

## Bulletin 43 of 18 May 2017

### Wireless Power Transmission

"Transmission of electrical power via today's familiar overhead 'poles & wires' technique, has changed little since first deployed in the early 1920's", our guest speaker Neil Flowers tells us. Neil is an electrical engineer who, together with inventor Keith Howard founded GPI, (Gamma Power International Ltd.). This company is financing the research into development of a system for transporting electrical energy without using wires, but with just the earth or seawater as a conductor.

At present they have completed bench scale demonstrations of a working model. A Youtube video of these experiments is available by [clicking here](#). Next stage is going to be the validation of these experiments on a field scale. So far energy worth only a couple of hundred watts have been handled but to prove the large scale feasibility, a lot more - like 25 KW over a distance of 10 Km - has to be transported with an acceptable efficiency.

The basic idea for wireless transport of energy was already developed by Nicola Tesla around 1900. Also there is a well established transport method called "SWER" (single wire earth return) mostly applied in rural areas for isolated properties. As poles and wires are very vulnerable a method to transport electrical energy without them would be very welcome (unless you are a company like Ausgrid, Neil told me after the meeting... "they do not want to

know about it..." he said.) No bush fires because of sparking, no power outage when someone loses control of his car and hits the pole. No regular maintenance and tree lopping and no horizon pollution....

Predictions based on the bench scale experiments are that there will be less loss (in the order of 8%) during transport than with conventional power lines. Also the construction cost of a high voltage power line (\$ 2.5 million per km) would be reduced by 90%.

If the system can be proven to work over long distances South East Australia would finally be able to tap into the huge potential of the tidal energy generation in the Kimberly area.

So far Neil and his partners have acquired an international patent on their system.

In the world of physics there is still a lot of skepticism for the methods developed by GPI. Experiments in the Nevada Lightning Laboratory show the validity of the proven fact that energy far fields drop linearly with distance. Neil believes that this does not apply to the technique they developed.

Another point - that just occurred to this weeks editor - is that electricity is a "two

way" thing: plus and minus, one wire from the generator and another wire back.... Both through the earth?

It'll be interesting to follow the experiments and especially the field scale ones to see if (and how) it really works. And if it works... we are in for a radical change in the way energy is distributed.

It was interesting to hear about it and well presented. Thanks Neil and success with the experiments.



### Contents:

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### Congratulations

#### Members birthdays

none

#### Partners birthdays

none

#### Anniversaries

27 May - Hugh & Ann Randall  
29 May - Dieter & Helga Greiter

### Lady Luck

Head & Tails was won by Chelsea Ellul and the raffled bottle went to Sergeant Warwick.

### Next Week

**"Triple B"**  
(see page 3)

#### Door

Liz Friend

Richard Harris

#### Meet and Greet

Michael Jenkins

#### Grace

Arja Levonpera

#### Loyal Toast

Peter McBean

#### Introduce speaker

N/A

#### Thank speaker

N/A

#### Bulletin editor

Chris Bartlett



## Rotary on the Air

Within Rotary International there are numerous Fellowships of members with a common interest: campers and caravanning, golf, photography, sailing, marathon runners, just to name a few. A full list can be found on the [RI Website](#). One of the Fellowships is "Rotarians on Amateur Radio" of which this weeks editor is a (not very active) member.

By pure luck Tuesday morning I switched my radio on while it was still tuned to the 40M band and in my headphones I heard a fairly strong morse coded signal beeping away. I recognised the word "polio" and then listened a bit closer and got DL0POLIO as the call sign of the transmitting station.

"DL0" is a prefix indicating a German station and the "Polio" was quite obvious... I gave the station a call and he acknowledged my call sign (VK2GWK - VK for Australia, "2" for NSW and the "GWK" is me) and gave me a signal report from Germany.

Since early 2016 several stations with "POLIO" have been active from both Europe and Australia, promoting the "End Polio Now" campaign in the ham radio community. Amateur radio contacts are usually confirmed by sending a post card (QSL-card) with the details of the contact: date and time and transmission mode (phone or morse code) and signal strength. The image in this article is of the card I am going to receive. The station in Germany is operating from Rossbach (half way between Cologne and Koblenz) by Rotarian Horst Hoferichter.



## ROADwhyz 2017

### A safety Success!



250 Year 11 students from St Phillips Christian College and Tomaree High School attended Roadwhyz 2017 at St Phillips Auditorium on Tuesday. Members will recall our decision to try this program for the first time, following many years of the RYDA program, held for a full day at the Elizabeth Waring Centre.

Youth Director Arja Levonpera and her team did an outstanding job organising this hard hitting 4 hour program on Road Safety. Richard Turner was one of the presenters, and also did a great job in Arja's absence, while Judi Priestley organised the early morning coffee, a wonderful morning tea for the presenters and teachers, and the museli bars and drinks for the students morning tea. Liz Friend and Denise Diemar assisted in the catering area. Geoff Diemar, Michael Jenkins, Don Whatham and Chris Bartlett, helped put the "showbags" together which



had some Rotary Youth Program information and a generic Rotary brochure. The feedback from all parties was quite outstanding, making the day very successful from everyone's point of view. It was particularly encouraging to see the students discussing various aspects of the half day program during their break and after the final presentation.

Nelson Bay Rotary Club sponsored the 250 students at \$5.00 per head and provided the morning tea at a very minimal cost. The respect shown by all students was also well received. A very successful day and well done Arja and her team.



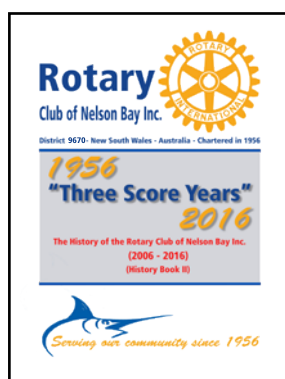


## **“TRIPLE B”**

### **“Book, Birthday & Bart”**

Next week - Thursday 25<sup>th</sup> of May 2017 - is a special Rotary night for members, partners and friends to celebrate the 61<sup>st</sup> birthday of the Rotary Club of Nelson Bay. The night is going to be even more special as there will be the official launch of the History Book “Three Score Years”, prepared by Richard Turner and other club members and last but not least we shall pay tribute to PDG Bart Richardson OAM who was recently called to higher service.

**Instead of apologies a list was passed round to indicate members attendance for this night (including partners and friends). If you are not on this list, please call or text John Crump (0401 450 239) as soon as you can.**



### **“Behind the Badge”**

#### **Liz Friend**



Liz joined our club some eight months ago but only now got the opportunity to tell us a little more about herself. She was born in Cootamundra on a farm but after finishing year 12 moved to Canberra to join the Commonwealth Public Service as a cadet. As a public servant she had several jobs until she got children and had to stop working.

To rejoin the workforce after her divorce she acquired computer skills and was employed by the “AAA”. Liz also - through part time study - completed a degree in Tourism at the University of Canberra. Although not very “touristy”, with her management skills she worked for the ACT Government, managing the local cemeteries followed by Human Resources roles and Child Protection, Disability and Youth services.

In 1998 Liz returned to the Commonwealth Public Service working with the Merit Protection Commissioner handling investigations and recruitments. Her last job in Canberra was with the Department of Health as a Human Resources manager and an extended range of responsibilities.

Liz has two daughters in Sydney and a son in Canberra and three grandchildren.

Liz joined Rotary in Canberra nine years ago and when - after retirement - she moved to Port Stephens last year, she researched the local clubs and - after her first visit to the RCNB decided to transfer. Good choice Liz!



### **Donations**



Last week's BBQ at Bunnings raised \$1000 for Australia Rotary Health. Chris Bartlett is the District representative for this foundation and gladly received the money from president Judith.

John Cropley in his capacity of International Director received another \$ 1000 raised by the Club selling sausages and steaks, to buy a ShelterBox. There can never be enough of them.....

**Pay your dues and special dinner fees by EFT:**

**Account name: Rotary Club of Nelson Bay Inc. - BSB: 637000 Account #: 781017418**  
**(please, mention your name and what you are paying for.)**

## Rotary uses virtual reality to inspire others

Rotary is working with Google's virtual reality team to offer an experience that showcases the impact of compassion to a global audience.

We're producing a three-minute virtual reality film that emphasizes the two themes of polio and peace, and how Rotary's work to eradicate the disease is increasing stability across the world.

Through the power of virtual reality, viewers will follow the extraordinary journey of a child whose world has been torn apart by conflict. The film will immerse viewers in this child's world, and they'll experience for themselves the impact that small acts of compassion, protection, and kindness can have on others.

We'll premiere the film on 13 June at the Rotary International Convention in Atlanta, Georgia, USA. It will be widely released in time for World Polio Day on 24 October.

This isn't Rotary's first experience with virtual reality. With support from the U.S. Fund for UNICEF, Rotary premiered its first virtual reality film, "I Dream of an Empty Ward," in October 2016. In that film, viewers visit India, which has been polio-free since 2011, to follow Alokita, a young woman paralyzed by the disease as a child.

Traveling through the streets of Delhi, viewers get a close look at life in India and what's being done to keep the country polio-free. And, through a visit to India's only polio ward, at St. Stephen's Hospital, they witness Alokita's triumphant first steps after 11 years.

(source RI news)



Last Wednesday's volunteers and guests of "Project Neighbour" enjoyed the luxurious facilities of the "Breakwater" in Shoal Bay when all of a sudden another - uninvited - guest turned up. He had a keen eye on the sweets on the table but was easily convinced of the fact that sweets are very unhealthy for birds. No cookies for kookies.

### Satellite members in Orbit



Chelsea Ellul



Ryan Palmer



Justin Shanahan