power is a fact of life so we had better get used to it, and then learn to like it!

<http://www.youtube.com/watch?v=IFZ0z5Fm-Ng>

Cheers, Greg

This Week: Graham Timms



From Graham Timms

I have been asked to be guest speaker on the night. I will be conducting a sensory evaluation of white wine similar to the one I did a couple of months ago on red wine – that is four white wines purchased from the Club will be evaluated for quality with the idea of teaching people what to look for in white wine.

For those guests who may not know me, I am a part owner and cellarmaster of Toms Waterhole Wines, Canowindra NSW. I have completed the Wine Certificate Course at the University of Western Sydney and Part 1 of the Master of Wine.

Cheers,

Graham Timms

Last week

Jo Harris—Australia's first wireless message
Report page 3

BBQ at West Pymble Pool a Great Success

Many thanks to Graham Timms, Margaret Braid, Malcolm Braid, Irene Kennedy, Rasma Andrejewska, Patsy Hungerford, John Thompson



for your efforts today in running a successful and friendly BBQ - we collected \$382.25 - perhaps we could give Bluefit a Certificate of appreciation
Geoff Hungerford



From Emyr—Bradfield Comedy Debate

Dear Emyr

On Sunday 16 October at 4 pm we are holding the Bradfield Comedy Debate.

Breakfast radio host Adam Spencer and well known ex-journalist Sally Loane will be among those offering their wit and insights as they debate *That we are tired of being wired*.

With generous support from principal sponsor McCarroll's Toyota, along with Lindfield Community Bank and Swimart Lindfield, all proceeds from the debate will go to support the KYDS youth counselling service.

If you would like to come along, tickets are \$35 and are selling fast – you can book at www.bradfieldcomedydebate.com

After the debate, you will be invited to join me and other speakers for light refreshments.

It should be a fun afternoon – and we'll be supporting the extremely important work done by KYDS in building the mental health and resilience of young people.

I do hope I will see you at this event!

Best Regards Paul Fletcher

Paul Fletcher MP with Rotary Club of Lindfield present the

Bradfield Comedy Debate

"We are tired of being wired"



Principal Sponsor



Proudly Supported By



Laugh out loud with

Adam Spencer (ABC Breakfast radio host)

Sally Loane (Business executive, ex-ABC radio presenter)

Peter Duncan (Writer-director of ABC TV's "Rake")

Jo Dyer (Sydney Theatre Company and filmmaker)

Paul Fletcher (Member for Bradfield)

WHERE: The Lorraine Smith Auditorium, Centenary Centre
Ravenswood School for Girls
Enter via Henry Street, Gordon

WHEN: 16 October 2011 4.00pm – 6.00pm

PAY & BOOK NOW: \$35 per head | \$20 students

www.bradfieldcomedydebate.com or 9416 3638
by 12 October 2011

All proceeds to **KIDS** youth counselling service

Jo Harris—First Wireless Message



THE FIRST DIRECT WIRELESS MESSAGES FROM ENGLAND TO AUSTRALIA

IF you want to discover more about your family history, Jo Harris is the person to speak to.

The Wahroonga historian has spent countless hours delving through historical records helping people to trace their heritage.

And her efforts have not gone unnoticed.

Recently she was awarded a certificate by the Royal Australian Historical Society for her "outstanding leadership in the research, teaching and preservation of local and family history in the Ku-ring-gai area".

It follows a lifelong interest in history inspired by her grandfather, who came to Australia as a member of the Royal Navy and eventually settled in Wahroonga.

His house was the first in Bareena Ave and he kept sheep on the property.

"I have always been fascinated with what came before us," Mrs Harris said.

"I just love researching, it's just a wonderful, wonderful thing and I love to teach people how to do it."

In 2001 she compiled a book of all the people who lived in Ku-ring-gai at the time of Federation.

Since then she has been working on the histories of those people.

"It's a big job but it's a fascinating job," she said.

"People ask me why I do all these things and my answer is one simple word - curiosity."

Mrs Harris is vice-president of the Ku-ring-gai Historical Society and has been leading its family history group for many years.

The 2008 Ku-ring-gai Citizen of the Year is also a historian for the Wireless Institute.

"I'm part of Ku-ring-gai and Ku-ring-gai is a big part of me," she said.

Hornsby and Upper North Shore Advocate

Jo Harris—First Wireless Message

On 22nd September 1918 direct wireless messages from England were received in Australia, creating considerable public interest and causing a political controversy. The messages were transmitted from the big Marconi station at Carnarvon in Wales and were received at the home of Ernest Fisk, the Managing Director of Amalgamated Wireless (Australasia) Limited (A.W.A.). Two communications were sent, one from the Prime Minister of Australia, Mr. W.M. "Billy" Hughes, who was in England trying to raise enthusiasm for the Australian war effort in Europe because public support was waning and the disastrous English military leadership of the Australian forces was under serious question. The second message was from the Minister for the Navy, Mr. Joseph Cook, who accompanied Hughes. Australia's efforts to sell its farm produce to England were being frustrated by the English farmers and unions, which explains the jingoistic tone of Hughes and Cook's wireless messages. As it happened, Germany capitulated soon after this event and both men then took part in the Peace Conference and negotiations in November 1918.

The two messages were as follows:

1.15pm Sydney time.

"I have just returned from a visit to the battlefields where the glorious valour and dash of the Australian troops saved Amiens and forced back the legions of the enemy, filled with greater admiration than ever for these glorious men and more convinced than ever that it is the duty of their fellow-citizens to keep these magnificent battalions up to their full strength. W.M. Hughes, Prime Minister."

1.25pm Sydney time.

"Royal Australian Navy is magnificently bearing its part in the great struggle. Spirit of sailors and soldiers alike is beyond praise. Recent hard fighting brilliantly successful but makes reinforcements imperative. Australia hardly realises the wonderful reputation which our men have won. Every effort being constantly made here to dispose of Australia's surplus products. Joseph Cook, Minister for Navy."

AWA published a souvenir document of the event with the heading "The First Direct Wireless Messages from England to Australia." with a reproduction of the actual message forms as supposedly written down in Sydney and the following additional information:

"These messages were transmitted by arrangement with Senatore G. Marconi, G.C.V.O., D.Sc. and Godfrey C. Isaacs Esq. Managing Director, Marconi's Wireless Telegraph Company, Limited, from the Marconi Transatlantic Station. at Carnarvon, Wales, at 3.15am & 3.25am (Greenwich mean time), September 22nd, 1918.

Received instantaneously at 1.15pm & 1.25pm (Sydney time) by Mr. E.T. Fisk, Member Institute of Radio Engineers & Managing Director, Amalgamated Wireless (Australasia) Limited, - at his Experimental Wireless Station, Wahroonga, New South Wales, with apparatus designed and manufactured in Sydney by Mr. Fisk and the Staff of Amalgamated Wireless

Jo Harris—First Wireless Message

During WW1 signals from the big transmitting station at Nauen in Germany had been heard regularly in Australia so there was every chance signals could be received from England and in fact AWA had been carrying out experimental work for more than a year prior to the official messages. At the AWA general shareholders meeting in August 1918 Ernest Fisk explained that

".... we are able to read messages direct from Berlin. These messages can be heard practically all day, ... " In late 1916 Fisk had travelled to England where he discussed with Marconi the German wireless intercepts and the possibility of reception of wireless signals direct from England. It was agreed that AWA should set up a suitable receiver to listen for the Wales/Canada traffic from the Marconi Wireless Transmitting Station at Carnarvon in Wales. The UK Admiralty (which controlled the station during the war) later agreed to operate at other times, sending test messages for AWA. On 26/2/1917 Fisk sought Australian Navy permission to erect an aerial at "Logan Brae", Station St., Pymble in Sydney, in one of the houses that AWA maintained for its staff, in order to listen for signals from the UK. (Fisk and his staff also carried out secret transmitting tests with the Pennant Hills wireless station from this time, using the call sign AWY). The reception equipment set up at Pymble was improved during the year and by December 1917 it was clear that signals from England could be received on a regular basis so the installation was moved to Fisk's residence at "Lucania" on the corner of Stuart and Cleveland Streets, Wahroonga. There Fisk erected a large square wooden tower about 25 metres high, with two antenna wires spaced about 3 metres apart and about 30 metres long, running from the Southeast to Northwest across to a mast on the western side of the property. Even though signals were being received, results were very variable and it took till September of 1918 before any real results could be achieved and publicised.

The new valve technology that became available during WW1 was crucial to the successful reception. The receiver was the first that AWA manufactured, although it closely followed typical Marconi design and appearance. It included an "Aerial Tuning Unit" which consisted of a large vertical aerial tuning coil about 500mm high by 150mm diameter with a sliding contact running down the side to select the number of turns of the coil, along with a variable capacitor mounted on a wooden base plate. This same unit was used with the Marconi long wave crystal set and the tuning range was 10,000 - 30,000 metres (30Khz - 10Khz). The valve and secondary tuning unit, called a "Magnifying Valve Receiver", Type 103, was similar in appearance to the Marconi crystal receivers but was fitted with three Marconi type "Q" valves. AWA engineers used up to 3 of these receivers as amplifiers. Note that the AWA Type 103 receiver is nothing like the Marconi Type 103. They raised the High Tension voltage to around 300 volts (normal HT was about 160 volts) and were able to minimise unwanted feedback by individually adjusting the filament voltage to each valve.

Jo Harris—First Wireless Message

This setup ran from a high tension battery supply and a number of filament batteries which were charged from a wall mounted charging board.

The Carnarvon 200 KW transmitting station, call sign MUU, was actually located near the village of Waenfawr, 10 Km SE of Caernarfon (the Welsh spelling). It had been built to communicate with Montreal in Canada and consequently the aerials were not aimed in the best direction for reception in Australia. The frequency of Carnarvon was 14,300 metres (21 Khz) and it was classed as only a low power station because the great circle distance between Carnarvon and Montreal is only 4,800 Km. and high power was not necessary. Despite this, there was enough signal to spread round the world and once it was shown that signals meant for Canada could be received in Australia, special tests were arranged at times thought to suit communications to Australia. At this time the science of propagation was unknown and it was believed that the best conditions were during full daylight, using very low frequencies and lots of power. Now that more is known about propagation effects, we know that this is not the most propitious time for reception. It was not appreciated till 1922 that signals tend to follow the great circle route of maximum darkness between stations. There are two such paths that wireless signals can take; the short path, ie the shortest distance between the two points - or the long path, the reciprocal distance between them. Signals are strongest over the short path between England and Australia (15,200 Km across Asia) when both cities are in darkness. During September that is at 7.30 pm (1930 GMT) in Carnarvon and 5.30am in Sydney. A second lower peak occurs around 6.00 am (0600 GMT) at Carnarvon and 4.00 pm in Sydney when the signals travel the long path (20,800 Km) across South America and towards Antarctica, although during September there is no long path overlap of darkness at the two cities so signals would not be particularly strong. Luckily the sunspot cycle was at a peak in 1918 because the time chosen to send the messages was in between the optimum times for strongest signals. The messages were actually sent at 3.15 am Carnarvon time (at sunrise) and received in Sydney in the middle of the day at 1.15 pm local time. However, strong long path VLF signals do start to become audible from about 12 noon Sydney time so it appears the Fisk team achieved success early in the period of opportunity and copied the full text well before the signal peaked. It is probable that Fisk invited the press and dignitaries to arrive around noon and, after suitable introductions and perhaps refreshments, planned for a listening period of a couple of hours during which he would be sure the signals could be copied.

Jo Harris—First Wireless Message

Because there was no two way communication between Sydney and Wales, the messages were sent several times, commencing 15 minutes after each hour. The log book shows that the messages were taken down again at least twice more that afternoon but then atmospheric became very bad.

Although Fisk received the kudos (and throughout his life he was very committed to extracting maximum personal publicity), in fact it was AWA technicians who built and operated the equipment and carried out the extended trials before the public success was orchestrated. As the trials extended over 12 months it is hard to determine all who were involved but they probably included Harry Wiles, Alton F. Vipan, T.W. Bearup, Harry M. Lamb, George Apperley, Raymond E. McIntosh and Eric Burbury. McIntosh was the one who actually took down the messages even though Fisk is the name on the message forms. McIntosh transcribed the morse code into a log book that had been in use for the experiments and the "official" message form was written out later and signed by Fisk. The log book is now in the Mitchell Library.

Obviously Prime Minister Hughes and Navy Minister Cook were not standing by at Carnarvon at 3 o'clock in the morning. Their messages had been sent previously by wireless, or perhaps cable, from London to Wales. (Some cynics might even suggest that the entire text was known to Fisk and his staff before the event).

Sydney had no facilities for replying by wireless so AWA sent a cable to England to proclaim the success.

In 1934 the Wahroonga Community Service Association, Ku-ring-gai Municipal Council, the Royal Australian Historical Society and AWA subscribed to the cost of a commemorative monument which was erected on a corner of the property "Lucania", on land donated by the then property owner, Mr. Marc J. Rutty. The monument comprises a marble plinth with 4 horizontal arms, each surmounted by a "British" lion. In the centre is a column with a globe of the world on top and a figure of the winged god, Mercury, with one foot on the globe. Engraved plaques on the plinth describe the event. Ernest Fisk unveiled the monument on 14/12/1935 following speeches from Prime Minister Hughes and other dignitaries. AWA produced 1000 numbered commemorative booklets of the occasion titled "An Epoch of Radio Communication" and they are now collectors' items. Over the years Mercury was stolen several times, (one time he was found in the local tip) so, as a Bi-centennial project in 1988, the monument was raised up onto a tall marble cylinder and a smaller version of Mercury was securely fixed on a very tall spike rising from the globe, out of harm's way. Patterns exist for a back-up Mercury if needed! The original Mercury is in council safekeeping. A small plaque was affixed to the steps stating the monument is now the "Fisk Memorial"

On September 22, 1993 the Wahroonga Amateur Historical Radio Society, call sign VK2WAH, the Ku-ring-gai Municipal Council and dignitaries from AWA and the Fisk family, along with children from local schools,

Jo Harris—First Wireless Message

commemorated the 75th Anniversary at the site, "Lucania". Later, wireless contact was made from the Wahroonga home of Mrs. Jo Harris, call sign VK2KAA, with the Dragon Amateur Radio Club in Wales, operating from the Welsh site of the Marconi transmitter and using the amateur call sign GB2VK.

"Lucania" still exists much as it was in 1918, but all evidence of wireless activity, apart from the monument on the street corner, is long gone. The land was subdivided many years ago so the area is smaller than in Fisk's time when Wahroonga was a rural area with large land parcels and dirt roads. The concrete foundation for the tower remains and is located on the north east corner, just inside the boundary of the property next door. "Lucania" has an attic, but despite the vision conjured up of an avid experimenter hidden away in his upstairs shack, Fisk and his engineers operated from a spacious ground level back room. Even so, that room was not suitable for a group photo so the equipment and assorted dignitaries were assembled out in the yard for a publicity photo of the equipment. It should also be noted that illustrations of the house showing the tower are artistic licence ... it was not there when photos were taken and has been drawn in.

EPILOGUE.

The fact that messages could now be sent direct between England and Australia caused a political controversy and added to the animosity felt between governments and the Marconi Co. Prior to WW1, Germany had set up an extensive wireless chain in its colonies around the world as well as in other friendly countries. This gave it economic, political and military advantages that were envied by the British Imperialists, but attempts to build a similar British colonial system had been frustrated by the commercial demands of the Marconi company and political intrigue in England, up to WW1. Following the war there were renewed moves to establish a wireless network between the British colonies. The English Marconi offer to build and rent a private network was rebuffed and the Post Office pushed ahead with plans for relay stations using Poulsen (USA) wireless equipment. At the end of 1918, following the successful tests, the Marconi Wireless Telegraph Company submitted a proposal to establish a direct wireless service between England and Australia, but Australia would not agree to a private foreign company controlling Australia's wireless lifeline. In 1920 AWA (even though it was 50% owned by the Marconi Co.) submitted a similar proposal to a sympathetic Prime Minister Hughes but any action was delayed pending a 1919-1920 study by an English committee which came up with the Norman Report, named after its chairman, Sir Henry Norman. This report confirmed the Post Office thinking and recommended a chain of very high powered, very costly VLF wireless stations no more than 2000 miles (3,300 Km) apart, with relay stations in Egypt, India, Singapore and then to Darwin or Perth, Australia,

Jo Harris—First Wireless Message

with a branch from Egypt to South Africa. Prime Minister Hughes, having seen that direct communications with the UK was possible, did not fancy Australia being at the end of a very vulnerable chain of stations, so he rejected any co-operation with the UK recommendations. Instead, he signed an agreement with AWA for a direct service to the Marconi stations in England and soon after (1922) arranged for the Federal Government to take up a 50% plus one share, controlling interest in AWA by paying £500,001 for newly issued shares. That put the cat amongst the pigeons because the English government, which had had enough of the activities of the Marconi company, refused to grant it a licence to transmit to Australia, and did not appreciate a colonial Prime Minister using his new government controlled wireless company to muscle in on Mother England's rights to communicate with its colonies! Much diplomatic wheeling and dealing ensued to get the governments and protagonists to talk again. The UK Government determined to proceed with the Imperial Wireless Chain with the English Post Office to build and run the relay stations, cutting Marconi out of the action. The first two stations were finally opened at Leafield, England and Abu Zabal, Egypt. While this was going on the Marconi organisation was rapidly advancing the state of the art, with valve receivers, high power valve transmitters and research into propagation and short waves. Then in February 1924, in great secrecy, Marconi cabled AWA, asking them to build a receiver for 90 metres (3.3 Mhz) and listen for 2YT at Poldhu in the south of England. The two receivers that AWA built, literally overnight, had two RF stages with tuned plate and tuned grid circuits (called a TPTG circuit) followed by a detector, whilst outboard audio amplifiers could be added to boost the signal, as required. It was installed at the Willoughby transmitting location of public radio station 2FC which had a long, tall dipole antenna and was managed by AWA. The first signals were heard at good strength (up to S8) at 5.30 am Sydney time on 6/3/1924 (1930 GMT), ie with both cities in darkness. Later tests showed that 25 metres (12 Mhz) gave the best all round results, including good daytime reception. Marconi was now able to demonstrate reliable direct communication to any of the British colonies, using short waves with low power and far less costly aerials and stations. He probably took fiendish delight in making his revelations in a speech to the Royal Society of Arts in July 1924. That news put the UK Government in a very difficult situation and changed all the plans for the VLF chain wireless scheme which was then abandoned in favour of what became the Beam Wireless Scheme, operating at high frequencies. With its newfound bargaining ace Marconi was able to negotiate very profitable deals to build the stations and provide staff to run them and train local personnel. In Australia the Beam Wireless station was built by AWA, using Marconi equipment and designs, with the transmitter at Ballan near Shepparton, Victoria, where the small settlement that grew to house the staff was named Fiskville. The receiving station was at Rockbank also in Victoria. After several technical and political delays it opened in April 1927.

Jo Harris—First Wireless Message

REFERENCES.
AWA Archives, courtesy of Mrs. Margaret White, AWA Librarian.
(Many of these items are now in the Mitchell Library, Sydney)
Australian Archives.
Collection of C. MacKinnon, VK2DYM.
Reprinted with the kind permission of Colin McKinnon, VK2DYM (Copyright 2004.)

Pymble Players

Pymble Players Theatre Booking: Thursday 27 October, 7.30pm for 8pm: \$20

We have booked the whole theatre for Thursday 27 October. Pymble Players is easy to get to and has free parking. Plays are held in the beautiful 1884 church hall of Pymble Chapel at the corner of Bromley Avenue and Mona Vale Road, Pymble.

We're going to see "The Memory of Water", written by Shelagh Stephenson and directed by Patsy Templeton. In 2000 this play won the prestigious Laurence Olivier Award for Best Comedy.

"Even water has memory – you can dilute and dilute but the pertinent thing remains ... it still exerts influence": Three sisters meet on the eve of their mother's funeral. As the differences in their own memories of their childhood are revealed, conflicts and tensions emerge, and the sparks fly. But ultimately it is the fabric woven in that early family life that finally allows them to forgive each other and become united. This cleverly written play will resonate, particularly if you have siblings!

This is a major fundraiser so we want all of you to come but you'd best hurry because it is an intimate theatre and there are only 84 tickets!

Booking: Please let Caroline know how many tickets you need or fill out the events sheet on Monday.