

# Overseas Telecommunications Veterans Newsletter

*Registered Address:*  
805/41 Meredith Street  
Bankstown NSW 2200

*June 2014*  
*Volume 14 Page 51*  
ISN 1322-1906

## *58<sup>th</sup> Annual General Meeting*

**The OTVA 58<sup>th</sup> Annual General Meeting will be held  
Friday 13<sup>th</sup> June 2014 at 11.30 am  
Level 2,  
NSW Bowlers Club  
99 York Street, Sydney  
(doors open about 11.15 am)**

**After the meeting a smorgasbord lunch at a cost of approx. \$23 is available  
in the Red Room  
(Level 1)**

**If you intend to join us for lunch, please indicate with your RSVP to  
facilitate seating and catering arrangements.**

**Call or SMS Peter  
0411 260 542**

### **Coming Events:**

**Committee Meetings. Wednesdays 23<sup>rd</sup> July and 8<sup>th</sup> October 2014  
Xmas Function. Thursday 6<sup>th</sup> November 2014**

---

### **In this edition.**

<i>Page 52</i>	<i>Presidents Message</i>
<i>Page 53</i>	<i>Beam Wireless days</i>
<i>Page 54</i>	<i>ARQ What is it ?</i>
<i>Page 56</i>	<i>Visit to ABC Studios</i>
<i>Page 56</i>	<i>Back to Bondi</i>

## Fellow Members of the OTVA,

I hope that this newsletter finds you and your families in good health and enjoying life.

Well another 12 months has passed since last year's AGM. The 2014 AGM will be held on June 13 at the Bowlers Club in York Street Sydney.

We have also found a new treasurer for the OTVA in Robert (Bob) Dean. Bob will start to take over the reins from Bernie White who has performed the function for us since Alex Ebert resigned from the role in 2012. I thank Bernie for his hard work and support and welcome Bob to this new challenge and wish him well in the role.

We have also found a new editor for the OTVA Newsletter in Peter Allan. Peter will start to take over the reins from Henry Cranfield who has performed the function for us since Bob Emanuel resigned last year. I thank Henry for his hard work and support and welcome Peter to this new challenge and wish him well in the role.

The role of Newsletter Editor can be a very rewarding job especially as you get to see first-hand many wonderful stories about the people that made OTC a great place in which to work as well as details of things that happened during the OTC era. Unfortunately not all of these stories can be printed for legal, moral and ethical reasons.

The Newsletter Editor continues to seek stories from members without which the newsletter could lose value to its readers. Henry won the \$50 award for his entry in the last newsletter: *Oh to Be a Ship's Radio Officer?* If you have a story that can be printed and is assessed by the committee to be the top story in that edition of the newsletter you too could receive \$50. You have to be in it to win it!

Prior to the AGM in June, an email containing a list of all financial members of the OTVA will be circulated to all of the email addresses that your committee

has on file. If you did not receive an email please email [president@otva.com](mailto:president@otva.com) so that your email address can be added to the email distribution list. Your email address will be kept private unless you specifically ask for it to be shared with others.

## The OTVA BLOG

(<http://www.otva.com/blog/>) continues to be the primary point of reference for information to our members. The number of hits each month is consistently high and your committee continues to receive correspondence from ex-OTC personnel, their families and members of the public asking questions about many aspects of OTC. Many of these contacts are via emails from overseas from ex-OTC personnel living abroad or persons interested in the history of OTC who have stumbled across the OTVA web site while trawling or have been directed there.

Email continues to be a great source of communication with you, our members. If you send an email to [president@otva.com](mailto:president@otva.com) I will review it and where appropriate email it out to those on the email distribution list as well as upload it to the BLOG site where deemed appropriate.

Regrettably the project to digitise Transit and Contact magazines is not yet complete. Copies of the missing magazines continue to trickle in requiring us to delay the final release of a DVD to get a more complete compilation of magazines. Your committee is looking to conclude this project in the next few months and will be able to make the DVD available to financial members of the OTVA before the end of 2014.

Despite the support of Charlie Rudd (Ex-OTC and founder of Phoenix Foundry) and Peter McCallum (Waverley Historical Society) the committee of the OTVA has been unable to gain interest in and the support of the laying of a plaque at Bondi Beach to commemorate the landing of the Compac Cable in 1962 and the opening of Compac on 3<sup>rd</sup> December 1963 by HM Queen Elizabeth II. As many of you know

that was a significant event in Australian telecommunications history as Australia moved from HF Radio to Cable transmission links that connected Australia to the rest of the world and enabled Australian commerce to overcome Australia's remoteness from global commercial centres and its overseas trading partners. This was huge boon for business but it was also a major step forward for Australians to communicate with friends and relatives overseas. It began the revolution that eventually had the slogan "no one's far from anyone, anymore". I extend my sincere condolences to the families of our ex-OTC brothers and/or their partners who have departed this life since I last addressed you. We are saddened by their passing but are gladdened by the fullness of their rich and long lives. May They Rest In Peace.

Warmest regards,

Peter Bull  
0411 260542  
peterbull@otva.com

---

### **My Beam Wireless Career.**

*By Bernie White.*

*( This is an extract taken from a book written by Bernie which gives an introduction into Beam Wireless the begging of OTC as we knew it. Many names will be very familiar to some but could also bring back recollections to others. AH )*

#### **As happens in everybody's life one has to eventually enter the workforce.**

So without much ado in 1938 I was bundled off into Sydney to take up employment with Amalgamated Wireless (Aust) as a messenger. We were called Beam Boys and worked in the Beam Wireless Service located at the corner of Erskine and York Streets in Sydney. Some of my workmates in those days were- Happy Collins, George Sheppard,

Kevin Quinn, Nev Huntington, Tony Ebert, Jack Conaghan, Ron Waugh, Wilf O'Donnell, Eric Cockle, Ray Carragher, Jack Radnidge, Gordon Cupit, Harry Stone, Don Kirkwood, Bob Reeks, Jim Pow, Arthur Purtill, Marie Casey and others.

Employment as messenger in this firm meant being dressed up like a Canadian Mountie complete with breeches and leggings but with a peaked cap instead of the usual Mountie hat. Discipline was strict and I remember some of the lads being sent home again chiefly because they had dirty boots or that their buttons were not shining.

After several months working as a 'walking' messenger I eventually graduated to being able to use a bike in my work and from then on work was found for me in the outer regions of the Sydney CBD. Bike boys owned their own bikes and received an allowance of 7/6d (whacko) per week which supplemented their One Pound per week wage.

Several little mishaps occurred during these early years of employment one being when I was given a delivery just 5 minutes before knock off time and, being in a hurry to finish work, took off like a bat out of hell. Down into Carrington Street from the AWA Building I went but, as I turned into Carrington Street, some bright pedestrian decided to step off the gutter to cross the road.

He was promptly knocked over by a very busy Beam Wireless messenger (myself). Being in such a hurry all I could do was help the poor fellow up – dust him down --- and I hit the road again. To me that was the end of the matter but two weeks later I was on the mat for the incident mainly because it had not been reported.

Some of the officers in charge of the Beam Messengers in the years 1938/1939 were Bill Stevenson, Pat Darcy, Pat Riley, Gordon Cupit, Don Kirkwood, John Hector, Jack Radnidge, George Wheeler, Harry Stone, Wally Zihrl and

Mr Bannister Beam Supervisor's on duty during my stint in SOR (Sydney Operating Room) were George Brown, Horrie Brown, Don McLennan, Don McIntosh and Harry Selfe. Harry Selfe died in an air crash whilst on transfer to King Island...

The Beam Wireless Service moved into the new AWA Building in York Street which was completed in the 1939/40 era and our operations were transferred to this new building

Broadcast Station 2CH was also transferred to this building and their staff took up residence on the top floor with a massive antenna tower sitting on top of them.

Eventually the fresh-air escapades as a Beam Messenger came to an end and I was promoted to Circulation Clerk in the Operating Room.

Still on shift work; this was an inside job where one had to distribute and number inward and outward messages as they came to hand. Woe betide us if anything went wrong Superintendent Mark Mortimer- would come down on us like a ton of bricks. In the event of a misdemeanor we would be presented with a 'Please Explain' form which was of foolscap size. Many are the times one had no answer as to why the error occurred and hence this big sheet of paper only had a single line of explanation which did not go down well an error in 3000 words of code translated from the Morse formulated insulator tape.

In wartime we were working seven days a week for eight to ten hours a day just translating Morse coded messages into readable English. This required concentration at its highest level.

Needless to say that, later on, some of the Beam telegraphists were the champions of all typists—women included.

After a year on the circulation and service desks the war broke out and many of the young bloods signed up to go to war but, mostly, to no avail. The Government of the day had empowered a Manpower Board to determine what industries were

essential to the war effort and just who could and who could not go and join up. The Firm in its wisdom then guided any young enterprising ex-messenger/clerks through high speed telegraphy courses which sealed their fate where joining up was concerned. This being the situation several of our boys did get away and names like Jack Radnidge, Gordon Cupit, Happy Collins, Don Kirkwood and Jim Blemings come to mind.

No doubt there were many others with one bright lad changing his name and his age to get into the Army. Unfortunately for him the Board found him out and four months later he was back in the Operating Room. Others who got away were Peter Field from the Dispatch – lost in the Battle of Britain in a Spitfire. Don Kirkwood also joined the RAAF; was lost when he went down in a Beaufort Bomber in the Pacific Area.

## **What is ARQ**

**By Cyril Vahtrick**

**(This article appeared originally in "Transit" for June 1958. Ed)**

A.R.Q. is the term used for "Automatic Error Correction" applied to machine telegraph signals, generally over a radio circuit. This does not mean that if somebody makes a mistake the equipment will correct it. The main function of A.R.Q. is to detect and correct errors which occurred during transmission of a telegraph signal over a radio circuit. Assuming that a message is being transmitted and because of interference, loss of signal, or any other cause, the form of the signal which reaches the radio receiver has changed, then the function of the equipment is to prevent the error being passed on to be printed on the received message.

### **5-Unit and 7-Unit Codes**

The A.R.Q. equipment is designed to interwork with telegraph machines using the "5-Unit Start-Stop" code. In this code the various letters of the alphabet and other teleprinter characters(carriage return, line feed, etc.) are each represented in code by

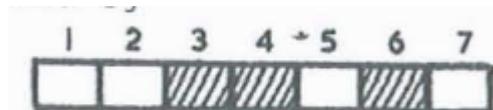
a distinct arrangement of Mark and Space pulses grouped so that there are always 5 pulses to signify each character. Normal unsynchronous operation of 5-Unit machines requires, in addition to the five code pulses, a "start" pulse (Space) at the beginning of each group and a "stop" pulse (Mark) at the end, so that, in effect each character comprises seven pulses, only five of which are used for coding purposes. A.R.Q. operation must be synchronous, and therefore "start" and "stop" pulses are unnecessary, making possible a direct conversion of the above 5-Unit code to the so-called 7-Unit code in which seven pulses are used, but this time all seven take part in forming the code using seven pulses each time, 128 distinctly different groups are possible (work it out if you like), and this is far in excess of the 30-odd normally required. Of the 128 different combinations, 35 can be chosen in which the total number of Marks in the seven pulse group is always three and these are the ones which are used to indicate the various characters including now the special A.R.Q. function. (This is described later.)

### Error Detection

The A.R.Q. system works in two discrete phases, error detection and error correction. The error detection equipment checks that each group of seven pulses contains three Marks, with the implication that if three Marks are not present, the signal has changed in some way. If we denote Mark by a shaded square and Space by a blank square we can give an example showing how error detection works:

In the International 7-Unit Code No.3 (Van Duuren):

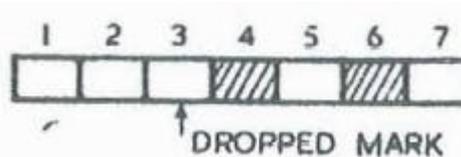
A is signalled by



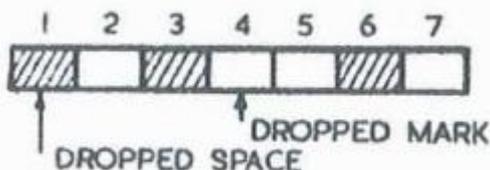
B IS signalled by



Supposing now we are transmitting "A" and fading occurs during the third pulse which is a Mark, resulting in this pulse being interpreted as a Space by the receiver, then the signal received by the A.R.Q. equipment is:



This group does not contain three Marks and therefore an error is registered. Under other conditions it could be possible for more than three Marks to be received, whereupon an error is again registered. It is also possible for a Space to be replaced by a Mark and later on in the same group for the reverse to occur, for example, "A" is transmitted and the first pulse suffers interference and is received as Mark and No. 4 is received as Space when the signal received is:



which signals the letter "H", and since the requisite three Marks are present, the equipment is unable to differentiate this from an authentic signal and an "undetected error" occurs. This is a comparatively rare occurrence unless the radio circuit is so poor that ordinary working would not be a practical proposition.

### Error Correction

In a complete error correction setup, a radio circuit must be established in both directions simultaneously with similar equipment at each end. Both circuits can carry normal traffic, but when an error occurs as above, the equipment detecting the error interrupts any transmission which may be going on from its local end and

sends a special signal which is then passed via the overseas station's receiver back to the overseas transmitter. This causes the latter transmitter to retrace its steps and re-transmit the section being queried and if the local A.R.Q. equipment still does not get the required three Marks in the code group the special signal goes back again and this process keeps repeating until the correct ratio is obtained. While this is going on the receiving printer handling the message in which the errors are occurring "marks time" so that when the disturbing influence on the radio circuit disappears and permits correct reception, automatic printing resumes and the finished message is free from gaps or errors.

#### **Equipment**

The now familiar T.E.D. equipment was our first equipment in full-time use in which the above principle is used. The code, however is different from the one now being adopted Internationally. The equipment now being installed at S.O.R. was imported from Siemens and Halske in Germany and generally goes under the title of 4D7A Mux. This equipment was used on the International Telex circuits

### **ABC Studios Visit** **by Neil Yakalis.**

The ABC radio & TV studio outing went well today with a total of 18 going. They were Neil & Jeanette Yakalis, Robert Askew, George Woloszuk, Ray Alford, Ray Hookway, David Charrett, Robin Tuckfield, Ross Beaumont, Jim Simpson, Bruce Hardiman, Wayne & Noeline Clauson. Plus friends of Wayne Clauson Paul & Mavis Williams. Also neighbours of mine John & Gloria Dartnell & an old school friend Ray Dowsett. John Dartnell worked as a tech for 37 years in the ABC studios at Gore Hill & Ray Dowsett is a retired Qantas aircraft mechanic. After the one & a half hour guided tour seven of us stayed for lunch in the ABC cafeteria.

### **Back to Bondi Beach after 40 years**

#### **By Colin Kelly**

Way back in 1974, a group of young Trainee Technical Officers descended on Sydney from Brisbane, Melbourne and Perth. This group had managed to survive four years of technical training under the capable stewardship of Ray Baty, Joe Collister, Darryl Heggarty and Brian Woods.

After a brief, but enthusiastic, stay at the Eversham Guest House in Manly we were asked to find alternate **accommodation, so** a group of us managed to rent a house at 15 Consett Ave, Bondi Beach.

This house was the scene of many a wild party over the years and many of us remember the 'Bondi Birthday Cake' on our 21<sup>st</sup>.

Some of those who lived in or were associated with the infamous house are

Colin (Ned) Kelly	Mark (Doc) Roberts
John (Joe Cool) Robinson	Steve (Slim) Marshall
Harley (Scruff) Vague	Ray (Colonel) Pow
Kevan Bourke	Garry Chapple
Bruce Mayberry	Chris Collison
Bill Kay	Craig Doyle
John Smith	John Pavy

In November this year, we will be returning to Bondi Beach for a 40<sup>th</sup> Reunion commencing with the OTVA Annual Christmas Lunch at the Bowlers Club in the city on Thursday 6<sup>th</sup> November and the party will continue all weekend. If you are interested in catching up with us some time over that weekend and would like more info, please contact me on 0412-703522 or by e-mail at [colin.ned.kelly@gmail.com](mailto:colin.ned.kelly@gmail.com)

### **OTVA Membership.**

We now have over 75 members who have opted for enduring membership.

This certainly reduces the work in maintaining our members database and financial records. Thank you.

The direct payment option direct to our credit union account instead of cheque payments is another saving.

While we still have some unfinancial members we have a membership of over 250.

The email option is used by many members and if you can use this option instead of receiving a hard copy by post, another saving.

Allan Hennessy.

### **Editor's Final note.**

As editor of our Newsletter. It has been a pleasure and an honour to have served. My sincere thanks to all who have contributed to ensure its success over the past few years; but I feel special mention should be made of the efforts of Evelyn and Bernie White as well as Yvonne and Allan Hennessy who since Telstra withdrew its support have taken care of the printing, folding and stuffing of envelopes and posting of our journal. Peter Bull's never-ending enthusiasm contributes largely to our success. Well done and sincere thanks to you all.

### **MAY I LEAVE YOU WITH THIS THOUGHT:**

**“THE ONLY TRUE GIFT MAN CAN GIVE HIS FELLOW IS A LITTLE OF HIMSELF TO IMPROVE THE LOT OF THOSE LESS FORTUNATE”**

SINCERELY

HENRY CRANFIELD