



"The Messenger"



(Of The Gods.)

Official Newsletter of the Royal Australian Signals Association (SA) Inc.

June/August 2009.

Disclaimer: The views expressed in articles in the "Messenger" are those of the writers/contributors and not necessarily those of the "Committee" or "General Membership" of the Royal Australian Signal Association (SA) Inc.

An Invitation.

The Committee of the Royal Australian Signals Association (SA) Inc. have great pleasure in inviting You and your partner and Guest/s.

On Saturday Evening 10th October 2009.

At 1900 Hrs for 1930 Hrs.

For our All Ranks Annual Corps Dinner.

*To be held in the Conference Room
144 Signal Squadron Keswick Barracks.*

Further details are enclosed.

Presidents Report.

Dear Members,

I hope this finds you all well and enjoying some of the great rain we have had passing our way of late. It's hard to believe that it's August already, it has been difficult for the Committee and myself to spend as much time as we would like working on Association items. I think that we have all been effected by the recent financial down turn, whether it be through higher prices or business affairs.

The Committee has been working on our room at 144 Sig. Sqn and hopefully after some fresh paint we will be able to put together the items we have in our possession. The room will become our meeting place and somewhere where everyone can visit and see items of memorabilia that have been collected over the many years. If you have anything that you believe will enhance the display please contact myself or one of the Committee Members.

A few words on our website WWW.rasigs.com. We are still improving the site and adding additional information as it comes to hand. Tasmania and ACT have joined us and some of their information is on the site or about to go on. We have had some positive feedback from WA and hopefully they will follow soon. Please remember that this Website is being prepared so that eventually we have our own national site for all the RASigs Association Groups.

At the beginning of the year we tried to put together a calendar of events. This was to allow everyone the opportunity to plan in advance their attendance at some of the organised events. To date very few of you have made an attempt to attend any of the events we have offered. I ask you to please look over the calendar and try your best to come to at least one. Some of the events due in the approaching months should be fantastic. One such event will be a Singles/Family/Anyone car rally. Just a nice drive around town with some questions to answer with the finish at 144 Sig. Sqn. for a meal, refreshments, prizes and followed by the grand opening of our Room/Museum. The Presidents Luncheon is on again in November, it was well received last year and I hope that you visit the farm again, all are welcome.

We will be hosting our annual RA Sigs All Ranks Corps Dinner at 144 Sig. Sqn. in early October and once again I hope that you can attend this very important and significant event in our calendar.

One final point, please do your best to help us with membership, there are still many Sigs out there that have not yet joined us and may be missing out on the chance to get together with friends and past Comrades.

I hope that this information is of benefit and I look forward to keeping in touch with you on the Association's progress.

Regards

Bruce Long

President RASigs Association SA (Inc)

Just Prior to Anzac Day the Association received the following communiqué.



ROYAL AUSTRALIAN CORPS OF SIGNALS OFFICE OF THE HEAD OF CORPS.

R8-3-042, DEPARTMENT OF DEFENCE. CANBERRA ACT 2600, AUSTRALIA

Tel: (02) 6265 5139 Fax: (02) 6265 3840

To the President and Members of the Royal Australian Corps of Signals-South Australia.

Ladies and Gentlemen, I write to you on the occasion of Anzac Day 2009 to provide you with a short update on the Corps. I also provide this brief to you on behalf of the Representative Colonel Commandant for the Corps, Major General Paul Irving (who passes on his best wishes).

The last 12 months have been one of high operational tempo and change for the Royal Australian Corps of Signals. Since August of 2008, the Darwin based 1st Combat Signal Regiment has provided the nucleus for the Force Communications Unit (FCU) for ADF's operational deployment in the Middle East Area of Operations (the MEAO) and East Timor. For the first time since Vietnam, formed RA Sigs. units are deploying on operations. The FCU deployment has been very successful. Reserve RA Sigs units continue to provide key support to operational deployments, in particular Army's commitments in the Solomons Islands.

The RA Sigs elements of the Army's Special Forces continue to deploy on intensive and very dangerous operations. Sadly, the Corps lost SIG Sean McCarthy in action last year. As a Corps we take the time to remember SIG McCarthy and his family on ANZAC Day this year.

In 2008, the Chief of Army, Lieutenant General Ken Gillespie, announced the Adaptive Army initiative. The Adaptive Army is being implemented in two phases with the first phase commencing in 2009. Army will see its Land Command and Training Command organizations merged to form a new entity to be known as Forces Command. Forces Command (or FORCOMD) has the task of raising and sustaining Army's organisations for deployment on operations. RA Sigs Units, both Regular and Reserve, will over time, adapt to reflect the objectives of the new Army Organisation that emerges from the Adaptive Army initiative. The Headquarters Forces Command will have a G6 (Comms and CIS) organization lead by a full Colonel.

Complimentary to the Adaptive Army initiative and the Enhanced Land Forces program, Army is looking at the structure and role of it's Corps over the next several years with a view to determining what each

Corps should look like in 2016 and beyond. As the Head of Corps RASigs, I have been tasked to provide support to Army Headquarters for the conduct of the RA Sigs Force Structure Review (FSR). The FSR commenced in late 2008 and will be completed by mid 2010. The FSR activity is being conducted by Colonel Mike Brennan. (Mike is conducting the activity in his Army Reserve capacity). To date, two formal FSR workshops involving key RASigs staff and Unit CO's (including Reserve Members). Further workshops will be held this year.

2008 also saw the start of the redevelopment of the Defence Force School of Signals. Over the next several years, the School will receive new modern training facilities with existing buildings to be redeveloped.

The RASigs Associations throughout Australia have been very active in the last 12 months in support of their members and the wider Corps. Major General Irving and I acknowledge and commend the activities of each of the Ra Sigs Associations. We appreciate the key support that the Associations provide to the Corps particularly in the area of history, heritage and tradition.

I briefly highlight the following events that the Associations organised and supported over the past twelve months:

40th Anniversary Commemoration Activity of the Vietnam Battle of Coral and Balmoral-conducted in Canberra in May 2008. RASigs Vietnam Veterans and other members of the Corps gathered for a commemoration of this key Vietnam Battle. A special thanks to the RA Sigs Associations involved in making this event happen.-in particular the 104 Signal Squadron Association and Queensland RA Sigs Association.

The dedication of the RA Sigs Vietnam Plaque at the Australian War Memorial, Canberra in August 2008. The Corps will always be indebted to the tireless efforts of LTCOL Peter Murray, Brigadier Bill Horn and members of the ACT RA Sigs Association in making this activity happen. In saying this, Major General Irving and I also acknowledge the assistance of all of the Sigs Associations with this very special event.

The 2008 RA Sigs Reunion activity held in Adelaide in November 2008. This was a remarkable reunion activity that was organised by the RA Sigs South Australian organization, and supported by all of the Associations. Major General Irving and I express the thanks of the Corps to the South Australian Association President, Bruce Long and his team for making this memorable event happen. Also, a special thanks to 144 Signal Squadron for the support they provided to the reunion activity.

The many other activities that the Association have engaged in around the country including in Perth the homecoming activities for deployed soldiers; in Sydney the support to, local RA Sigs units, in Melbourne the Association's ongoing work in support of the Corps heritage and support to the Corps Museum and in Brisbane the ongoing support to members of the Corps.

In 2009, the Royal Australian Corps of Signals marks the retirement of two of its senior officers from the Australian Regular Army: Major General Ian Gordon (a former Deputy Chief of Army) and Major General Maurie McNarn (a former Director of the Defence Intelligence Organisation) The Corps acknowledges their service to the Corps, the Army and the wider Australian Defence Force.

I am pleased to advise that in 2009 the Corps continues to grow senior officers and Warrant Officers for the Army. Brigadier Simone Wilkie was promoted to the rank of Brigadier at the start of the year.

Lastly, I want to thank and acknowledge the retired members of the Corps who keep us connected and informed. Where would we be without Ted (Blue) Hawkins and his tireless communication efforts-many thanks Blue from a grateful Corps..

In conclusion, Major General Irving, the Corps RSM (Warrant Officer Class One Michelle Griffith) and I wish all of the Associations and their members well for the future. The Corps values and thanks you for your support.

I look forward to meeting with the Associations where possible to do so in the future.

Mike Milford
Brigadier
Head of Corps
Royal Australian Corps of Signals.

23rd April 2009.

RA SIGS REUNION VIETNAM NOVEMBER 2009.

As reported in past issues of the “Messenger” registrations are now being accepted for this important event to be held in the country of Vietnam from the 5th through to 9th of November 2009. All ex and serving members of the Royal Australian Corps of Signals plus their families are invited to this reunion. There is no registration fee but full payment is required by 30th August. For further and detailed information go to the Web Site <http://www.rasigsvietnam.com>

RA SIGS REUNION 104 SIG SQN (ALL SIGS WELCOME)

This event is planned for the year 2011 (Gold Coast-Date TBA). For further details go to <http://www.au104.com>

Media Releases in Brief.

Veteran's Affairs Budget:

For 2009/2010 the Government will provide funding totalling \$11.8 Billion being \$6.5 Billion for compensation and income support and \$4.9 Billion for health and health services.

Income Boost:

More than 170 organisations will share \$507,619 to fund projects that honour Australia's wartime heritage. The range of projects include, wartime exhibitions, restoring and upgrading memorials and publishing unit histories.

Cutting Red Tape:

An Interdepartmental Working Group has been established by the current Federal Government to cut the bureaucracy involved in the processing of claims made by Veterans and ADF personnel.

Military Compensation Review.

This review will examine the operation of current Military Compensation Schemes. This step will address long standing issues with military compensation and in particular disparities and perceived inequities between systems and difficulties encountered by those leaving Military Service or making claims.

New Forum for Veterans.

This new forum known as the Ex-Service Organisation (ESO) Round Table will consist of senior leaders of the ESO community and will act as the main Forum for dialogue with the Repatriation and Compensation Commissions and the Department of Veteran's Affairs.

London Display:

Australians in London can experience a new interactive display which encapsulates Australian Service in WW1 and WW2 at The Australian War Memorial in Hyde Park. The War Memorial commemorates the service of more than 900,000 Australians during both World Wars. Etched into the walls of the Memorial are the names of the 23,844 towns across the country gave their sons and daughters to these conflicts and 47 of the battles they fought in.

Fromelles Cemetery:

The design of the new cemetery at Fromelles for the remains of up to 400 Australian and British servicemen is to be classic and simple in design. Hexagonal in shape the graves will radiate from a cross of sacrifice in the middle. The grave markers will be the dominant feature and will follow the style of all Commonwealth War cemeteries where each is honoured in death regardless of religion, rank or race.

Welcome to new members.

Philip Capper. Philip served in the Regular Army (6th Sig. Regt.) from 1977 to 1983 and then in the reserve forces (144th Sig. Sqn.) from 1984 to 1992. Philips trade was OKRC and he achieved the rank of Corporal.

Shane Scott. Shane served in the regular army for 20 years being posted to 2nd and 6th Signal regiments. He achieved the rank of Staff Sergeant.

Vale: Bryan Kenneth Eyre Trott. SX 26655 1922-2009

Bryan passed away in March this year. He enlisted in the Australian Army in 1941 and was posted to the Signals Section of the 2/8 Field Regiment. Bryan received his discharge in February 1946. He was a long term member of our Association and being a "Ham" was also a member of the Royal Signals Amateur Radio Society and the Adelaide Hills Amateur Radio Club. He served that club with distinction, his banking experience being of great benefit in his role as treasurer and financial adviser. Bryan while in his mid 70's passed all the necessary exams to become a fully qualified Amateur Wireless Operator and obtained the call sign VK5SV. No other details are available at this time.

RASigs Assn.(SA) Social Calendar for the remainder of 2009.

All members and partners/guests most welcome.

The following activities are planned for the remainder of the year.
Please note that some changes have been made since April's "Messenger"

Regularly on the last Thursday of every month (6PM) commencing a social catchup and/or dinner at the Goodwood Hotel.

Saturday 10th October: RASigs All Ranks Corps Dinner.

Please note this event in your diary. This is our annual formal dinner event. Arrangements have been made to use the conference room at 144 Sig. Sqn. Full details and a response form are attached. This event is open to all Ex Sigs. whether they be a member of this Association or not so if you know someone who is an Ex Sig. and could become a member **please pass this information on. The committee needs to know by the 18th September should you be able to attend or not and would be grateful for your prompt response. A return addressed envelope is provided for mail recipients.**

Saturday 24th October: Car rally commencing at 1030 Hrs until 1300 Hrs then a provided lunch in 144 Sqn's area followed by the award of prizes and the opening of the Association's Room.

Saturday 28th November 1200 Hrs: Presidents Luncheon at One Tree Hill

Sunday 29th November: Tenpin Bowling.

Please contact the President Bruce Long if you require further details and or to register your interest. Further details will be available in the next issues of the "Messenger".

A Brief look at the Beginnings of Radio in South Australia.

It all began in 1899 when based on previous experiments, the work of Marconi and others, Professor Bragg and Sir Charles Todd established communications between the Observatory on West terrace in Adelaide and a receiving station on the sand hills at Henley Beach.

The use of Morse Code was already established at this time being used in the “Wired” telegraph service and thus was used as the communication language. The medium by which this “Wireless” link achieved its result was “Spark Transmission”.

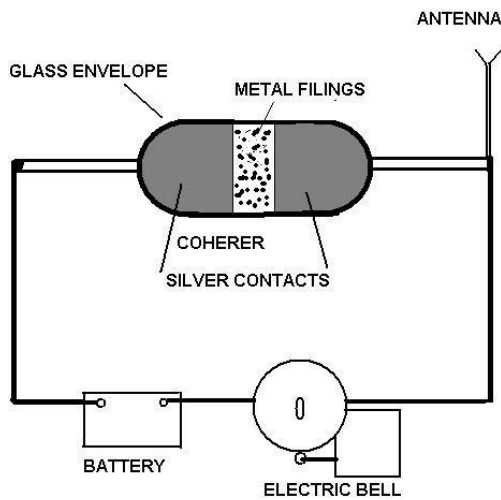
“Spark Transmission” although crude and comparatively broadband is nevertheless an interesting phenomenon. We are surrounded by it these days, electrical devices such as motors, welders, automotive spark plugs to name a few are all capable of radiating the noise they produce in a radius of quite a few metres. A motor vehicle moving in the street with an unsuppressed ignition system can quite easily be heard on a domestic radio. Thus it could be said that this is a form of “Wireless” communication.

Its worthwhile noting that for a spark to jump a small gap for example just a millimetre which is the case with an automotive spark plug, a very high voltage is preferred, typically 2000 volts. The early and many experimenters prior to Bragg and Todd were able to create such sparks with an interesting and common result. If a quantity of mixed metal filings in a glass envelope being connected to a receiving conductor were in the vicinity of the spark the filings would be slightly agitated and stick together. This could be engineered to close an electrical contact and so in result perhaps ring a bell. With some further development this could be made to occur just across the room or in an adjacent room and one can imagine the expression of ‘Success at last’ by the experimenter having established a form of communication without wires. Although then it was a substantial discovery and worthy of merit it pales into insignificance when we consider the technology we have just over a century later.

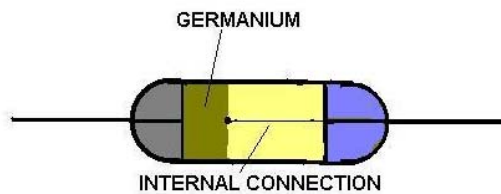
These crude “Detectors” then called “Coheres” were for a short time unsatisfactory at any useful distance but better forms were being continually developed making communications over longer distances a possibility. Bragg and Todd used the metal filings type of Coherer and one can only wonder what sort of transmitted power was necessary and the amount of “Wire in the Sky” needed for the Coherer to be stimulated at the receiving station some eight miles away. It’s hard to imagine how such a relatively crude and simple device could be sensitive to a generated spark at that distance. The sensitivity was such that strong atmospheric static could falsely trigger the “Coherer”. This lends one to the thought that the coherer could have had other detection properties not fully understood at the time. Also in the late 1890’s the wavelength of electro-magnetic energy was well understood so it’s likely that the receiving antenna was of a length sympathetic to the frequency of that “Spark Transmission”.

It should be mentioned that then the microphone and earphone weren’t suitable for spark transmission thus the transmission and reception of speech not possible. Not even the “Morse Clacker” used by the “Wired” telegraph service was practical so a machine which responded to the received spark transmission was used producing Morse Dits and Dah’s on a paper tape and would have been the forerunner of the “Undulator”. Once the coherer had been stimulated the system following was purely electro-mechanical. The metal filings once having adhered together on the reception of a signal would remain in that state after the signal had ceased. As a part of the mechanical process for each Dit or Dah it was necessary for the glass enveloped to be tapped with a device so loosening the filings and making them ready for the next transmitted symbol.

South Australia was ahead of the other Colonies in the development of radio but lagged behind the rest of the world so benefited from the research and discoveries from other countries notably Britain and the USA. The “Coherer” was being continually improved and many fascinating, sensitive and innovative versions became available. Around 1910 emerged the “Crystal Detector” (Diode) making the Coherer obsolete. This device began as a piece of suitable rock such as Gallium or Germanium plus a wire probe (Cats Whisker) but was eventually encapsulated into a glass envelope not unlike, but very much smaller, than the Coherer. This device was much more sensitive and made it possible for radio receivers to detect signals as weak as a few micro-volts when present at the antenna.



A DIAGRAM SHOWING THE GENERAL IDEA BEHIND THE OPERATION OF THE "COHERER". ONCE STIMULATED BY A "SPARK" TRANSMISSION THE METAL FILINGS WOULD STICK TOGETHER AND COMPLETE THE CIRCUIT BETWEEN BATTERY AND BELL.



AN ENCAPSULATED DIODE STILL USED AS A PART OF MODERN ELECTRONICS.

Professor Bragg and Sir Charles Todd were to leave the development of radio communication to pursue new endeavours but other avid experimenters continued the work. With the availability of more sensitive detectors the Post Office, Maritime authorities, the Military and other institutions soon saw the potential for “Wireless” communications its adoption then becoming rapid. Experimenters were professional as well as amateur, the amateurs being the forerunners of today’s “Ham” radio operators. These early “Hams” had to use components they had at hand. Once the Automobile had arrived its ignition coil was suitable substitute as a spark generator. So many in number had the amateur experimenters become that at the outbreak of WW1 their equipment had to be confiscated for the duration. In 1912 the Adelaide Coastal Station VIA commenced operation using spark transmission

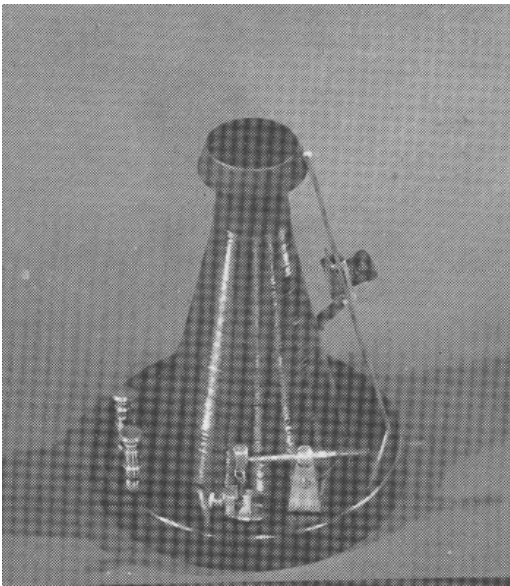


The Army quickly saw the potential for “Wireless” communication evident from the picture alongside. It shows what is believed to be The 22nd Sig. Troop at Mitcham circa 1915 with accompanying portable Spark Transmission equipment. No doubt the many amateur experimenters who enlisted for WW1 were quickly drafted into communications duty.

By the 1920’s the radio valve had been developed and radio technology progressed with amazing rapidity throughout the world. Although spark transmission continued on for a while the radio valve had made it obsolete. Now it was possible to produce clean relatively narrow transmissions that occupied less of the frequency spectrum.

The radio valve not only had the ability to produce stable and clean high power voice transmissions but could, when used in a receiver have the power to drive a large speaker thus eliminating the need for headphones. The commercial transmission of speech and music now became a reality broadcast station 5CL commencing operation in 1924 with 5KA following two years later. In just a short space of time homes were sporting the console broadcast receiver. In just 25 years radio communications had gone from the comparatively rough and rudimentary experiment in 1899 to the marvel of radio reception in the lounge room.

It is worthwhile to note that the early experimenters such as Professor Bragg and Sir Charles Todd weren't able to travel to their local store and purchase the parts they needed for their experiments. Everything had to be produced by someone. Fortunately they had at hand the many unheard of and unsung hero's who selflessly provided their skill and knowledge to manufacture whatever was required by hand, and in perhaps what would be a home workshop using just basic tools.



The amateur experimenters used spark transmitters yet the simplest of crystal receivers to make wireless contact with other enthusiasts interstate. Pictured alongside is a very novel, compact and possibly home made crystal radio set from the early 1920's. The tuning coil is wound on a conical former the sliding contact, crystal detector and headphone terminals quite visible. In terms of height and diameter it would be no larger than a small vase.

With the advent of radio entertainment a vibrant industry emerged in South Australia. Sales, installation and repair facilities were commonplace and after WW2 the mantle radio became popular. Brands such as 'His Masters Voice', 'Astor', Stromberg Carlson and so on were commonplace. The car radio was introduced and with the development of a new miniature valve the portable radio arrived. Portable then meant a radio set with the dimensions of a small suitcase and quite heavy.

Whatever humankind produces it has to come from the soil thus many scientists such a Geologists, metallurgists and so on have made a tremendous contribution to the electronics we have today. Rock and minerals such as Gallium, germanium, silicon, mica, quartz, carbon and selenium also metals such as gold, copper and silver were and are essential components of the electronic industry. In latter years the use of Quartz crystal could be regarded as having the greatest impact on the greater advancements we have today. This mineral when mined, cut into thin wafers and connected into an electronic circuit has the ability to resonate at a fixed and very stable frequency. The production of that particular quartz is a vital industry and without it we would not have the advancements we have today. All modern communication equipment, computers, accurate timepieces and so on would not function as required or at all without this important mineral.

One can only wonder what the next one hundred years will bring keeping in mind that all the principles and theories have been solidly established and proven so perhaps progress will be slower and develop as refinements rather than new discoveries.

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Contributing: News, articles etc. Send via the Secretary or Publisher.

The Association's website address is: www.rasigs.com

Paypal is available for convenient payment of your Association subs.

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