



OTVA NEWSLETTER

Overseas Telecommunications Veterans Association (Australia)
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It's Time!!

THIS IS IT -

The big one!

The OTVA Golden Jubilee Lunch on

17 November

If you haven't booked
yet, do so by **20
October**. Don't miss out
Details below

Bookings to Will Whyte: will.whyte@optus.com.au or Peter Bull: Peter.Bull.NOC@optus.com.au or Henry Cranfield - henrycra@aapt.net.au or 9534 1526

DO IT NOW!!!!!!

THE OVERHEADS

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www.otva.com

**In case you missed it on the
Front page!!**

Noon on 17 November, 2006

THE OTVA GOLDEN JUBILEE CELEBRATION

Bring your partner and help celebrate the 50th Anniversary of your Association. This will be a grand affair and used to launch a DVD of the Association's history. (Midday, 17 November, 2006) **DO IT NOW** There is a **limit on attendance and bookings must be completed (ie you pay when you book!!) by 20 October.** Bookings to Will Whyte, will.whyte@optus.com.au or Peter Bull: Peter.Bull.NOC@optus.com.au or Henry – (henrycra@aapt.net.au) or 9534 1526.

Some interesting colleagues are coming out of the woodwork. You should be there to catch up with them. Time to talk to one another is an important part of the program (and you will be in a club which doesn't close till midnight!)

PRESIDENT'S MESSAGE

We look forward to our 50th Anniversary Function on the 17th November 2006 with 50 years of history to remember. Our founders, no doubt would be amazed at what has occurred over that span of time, not forgetting that their efforts were on-carried by a lot of hard working members who, have brought us to today. No mean feat considering the circumstances.

Those of us who worked for OTC in that period, are rightly proud of our accomplishments, professionalism, "can do" approach and the esteem in which we were held world-wide. Some credit for that success was due to the rapport that existed between all areas and the "pursuit of excellence!"

Our initial social function was a "Buffet Tea" held at the "State Ballroom in Market Street, Sydney" and attended by the Chairman of the Commission and GM of that time. A grand affair!

Do enjoy our forthcoming "Golden Jubilee Function" as a celebration of success and the bringing together of those with whom we

shared so much and the remembrance of those who are no longer here to share our memories with. Please also remember, that our future lies in your participation and support in our association's activities; which I trust we may look forward to?

Sincerely

Henry

**VISIT TO THE TELSTRA MUSEUM,
BANKSTOWN ON 13 SEPTEMBER.**

On this day, about a dozen intrepid souls trekked to Bankstown to visit the Telstra Museum which is currently the repository of the OTC heritage (in boxes at the back). (Bernie White didn't trek as he only lives in the next street!)

We were made very welcome and after being treated to morning tea, shown the exhibition which is crammed in fairly tightly. Our visit was noteworthy as the reporter from the local paper came and took extensive photos which your Editor hasn't followed up yet. I was so engrossed I really only took a few shots (including the shot of the TLoch used elsewhere)



Kim Hopkins and Gordon Cupit listen to the explanations.



Peter Mills, Erik Bachmann, Paul Horder & Kim Hopkins

Afterwards, we enjoyed the pleasure of an informal lunch at the Bankstown RSL Club which was only two doors up the road (Thanks to Bernie who arranged it)

THE COMMERCIAL BRANCH, INTERPLEX AND OTC'S NEW YORK OFFICE.

By Tom Barker

When George Maltby established the Commercial Branch, in the 1960's, his intention was to get OTC involved with its customers more closely and to establish a better public recognition of OTC by showing an interest in business customers and learning of any problems which they may have encountered in their international communications.

At that time, our closest customers were those businesses which regularly sent telegrams to the overseas offices of their principals, customers or suppliers. These firms usually operated "Four Figure Accounts" which were used to identify the customer to OTC and simplify billings. Many of these customers were moving from telegrams to telex, as OTC's international telex facilities became more efficient and more generally available.

Prior to the opening of the COMPAC cable, telex channels were derived from Hasler TOR equipment, operating on HF radio paths and the circuit switching was performed manually by OTC operators, who supervised each call to ensure satisfactory service delivery. With the opening of the COMPAC and SEACOM cables, telex channels were provided via FMVFT equipment operating over cable voice channels (24 channels per system) which not only provided more reliable services, but at a much lower cost to OTC.

The Australian domestic telex network, provided by the PMG Dept. at that time, was also growing quickly and after subscriber dialling between all Australian subscribers was introduced (using keyboard signalling, rather than rotary dials), the customer take-up was very fast. This presented OTC with an opportunity which had never existed before, to offer its customers an automated service, for

which OTC could bill, within the terms of the Overseas Telecommunications Act of 1946.

This proved to be the most profitable service which OTC ever offered and was the basis for the its very politically popular Annual Reports and handsome dividends to its shareholder (the Australian Government) over many years. It was also the motivator for OTC to engage in vigorous debates with the PMG Dept and later, Telecom, about the introduction of International Subscriber Dialing for telephone services.

The first stage of OTC's Automatic International Telex service was achieved by a novel use of Siemens and Halske tape reperforators (FRXD's in the S & H language) which monitored each call, recording the answer-backs of the caller and the called number and the time of connection, plus a "MOM" entry at each completed minute of the connection. The tapes from these machines were analysed by OTC Accounts Branch and the customers were billed directly by OTC.



FRXD spotted at the recent visit to the Telecom Museum at Bankstown

The operating procedure for Australian telex customers was to dial 020, which would connect them to the international telex exchange (at Paddington) which would indicate by signalling "INTLX" that an international number could be called. Such calls had to be prefixed with the appropriate country code, which was an opportunity for OTC to produce and distribute customer literature, which provided operating

instructions, country codes and rates for OTC telex services.

These booklets were not mailed out to customers, but hand-delivered by OTC Commercial Branch representatives, who used the opportunity to establish a relationship with the customer and arrange for future regular visits to enquire about service related matters.

The first stage of this program was the opening of twenty automatic telex circuits to London and the customer response was so good that it was necessary to embark on a major engineering program, to meet the demand. From my (imperfect) memory Ross Beaumont was the engineer who carried that first project, but it led to the acquisition of the first international telex exchange with toll ticketing.

Once established, the automatic telex service became a vehicle for OTC to involve itself in customer service matters in a way which was never possible before. One of the things which developed out of that involvement was the realisation that OTC was being out-smarted by a competitor. With the benefit of detailed customer billings, which identified all international telex calls, Commercial Branch staff were able to identify customers who were making many calls to the same number, on a regular basis, which would justify their leasing a private line service to that particular overseas destination, which was often the office of their principals.

International Private Lines were almost invariably "sub-speed" telegraph circuits, at that time, a normal 50 baud (66 wpm) telex circuit being divided into four "quarter-speed" circuits by Hasler equipment. OTC staff would analyse customer billings over several months, and prepare a written analysis for the customer's information. This would be followed up by a sales proposal, which would cost-justify the customer leasing a private line to his most frequently called destination. OTC Commercial Branch Staff took this work very seriously and there was good-natured competition between staff, to achieve the best sales figures.

It was at this point that we would often become aware that the customer was installing

a private line, not to London or New York, or where-ever his main overseas correspondent was, but to Hong Kong. The customer would use this line to transmit all his overseas telex traffic, not just to London or Hong Kong, but to everywhere. OTC had become the unwitting victim of the Cable and Wireless MSC (Message Switching Centre) in Hong Kong, a battery of Univac 418 mainframe computers, engineered to handle private telegraph networks, customised to the needs of each individual company.

Such systems and services were being offered by many international carriers, at that time, but the C & W MSC had embarked upon a campaign to target Australian telex customers, probably because they knew that OTC did not have this capability.

It was apparent that OTC would continue to lose business this way, unless it had a computer-based message switching system to offer its customers, so that a network of private lines, connecting to every major office of any corporation around the world, could communicate, via the Sydney-based switch.

This entailed selling the service, not just to our Australian customers, but to the corporations (usually multi-national) whose headquarters could be based anywhere in the world.

After OTC management were made aware of the competitive disadvantage that OTC was suffering, in this situation, it was decided to install a message switching centre for private line networks and it was to be called Interplex.

At first the Interplex system comprised a number of small, stand-alone computer systems, allocated on a one-per-customer basis, but this arrangement proved too inflexible to meet all our customer needs, so an arrangement of General Automation (GA16/64) mini-computers, called "Mini-Plus" systems, was installed at Paddington, and these were capable of meeting a much wider range of customer requirements.

From that time on, the competition between OTC's Interplex service and the C & W MSC was very keen. We won some very good accounts and we lost some important ones to our competitors. It was an area of OTC's business which was truly engaged in

competition for business with an aggressive alternative supplier, an unfamiliar scenario for many who had spent their entire careers employed in monopoly carrier situations.

One of the facts which became apparent to those of us engaged in this business, was that 45% of OTC's corporate business was with companies based in the USA. We began to participate in International Telecom Expos, (such as the ICA) in the U.S and we soon realised that OTC needed to have a permanent presence in the U.S. if we were to succeed in this area of business.

At that time, OTC management was not enthusiastic about having a representative office in another country, to talk to customers, because there was a mindset that OTC was a monopoly and didn't need to compete for business. Fortunately this did not apply to people like George Maltby, who took the proposal to establish an office in New York, to the board a number of times, before finally gaining approval, in 1984.

The proviso which we were obliged to work with, was that no capital expenditure could be made, so everything had to be leased (presumably so we would not have to write anything off if the venture failed). I walked the streets of New York, trying to find somewhere to hang up OTC's shingle, and finally took a space in a serviced office business, located in Fifth Avenue, near the Rockefeller Center.

I was assisted in the task of setting up this office by some good friends in British Telecom International, who were setting up their own New York office at that time, a much more elaborate, permanent and impressive affair than OTC's modest presence.

This being OTC's first overseas-based office, a number of things had to be considered which were unprecedented in its experience. One important detail was the selection of staff and the length of their terms in that post. I decided that three years was probably the most sensible term length, as it takes some time to become accustomed to working in a foreign country and also time to prepare for ones return home, so three years would allow a useful time in the job, once settled in.

Trevor Duff was selected to fill the Manager position and Ravi Bahtia his assistant. For our official opening, George Maltby prevailed upon an old friend, the Australian Ambassador to the United States, Sir Robert Cotton, KCMG, to officiate, and George selected the Waldorf Astoria as the venue. Our OTC PR section arranged for a New York firm to set up the location (the Ballroom) and the catering for the event.

Inviting Sir Robert to officiate was a masterstroke. Although Americans are proud not to be part of the British Empire (or what's left of it) they salivate at the presence of Royalty or British Nobles. Their responses to our invitations were overwhelming. On the night of the event we were blown away by the number of industry leaders who attended. It was a stunning success. For me, the two biggest thrills were when I talked for some time to Warren Buffet (about his buying Western Union Telegraph) and when Mike Ford, the head of British Telecom International, said to me (very quietly) "You beat us, Tom". They had held their New York Office official opening a week before us and we both knew that what Mike said was true.

The opening of the New York office not only gave OTC a permanent presence in the USA, which was appreciated immediately by our many corporate customers and US correspondent carriers. It made possible the scheduling of regular visits to them and also set the stage for the opening of OTC representative offices in London and Wellington shortly afterwards, which were to be followed by others in Japan and Vietnam, etc, in the years that followed.

The serviced office facility which we leased in Fifth Avenue served as OTC's office for nearly two years, by which time any doubts about the success of the project were long gone and Trevor Duff was able to move to a much nicer and better equipped facility in the main street of White Plains, outside Manhattan, but located very conveniently to many of our customers and US correspondent carriers and much cheaper than a downtown Manhattan location.

As fate later destined (unexpectedly), I was to spend the last two years of my OTC career in that office and I was able to observe, first hand, the advantages of being in a position to deal with issues which were important to OTC's business, in the same time-frame as those people with whom we were dealing.

Sadly, a number of OTC's corporate customers were located in the World Trade Center twin towers and we would spend many days in meetings there, with those people, so it was horrifying to witness the destruction of those towers, on television, from my home in Australia, many years later and to hear the stories of friends who lost members of their families in that tragedy.

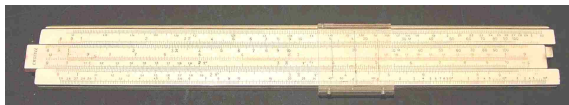
THE SLY DROOL -- An editorial indulgence!
FURTHER THOUGHTS ON SLIDE RULES AND CALCULATIONS

By Bob Lions

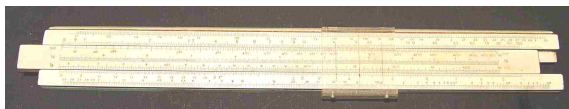
Erik's article had me heading into my garage to retrieve some examples of the devices of which he writes. While most of the Vets have seen slide rules, we must think of our inheritors!

Thus, having read the story, I was impelled to go and retrieve some examples, set them up to be photographed with the editorial camera and then process the pictures for the Newsletter. Fortunately, I had seen them recently so the search was brief!

Thus I found my first slide rule (a German Faber Castell) which would have been purchased in the late 1950's period which Erik speaks of.



Castell in normal mode

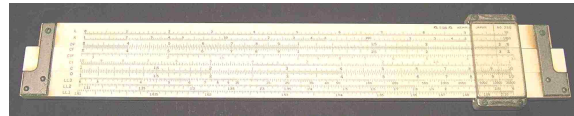


Castell with the slide reversed

Next is my Hemmi bamboo slide rule of Japanese origin, (probably early 1960s,) which was double sided so that you could use the 22 separate scales simultaneously.

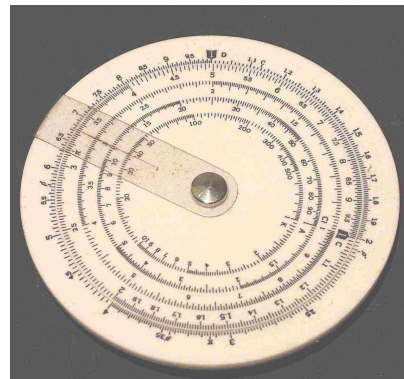


Front of the Hemmi



Rear of the Hemmi

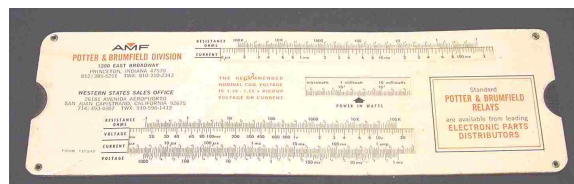
Erik also spoke of the circular slide rule and my cheap plastic verion is shown below. I think I bought it for form's sake, I don't think I ever used it seriously.



Circular slide rule

One item of which I do not have a photos is a wonderful tubular slide rule which belongs (belonged?) to Henry Cranfield. I minded it for many years but returned it to Henry when he retired in Sydney. It may be in the Power House

Erik also talked of specialised slide rules and I also came across one of those, from Potter & Brumfield who were relay manufacturers. These things were invaluable when you were doing relay designs. This one also had a temperature conversion scale on the back where nothing moved, but it saved a great deal of time when doing temperature conversions. (Does anyone remember relays? Maybe someone might care to do an article?)



P&B Relay design slide rule made of cardboard

With regard to the calculations and calculators, I also fished out my first calculator and my current one. The first, an HP 21, was bought in the early seventies and was somewhat cheaper than the first HP 35 which was purchased for OTC by Tom Barker (I think). Unlike the Texas Instruments calculator, which was a simple calculator, the HP calculators used reverse Polish notation which gave it much more capability for carrying out complex calculations. It actually calculated much more like a computer. It had a Light Emitting Diode (LED) display which was power hungry but was equipped with rechargeable batteries which would last for a couple of hours of calculating before needing recharging.



HP 21 and HP 32SII calculators

The HP 32SII which I now use occasionally when I want to just add up a few numbers or do some simple calculations, has a huge range of functions which are available as simple keystrokes and also has a 250 step memory. It has a liquid crystal display which is quite economical and runs on three silver oxide cells which don't get replaced very often.

All these functions are the sorts of functions you will find in your Lotus or Excel spreadsheets so really aren't wanted now.

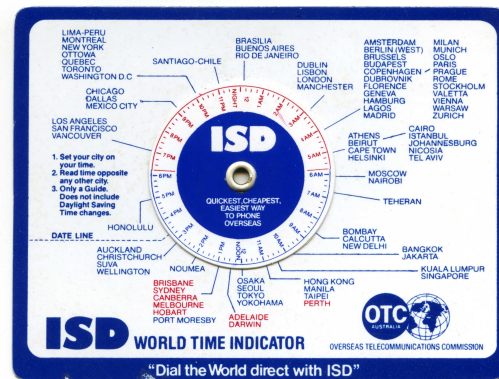
However, the comment Erik makes about the need to be able to get a rough idea whether the answer should be 0.12, 1.20 or 12.0 still is important. If your calculator or spreadsheet is not setup properly, you will always get the wrong answer.

I also remember a comment from a structural design lecturer many years ago, when we were lead through the calculations to establish the

size of a column, concluding by showing that a 3" x 3" column was adequate, but then ending with a comment "that as this would look too small, we should use a 6" x 6" column".

In a similar vein it is also important what you calculate. The design of a suspended timber floor is based more on its stiffness and ability not to sag when people walk on it rather than its strength. Thus, strength is grossly over-designed by the time you get the proper stiffness!

Since writing this for the August issue, I came across a simple linear scale slide rule which would be familiar to most of you.



BEAM OPERATING PROCEDURES — 1927-1940 - C.R.O. SYDNEY – PART 3

By QPee,

Received Traffic.

The same routes and systems were used for the reception of traffic. The traffic received was taken on an gummed undulator tape. This was then run through a water well and gummed down on a brown paper pad. As messages were received they were entered in a circuit log, with the condition of the transmission at the time. As each message was gummed, it was timed with an automatic time recorder. The messages were then passed to the telegraphists who typed the morse into plain language. Traffic was received at up to 400 words per minute, so that a number of telegraphists were required to keep up with the gummer.

The messages were typed on special forms and passed to the Inward Circulation clerks. All

messages had an inward identity number issued by the transmitting station. The clerk had a sheet for each class and serial number of the message. Some messages had two or three identity numbers, initially from the originating station, and then numbers from stations relaying the traffic. The first number, say in the case of London, was BS for full rates etc.

In those days, the majority of clients possessed a telegraphic code address, and cables with such addresses were passed to the Adrema clerk, who sat in a round console which contained a zinc plate for each code address. This plate had the name and address of the client, and any instructions such as telephoning, after hours delivery etc. The address was embossed on an envelope and also on the receipt attached to the envelope. This action was termed unpacking. When this action complete the message and envelope was passed to the Inward Circulation Clerk.

Traffic was then sorted into that which was delivered by our messenger service, that outside our messenger service, and that for onward transmission to another destination to which we had a telegraph service. Each message was given a serial number in accordance with above classifications. These numbers were in numerical order on sheets. On such sheets, the circuit number was entered, and on the circuit sheets the delivery number was noted. Again, the simple double entry bookkeeping. Similar to outward traffic, checks were kept on all traffic to prevent delays and loss. The supervisor received a traffic situation message from Melbourne every hour for London traffic, and the Supervisor checked the Circulation clerks sheets on the hour. Woe betide any clerk who had a missing number and had not previously advised the Supervisor.

Traffic for messenger delivery was then enveloped and a delivery number stamped on the receipt, and passed to the Beam Despatch. The Despatch clerk entered the delivery number and addressee on a despatch sheet, selected a messenger, then inserted the messenger's number and time of despatch on the sheet. On delivery the client was expected to sign the attached receipt and the time

delivered. On return to the Despatch, the messenger handed in the receipt and his time back was recorded on the despatch receipt. Receipts were promptly sorted and if one was missing the client was immediately telephoned to see if the messenger had arrived. Should the messenger have an accident or be delayed for some reason, a copy was made and sent post haste.

Messages for outside our delivery service, were given a Post Office number, entered on sheets and passed into the Despatch who entered the number on a special Post Office delivery sheet. These messages were also enveloped but not individually, so the receipt might have numerous Post Office numbers. Post Office traffic was given priority and two messengers were always detailed for this traffic. They were required to take the envelopes from the Despatch in the lane at the back of the AWA building to the Cable Clerk who was situated in the GPO at the corner of Martin Place and Pitt Street. A messenger was given 8 minutes for this task, and became very agitated if the Cable Clerk delayed in signing the receipt. Post Office traffic was continuous so messengers were not happy to be placed on this job on the roster.

Traffic for onward forwarding on our telegraph service was passed to the Outward Circulation clerk for a circuit number and then passed back to Inward Circulation prior to transmission for him to enter on his sheets.

Messenger Boys were employed at the age of 14. Those who had their Intermediate Certificate were qualified for future advancement. Those that did not have this qualification were required to attend the Company's night school to pass an internal examination. Those not qualified by the age of 16 had their services terminated. Messengers were given uniforms twice annually. One winter uniform and one summer. Winter uniforms were long trousers and jackets, navy blue with red piping. Buttons were silver with silver numbers on the collars and Beam Wireless on a red patch for each upper sleeve. They were also issued with a peaked cap. Bike boys had gaiters in the early days, but later these were changed to breeches and long

leggings. Summer uniforms were khaki shirts, khaki jackets, blue shorts, long blue socks and boots with a pith type helmet. Similar buttons and numbers as winter uniform. The messenger was required to wash his shirt and trousers, but jackets were sent to a laundry by the Company. Walking boys delivered to an area bounded by the Quay, Elizabeth Street, Park Street and Sussex Street. Bike boys covered an area bounded by Kings Cross, Surry Hills, Broadway and Pymont. To be selected as a bike boy was considered a promotion, as he not only received his salary but was paid 7/6d per week for the hire of the bike. During the depression years this was a fair sum as they could purchase a bike at 5/- per week on terms, and had the bike to ride to work and save fares. Also riding a bike was a lot better than walking.

Promotion from the Messenger service was either to the operating room or to the general office and accounts branch. If one went to the operating room, he was expected to enrol at the Company's Marconi School of Wireless and obtain his Certificate of Proficiency for a First Class Marine Operator. This course consisted of radio and electrical theory, morse code at 28 words per minute and typing. Morse code and typing skills he was expected to obtain in the operating room by practice during any lull in traffic. The Marconi School gave the student a concession on the fee cost. The course was initially by correspondence but about half way through the correspondence section, he was required to attend the school for practical technical training. Being on shift work, one could not attend all technical lessons, found it hard to change shifts, and therefore got behind in the course. When this happened, and it was inevitable, one only received 2/6d of his next annual increment of 7/6d. Result was that many were receiving sums of 2 pounds 50 shillings per week instead of 4 pounds 25 shillings per week. This was typical of the penny pinching attitude of management.

In later years, after OTC took over, they abandoned the requirement for the Radio Officers Certificate and opened their own Telegraphist School.

SATELLITE SNIPPETS

(Dennis Grant)

Saturation levels.

Since Moree was the one and only Standard A antenna built by Collins Radio, the gain at both 4 Ghz and 6 Ghz had to be accurately measured to pass qualification. To do this, Standard gain horns were fixed to the side of the main reflector and signal switched between them for comparison. Naturally the TX power had to be dropped a lot when switched to the main antenna. After a whole night of testing and getting it right, the HPA engineer from Collins miscued and switched some 3kw of unmodulated carrier into the main antenna and in his words "Suddenly there was only one carrier coming back from the satellite. (Intelsat 2) Mine!" He was severely reprimanded for this as he had saturated the satellite and suppressed all the other carriers including the beacons.

Carnarvon's "Me too"

Some years later Carnarvon had a problem with their uplink power control. Not sure of the issue, but the effect was dramatic. Instead of stabilizing the power level within very close limits (+/- 0.1 dB) the Auto Power Control drove the HPA to max power, which was an impressive 13 Kw. Although the satellite (Intelsat III) had many more transponders, the receivers were wideband and so the saturated receiver took down a lot of other carriers. Intelsat through the Jamesburg California earth station contacted us at Moree after about the 10th such incident, as for some reason they could not contact Carnarvon direct and for what I think was the only time it occurred they "Instructed" us to "Instruct" Carnarvon to shut down their transmitters until they got the problem resolved.

VALE

WILF O'DONNELL – (16 January 1925 to 12 July 2006)

On 16 January 1925, Wilfred Francis O'Donnell was born into a world quite different to our present times. His life and values were to be shaped by the major historical events of the 20th century. He was

one of 4 children. His father was a dairy farmer on the north coast, who supplemented his income by operating a small trucking business. In the early 1930's the great depression struck. Although Wilf was a schoolboy, he helped his father as much as he could, eventually leaving school to try and keep the family business and farm operating. Unfortunately everything was lost, and the family sent Wilf to Sydney to try and give him a chance at a better life. Wartime Sydney must have been a very confronting place for an 17 year old boy from the country, however he quickly found a job as a messenger boy with AWA. His intention was to enlist when he turned 18.

A few weeks after his 18th birthday, Wilf discovered that his application to join the Air Force had been rejected, as he was working in a protected industry (AWA at that time was responsible for all international communication). Much to the upset of his family, he solved this problem by resigning his job and applying again. This time he was accepted. After basic training, he found himself, at the age of 19, stationed in England as part of an RAAF bomber crew, where life expectancy was measured in months. His war diaries contain an amazing account of his life at this time. He was in two plane crashes, bailed out once over England and flew many bombing missions. The diaries and letters to his family also show a loving son, with compassion for his fellow airmen who failed to return, and also compassion for innocent German civilians killed in bombing raids. After victory in Europe, he was to be sent to fight the Japanese in the Pacific, but fortunately the War ended and he was returned home.

Wilf had developed an interest in radio communication and studied at the Marconi School of wireless, obtaining a radio operator's certificate. He was able to persuade AWA to take him back and he worked there until its functions were nationalised by the creation of the Overseas Telecommunications Commission. Wilf married Isa on 15 October 1949 and they had two children, Wendy and Paul. His experience of seeing his father lose everything in the depression had a major

impact on his approach to his family. He and Isa worked and saved hard, the mortgage was paid off and the children wanted for nothing. His capacity for hard work was recognised and he was steadily promoted, retiring as a Superintendent on 14 July 1986.

Wilf thereafter entered the third stage of his life where he was able to enjoy the results of his success. A holiday home was built on the South Coast and Wilf pursued his interest in fishing and bowls. He softened considerably and had great pleasure with the arrival of each grandchild. Unfortunately Wilf's war disabilities were beginning to catch up with him. Over the last two years before his death, he suffered a diminishing loss of lung capacity. Each breath was a struggle, however he suffered without complaint and was nursed by Isa until his death on 12 July 2006. He will always be remembered as a loving husband, father, grandfather and friend.

Vale, Wilfred Francis O'Donnell, your work on this earth is complete, rest in peace.

Robert James Larkins

(6 March 1926 to 11 August 2006 in East Bentleigh, Vic.)

Bob joined AWA in 1941 in the Messenger Service then later worked in the Technical Workshop under Bert Lake. He left and joined the RAAF during the war. After the end of the war he joined the Victoria Police Force where he enjoyed a successful career until his retirement. His funeral was on 18/8/2006.

THE LAST WORD

I hope you enjoyed this issue which has a blend of technical, operating and commercial stories. I am hoping to get more of these for future issues. Even the admin and publicity guys must have stories, some of which could now be told. .

I hope you have enjoyed Denis Grant's "Satellite Snippets" which have been dotted through many of our recent newsletters. I have nearly run out. Surely others have similar short stories to tell!

Let's have them!