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# *The* **BROADCASTER**



Newsletter of the Broadcasting Directorate

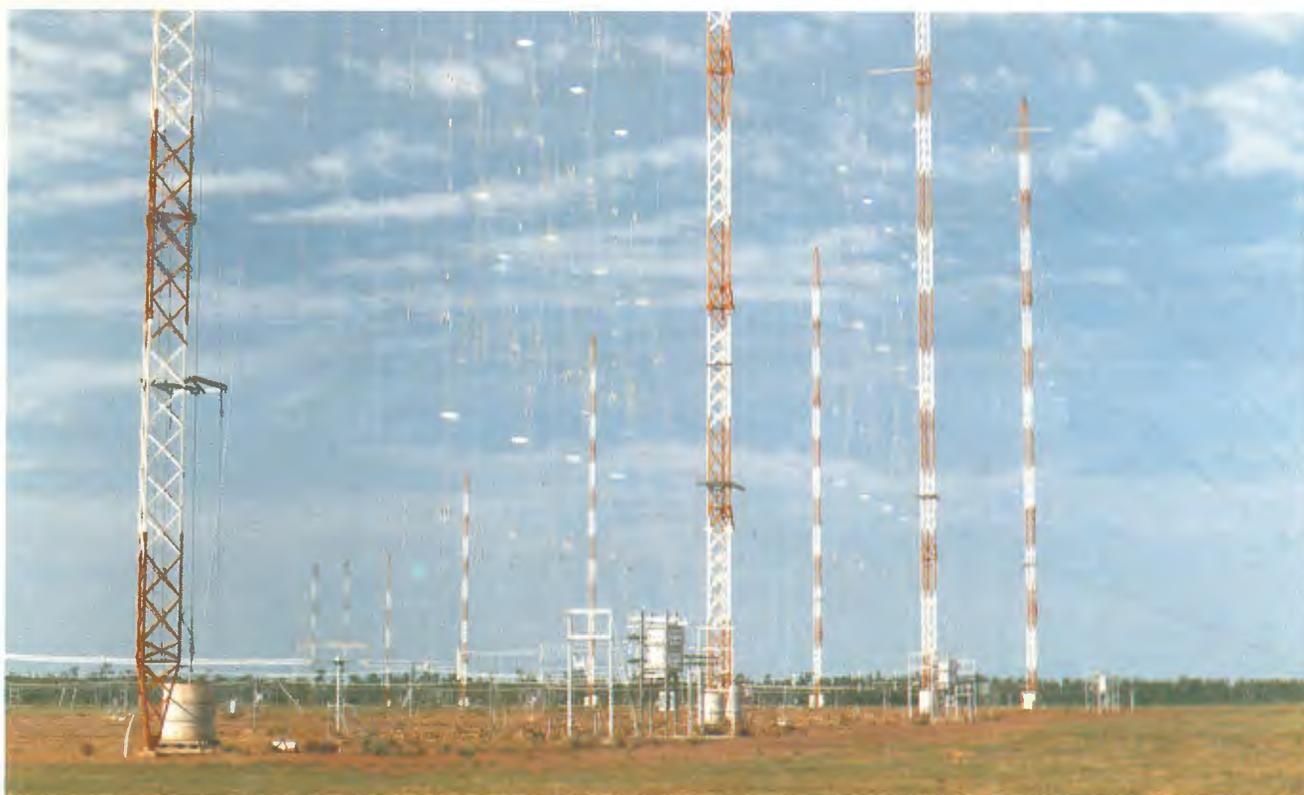
No. 1.

March 1985

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*CYCLONE TRACY — DECEMBER 1974*



*10 YEARS LATER — DECEMBER 1984*

## The Broadcaster

The Broadcaster is the in-house Newsletter of the Broadcasting Directorate and is published three times a year to inform and recognise the people who make up this organisation.

Articles appearing in The Broadcaster do not necessarily reflect the views of the management of Telecom Australia.

Written and photographic contributions are welcome. All material should bear the contributor's name and location and be directed to:

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## Editorial

This is the first issue of The Broadcaster and we hope you like the contents and format.

Launching the first issue has not been an easy task. The major problem has been to decide which contributions to include and which to carry over to subsequent issues.

We have started off in a modest way with only 12 pages but should there be sufficient interest and demand, content and coverage will be increased.

Subject to the availability of suitable contributions future articles will include staff hobbies, holidays, a broadcasting crossword, humorous anecdotes and others.

Our aim is to ensure that you find The Broadcaster interesting and informative and we welcome any comment from staff on its acceptance and means of improving its effectiveness.

JACK ROSS  
*Editor*

*Contributors this Issue:*

Leon Sebire  
Les Chidgey  
Mike Dallimore  
Jack Ross  
Ray Weeks  
Chris Dobson  
Doug Sanderson  
Graham Shaw

*Front cover:* Radio Australia, Darwin.

*Cartoon supplied by courtesy of The Northern Territory News*





## From the Director's Desk

To this, the inaugural issue of "The Broadcaster", I welcome our readers and particularly those who make up the recently created Broadcasting Directorate. It is my hope that "The Broadcaster" will become a forum by means of which we will learn to better know one another. Hopefully, our Newsletter will find interest with our immediate families and friends who, no doubt, continue to wonder what it is we do and how we fit into this mysterious occupation. Our Editor, Jack Ross, is well known to many of you as an author of considerable literary skill. I thank Jack for "volunteering" to take on the task and I wish him success in his efforts.

At the time of writing I have recently returned from visits to Tokyo and Hong Kong where I had been asked to participate in A.B.C. delegations to the 21st Asia Pacific Broadcasting Union and 15th Commonwealth Broadcasting Association conferences respectively. These conferences were attended by representatives of National broadcasting organisations in a large number of countries with a wide range of broadcasting systems. As at previous conferences technical papers were presented on a range of interesting broadcasting topics. Australia presented fifteen papers in all including a number from the Telecom Broadcasting Directorate. From such involvement it is inevitable that one will draw comparisons of expertise and efficiency of the various world broadcasters. I believe the depth of knowledge displayed by the small Australian delegations and the spontaneous manner in which many countries sought advice of Australian experience and practices is a strong indicator that we have a broadcasting system in this country which is the envy of many.

Once again exposure to the international fraternity of National broadcasters leads me to the firm conclusion that despite our tendency to be self-critical, our small staff numbers and limited budgets, we have demonstrated in Telecom Broadcasting abilities and achievements of which we can be proud. I have no doubts that as we proceed with our aims for further unification of our activities within the Directorate we can only increase our reputation and standing in world broadcasting circles.

## ABDQ3 Mt Mowbullian

Television station ABDQ3 is built high up in the Bunya Mountains, halfway between Dalby and Kingaroy and 80 km from Toowoomba. The official title is "Darling Downs", but it is known in the Broadcasting Branch as Mowbullian.

Mowbullian, or "bald head" is a grassy dome just along the road from the station on the edge of the Bunya Mountain National Park.

The Park is famous for its bunya pine trees, *Araucaria bidwillii*, much sought after by the early settlers for its excellent softwood timber. The aborigines prized the bunya for its edible seeds contained in the huge pineapple sized cones, and ate them raw or roasted. Some people feel that boiling in salted water brings out the flavour best with the subtle aroma of lofty pinewoods part hidden in drifting cloud.

The aborigines came from miles around in bunya season, and, impatient for the feast, climbed the tall straight trunked pines with foot holes cut in the thick bark. The scars of these cuts are still visible 80 years after the last of the big festivals. Hundreds of latter day Aussies scour the area every year for the great cones.

ABDQ3 is a conventional high power relay TV station, opened in December 1963. It now houses a stereo FM transmitter and being on the Dalby-Kingaroy route, is host to some Telecom broadband trunk equipment as well.

Mowbullian is a fully attended station with the staff living in Dalby and motoring to work. Shifts sleep overnight in comfortable quarters which would make a fine holiday flat should the station become unattended in future. The climate is cool in summer and bracing in winter. A little snow has been recorded on occasions as would be expected in South Queensland at 1000 metres elevation. Some delightful bushwalking in the Park would be available from this base. Ah, dreams, dreams!

DOUG SANDERSON

## 4RK Gracemere

4RK Gracemere — Queensland's senior regional transmitting station — was commissioned in 1931, one year after the formation of the National Broadcasting Service. It was a 2 kW station, one of the first to be crystal controlled and derived its DC voltages from rotary generators.

STC installed the equipment which included a T aerial with lattice steel tower supports. This aerial is now the station standby and is in use whenever the main top loaded sectionalized half wave vertical is out for maintenance.

The original transmitter operated for many years until replaced by an STC 4SU-11A 10 kW transmitter.

Apart from internal structural changes to accommodate new equipment, the building is as originally erected, largely timber and in the style of a low set Queensland country house. A fine avenue of pine trees leads down to the "foreman mechanic's" residence at the front gate. The station is fully staffed.

Officially "4RK Rockhampton", the station is 10 km from the city at Gracemere, once a village with railway station, school, store and pub, but now fast becoming a fashionable suburb of Rockhampton.

Gracemere was the centre of the Archer Bros. cattle station, established in 1855 before Rockhampton began. The old homestead beside Gracemere lagoon is still in use and can be seen from 4RK.

The ABC maintains a studio in Rockhampton, and originates local program for transmission over 4RK, 4QD Emerald and 4QL Longreach.

4RK's jubilee was celebrated in 1981 with a week of special broadcasts from the local studio and cakes and ale for visitors. At the transmitter a barbecue was held with a birthday cake featuring the T aerial and the dates. ABC and Telecom staff with families and friends attended, and several retired officers, some coming from Brisbane to join the crowd. It was a nostalgic and memorable occasion.

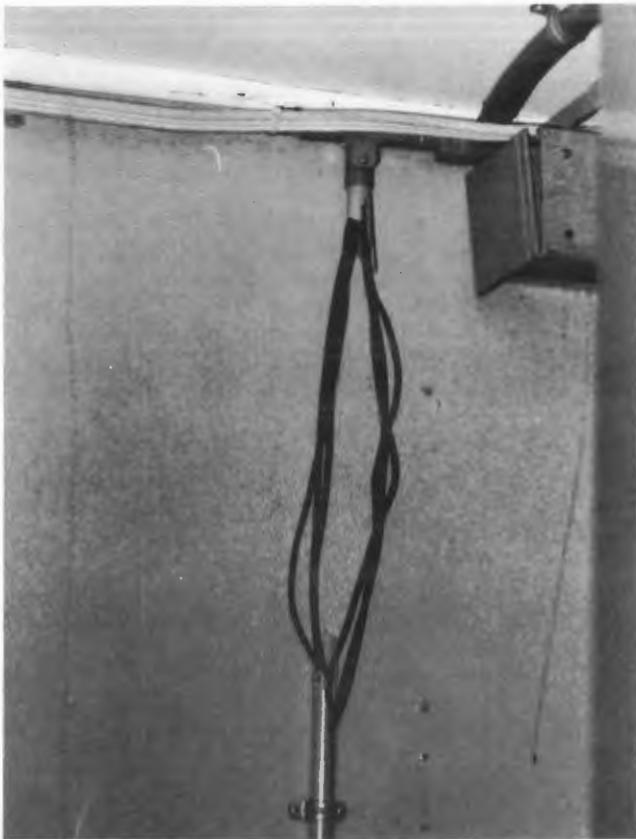
DOUG SANDERSON

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## News Round Up

### UNUSUAL EFFECT OF LIGHTNING STRIKE

We usually don't associate Tasmania with severe lightning storms. However one which occurred just before last Christmas not only caused considerable damage to the Strathgordon TV translator but it resulted in unusual damage to the 240 Volt power wiring. As shown in the photograph the conductors and their insulation were undamaged but the PVC conduit apparently exploded and pieces scattered throughout the room. Similar effect occurred further along the conduit run. The lightning left its mark in other areas of the station where it damaged the transmit antenna, the driver and power amplifier transistors, the input bandpass filter and the surge reduction filter which caught fire.



### GUYS TO BE REPLACED AT 6WF/6WN

6WF/WN transmit the Perth metropolitan services. The dual frequency main mast was constructed some 30 years ago, and was designed for operation with a transmitter power of 10 kW.

With 6WF/WN now operating into the mast at 55 kW and 10 kW respectively, problems have been encountered with crackling of insulators due to high electrical stressing.

As a result during periods of moist weather, or when the insulators have been coated by smoke from nearby scrub fires the mast impedance becomes unstable and difficulties arise in maintaining transmitter operation.

Another problem with the existing design is that the spacing of the insulator cage rods is such that arcing to the central cable has occurred, damaging the main guy cable by melting strands in the wire rope.

Maintenance on the guying system has led to down time amounting to several weeks every few years and is always an expensive operation.

In 1976 and again in 1981 the guys were overhauled in a major operation. All insulators and some guy sections were replaced. During both operations it was found that many insulators disintegrated after compression was removed from the insulator frames and that damage due to arcing, was significant.

After the 1981 exercise it was clear that a more permanent solution was required.

All guys are scheduled for replacement during Feb/Mar 1985 with the work expected to take five weeks to complete.

The design and specification of the new guying system was a co-operative effort between the WA State Broadcasting Branch and HQ Structures Branch.

In April of 1984 a contract was awarded to Johns Perry Johns and Waygood, Structural Division, based in Victoria, for supply of the complete guying system with tensioning equipment. The company has in turn subcontracted to Nobles for supply of 1.5 km of wire rope, and to Nilsen Porcelains Pty Ltd for the supply of 50 ceramic insulators.

WA Broadcast Radio Lines staff are to carry out all work associated with the guy replacement. A team of 13 men will be required.

The Project Engineer is Alan McCarthy who has been involved in the project from the contract specification stage. Alan has worked closely with Ken Ferguson, now retired, and Lindsay Donahoo of Headquarters Structures Branch. The WA Broadcasting Branch Drafting staff, Ian Gibbs and Kevin White will act as surveyors in order to keep a close watch on the mast deviation throughout the entire exercise.

MIKE DALLIMORE

### CHRISTMAS CHEERS

The NSW Broadcasting Branch office based staff held its first Christmas Social on 21st December with staff making the best use of flexitime and rostered day off conditions to extend the party over the full afternoon.

Although a "formal" Social Club has not yet been established, an enthusiastic committee of cell leaders under the chairmanship of Alex Hanlon planned and organised the function. The hardest task — the procurement and preparation of food and refreshments — fell to the Broadcasting Construction group who did a flawless job. John Larsen donated additional items which were very much appreciated by all present.

State Broadcasting Manager Vince Thompson in a short speech praised the organisers for a job well done. A vote of thanks was carried by acclamation.

### EXCITING NEW WORKS BEING PLANNED

How quickly are we in Telecom Broadcasting expanding the network? Typically, about twenty identifiable new stations go to air each year. Our record year occurred in 1982/83 when a total of thirty-two new services were established. In addition, of course, each year sees a significant number of equipment replacements and upgrading of existing services. In 1984/85 we will spend \$8.7 million on new or upgraded services for the Australian Broadcasting Corporation and almost \$4.5 million in new transmitters for the Special Broadcasting Service.

Readers will be interested to know how many new or upgraded services are currently at some stage of engineering planning and design within the Directorate.

There are:

- 7 new major UHF TV services (SBS)
- 4 major VHF TV transmitter replacements
- 26 new low power TV services
- 18 new radio services (MF/HF/FM)
- 158 satellite (Aussat) receiver installations.

These are, however, only the projects on which we have approval to commit funds. The current Capital Works Plan from the Department of Communications lists another 52 new services by name plus 40 undefined under the RUCS scheme on which work should commence over the next three years.

These do not include two major new projects which, whilst they have been the subject of Government announcements, are still in the early planning stages. These are the second regional radio network for the ABC and the clearance of television services from Band II. In combination, these will result in significant internal and external plant changes at almost every major TV station in the country.

### 3AB ALBURY/WODONGA ON AIR

The first national MF station to be built in Victoria for eight years was brought into service on 1st November, 1984. With the call sign 3AB and a power of 250 Watts it serves the thriving cities of Albury in NSW and Wodonga in Victoria.

The station is located on the flood plain of the River Murray and the prefabricated transmitter building has been mounted on elevated piers above the 100-year flood level.

Program comes largely from the local ABC studio, which also feeds the 10 kW station 2CO, less than 50 km away at Corowa in NSW.

As the transmitter is a solid state 1 kW 'cut back' a high degree of reliability is expected. All maintenance will be carried out by staff from the Mt Baranduda television station.

One new idea on trial at 3AB for the first time in Victoria is transmitter shut-down control by detection of the continuous 400 Hz tone placed on all lines overnight by the ABC. We are all wondering why we didn't think of it years ago.

#### NSW BROADCASTING OPERATIONS CONFERENCE

The Inaugural Conference of the NSW Broadcasting Operations Section was held at Terrigal on the Central Coast of NSW from 28th to 30th November, 1984. The conference was chaired by the Broadcasting Operations Manager, Bob Barrett, who welcomed guests and delegates. The guests included Max Chadwick, Assistant Director Broadcasting, Vince Thompson, State Broadcasting Manager, Mike Stevens, Acting Broadcasting Engineering Manager and Keith Nisbet, Broadcasting Administration Manager.

Delegates from all the Operations groups were represented including those from the 20 staffed stations.

Guest speakers spoke on a variety of subjects such as the Buildings and the R&M programme (Steve Hoile Buildings Officer), Test Instrument Provisioning (Vic Audet E3 Engineering), Aussat (Mike Stevens A/g BEM).

Max Chadwick provided an extremely informative talk on the history and future of Broadcasting in Australia with an emphasis on the need to provide an effective and efficient unit for the Government Broadcasting Service. He indicated that our paramount objective is that we must recognise that the Broadcasting Directorate does not exist for our whims — but as a service to the whole community, provided on the basis of serving the greatest broadcasting needs of the country.

General discussions embraced a diverse number of subjects which at times caused some quite animated discussion.

All present agreed that one of the most important outcomes of this gathering was the reforming of the Broadcasting family in NSW. If the attitude of the conference was any indication, the future of Broadcasting in NSW is a bright one.

The photograph was taken just prior to the bus departure at the conclusion of the conference and includes left to right: Horst Kruger OIC ABSN-8 Bega/Cooma, Lloyd Bruce OIC Broadcast Service Centre, George Marshall OIC 2NR Lawrence, Bryan Eagle, Audits & Advisory, Russ Moscott OIC ABCN-1 Orange, Vince Thompson State Broadcasting Manager, Gary Singleton A/g OIC 2FC/BL Liverpool, Jim Moore OIC ABDN-2 Grafton/Kempsey, Errol Hill OIC ABQN-5A Wollongong/Illawarra, Dave Stevens OIC ABGN-7 Murrumbidgee, Keith Nisbet Administration Manager, Ken Moore OIC ABUN-7 Upper Namoi, Ian Inman OIC 2NU Manilla, Dick Winston OIC Construction, Bob Barrett

Broadcasting Operations Manager, Keith Dare OIC 2NA/NC Newcastle, Ian Dalrymple OIC ABTN-1 Manning River, Col Want A/g OIC ABN-2 Gore Hill, Bill Roy OIC ABC-3 Black Mountain, Brian Robb OIC ABRN-6 Richmond/Tweed, Fred Seligmann Audits & Advisory, Col Steel A/g OIC ABHN-5A Newcastle, Steve Hoile Buildings Officer, Ron Johnson PTO Stations, Mike Stevens A/g BEM, Ron Lewis OIC 2KP Kempsey, Vic Audet E3 Engineering & Construction, Alan Jones OIC 2CO Corowa, Bus Driver.

#### SA/NT BROADCASTING OPERATIONS CONFERENCE

Senior staff of the SA/NT Broadcasting Operations Section met for a conference in Adelaide during the latter part of 1984. The aims of the conference were:

- to co-ordinate Broadcasting Branch operational activities.
- to exchange ideas and to formulate preferred operation and maintenance methods and practices.
- to identify operational problem areas and to find solutions.
- to consider existing instructions and guidelines.

All concerned voted it a very successful conference. Lew Grubb B.O.M. who convened the meeting said, "The participants were a most enthusiastic group who took up the challenges of problems facing the Branch with gusto.

The District's OIC's all acknowledged how much they had benefited."



*Back Row: Lew Grubb B.O.M.; Norm Scott OIC A & A, Adelaide Office; Harold Stanford OIC ABS-2, Mt. Lofty; Wes Graham OIC BSC, St. Marys; Brian Beyer OIC ABNS-1, The Bluff; Roger Hedley OIC ABR-3, Loxton.*

*Front Row: David Carthew OIC 5AN/CL, Pimpala; Iain Fraser OIC Eyre Peninsula, Port Lincoln; Barrie Morton OIC TV & MF NT, Darwin; Rod Jolly Audit & Advisory, Adelaide Office; Ron Mitchell OIC ABGS-1, Mt. Burr.*





Minister for Communications  
the Hon. M.J. Duffy M.P.  
opening the station.



Ross Kearney STO3, Officer-in-Charge.

## Radio Australia Cox Peninsula

### BACK ON AIR

Following Parliamentary approval in 1964, site works for the establishment of what was called a Radio Australia Booster Station commenced on Cox Peninsula near Darwin in 1965. First programs were put to air during December 1969, the 30th anniversary of Radio Australia. The cost of the station was \$9 million and included a receiving station for programs picked up off air from Shepparton transmissions. Staff lived in Darwin and were transported across the Darwin Harbour by launches, the "Charles Todd" and the "Skywave" operated by marine staff attached to the station.

On 24 December, 1974, Cyclone Tracy almost completely destroyed the five log periodic antennas and transmission lines. Damage to buildings was not extensive, but ingress of water caused considerable damage to the three 250 kW transmitters and associated equipment.

The jetty on Cox Peninsula was badly damaged, and the two submarine power lines later failed due to damage thought to have been caused by dragging ships' anchors during the cyclone. Both launches were wrecked and sank during the cyclone. One of the launch staff lost his life when he went down with the "Charles Todd".

In 1980 Parliament approved the recommendations of the Standing Committee on Public Works that rehabilitation work should proceed at an estimated cost of \$10 million. Major works included repairs to access jetty and provision of a new wharf head, repair and upgrading of buildings and services, repairs to overhead power lines, substations and switchyards, repairs to existing submarine cable and installation of a new cable, provision of transmitting curtain antennas, transmission lines and switching facilities and replacement of the computer control facility.

The station resumed transmissions on 2 September 1984 and was officially opened by the Minister for Communications, the Hon. M.J. Duffy M.P. on 30 October 1984.

GRAHAM SHAW



After the storm.



Control room damaged by water in 1974.



One of the masts on the ground following the cyclone damage.



Staff disembarking at the jetty.



Bob Spiller checking program input equipment.



Ian Smith (left) and Mike Jury operating station control facilities.



Veronica Pattison CA2 busy on the telex machine.



Launch used for staff transport.



Part of the new antenna system.

## Staff News

### QUEENSLAND

Jim South, Queensland State Broadcasting Manager has been on sick leave since August 16th last year. Because of his ill health Jim is to retire in July 1985.

Jim's career spanned some 42 years after commencing in the then PMG Department as a junior mechanic on 18.12.1942. He spent 11 years in the technical grades and was promoted as Engineer Class 1 in 1954. Jim's engineering career was largely spent in the State Planning Branch (20 years) where his most notable achievement probably was the production of the 1974-1984 Queensland State Telecommunication Development Plan, almost single handed.

Jim transferred to Radio Section shortly after Telecom Australia was established in 1975. He presided over the almost explosive growth in both radiocommunications and broadcasting with the dedication and enthusiasm we have come to expect from him. He was a prolific writer and produced some notable reports covering many diverse subjects which ranged from digital radio concentrators to the remote area satellite television program. After the establishment of the Directorate there was probably no one more dedicated than Jim to making the organisation a success. He put in a tremendous amount of effort in the State context into giving broadcasting a good image and making sure that it was a good place to work. He believed firmly in the broadcasting district concept which he considered gives staff a satisfying job and better career prospects. As a result, he became deeply involved in the recently released broadcast grading scheme and it must be gratifying to him to know that it is well on the way to being implemented.

Despite Jim's great dedication to work he also found time to be a family man. He and his wife Val have raised twelve fine Australians. In his spare time (most people wouldn't have any after that), he had a passion for home movies and motor cars.

With his retirement due to ill health Jim will be missed by Telecom and broadcasting in particular, both for his valuable contributions in the work sense and as a friend.

Col Hattersley OIC of the Metropolitan Radio Centre Bald Hills retired last August after 14 years service at the station. Col came to Bald Hills from Canberra but has retired to his Strathpine home and will spend more time doing his favourite thing — playing bowls.

Others who retired last year included Eric Gough, Rockhampton, Geoff Beetham, Townsville and Gerry Elliott, Mackay. Although they occupied Radiocom OIC positions at retirement they had each spent many years at sound broadcasting and television stations.

Greg Beer came from NSW to join the E and C group as STO2 Buildings. Word has it that he has taken up residence at Bethania well south of Brisbane either to be well away from the office noise or to make a quick dash across the border.

New STO1 Electrical, Trevor Barlow saw the light and transferred from local Buildings Branch. Trevor is a keen bushwalker and should find plenty of practice in looking after stations scattered between Southport and Thursday Island.

Chris Russell STO2 Broadcasting Operations and his wife took furlough recently and visited friends and relatives in England, Italy and Denmark. They travelled in style in a brand new BMW which they brought back as a souvenir.

### WESTERN AUSTRALIA

Ron Cherrington of the W.A. Broadcasting Installation Depot retired on the 31st January 1985, after 15 years service.

Following a varied career in private enterprise which included working in a paint and panel shop, contract work for an electrical firm, foreman for a construction and engineering firm and delivering Jaguar cars to their new owners Ron joined the P.M.G. Department in 1969.

Ron started work in the TV. and Broadcasting Installation Depot where his first boss was Supervising Technician Bob Howie, and he remained in the area until his retirement.

Because of his wide experience in private enterprise Ron tackled tasks that are not normally handled competently by many other technicians for example, fitting and turning, welding, building and

installing transmitter air ducting, installing and commissioning diesel generator sets and minor structural alterations to buildings to accommodate new plant.

During his retirement Ron will be pursuing his hobbies which include providing mechanical backup for a motorcross sidecar outfit, restoring a 1927 Austin 7 car and rallying in his Vintage Zenith-JAP motor cycle and sidecar. He also has three old Norton motor cycles in various states of restoration.

Ron will shortly be moving to live in Mandurah where he is building a retirement house.

### VICTORIA

A warm welcome is extended to all new staff who have commenced with the Victorian Branch, especially to the people from interstate who have obtained promotion to three key positions. Welcome John Lush — State Broadcasting Manager (ex Darwin), Roger Berkin — STO2 Buildings (ex Townsville) and Dave McCormack — Sen. Line Officer Gr 1 (ex Darwin).

Welcome also to Michael Newman, Helene Plessias, Debbie Wade and Jennifer Smith of the Management Services Section and Norm Clark, Broadcasting Operations Section, who have transferred to the Branch from local Operations Districts, and new employees Lidia Aiello and Sue McMillan, Management Services Section.

Several staff have recently transferred to Radio Australia, Cox Peninsula and it is hoped that they are enjoying the change in climate. Goodbye and good luck Ray Henley (ex Mt Dandenong TV), Alan Holland, Dennis Joel, Veronica Pattison, Terry Said (ex Radio Australia, Shepparton) and Ian Smith (ex Yatpool TV).

### SOUTH AUSTRALIA AND NORTHERN TERRITORY

Eric Barnden retired as Shift Leader, ABS2 Mt Lofty, after 27 years with Telecom and the Postmaster General's Department. He attended a course at the Royal Melbourne Institute of Technology on television in 1959 and became a member of the installation staff which installed ABS2, the first National television station in South Australia. Eric was one of the six man shift team appointed to operate the station and with the exception of short periods of relief at Mt Burr, The Bluff and Loxton, he remained at ABS2 until his retirement on 14th January, 1985.

Eric accompanied by his wife Betty, was farewelled at a small function at the station.

The re-commissioning of the Radio Australia Cox Peninsula station saw an influx of new staff in Darwin. These included Ross Kearney OIC from Western Australia; Terry Said, Allan Holland, Denis Joel, Ian Smith, Ray Henley, Martin Greasley and Veronica Pattison from Victoria; Ted Hurn, Vern Taylor, Glen Miller and Darby Hill from Adelaide; Les Denison from Department of Transport W.A. and Chris Jarvis and Bob Spiller from Darwin. Other new faces in the Northern Territory Section include Len Som-de-Cerff, Barry Morton, Terry Wooster, Dave Edwards and Murray Fopp.

Graham Ward transferred from Central Office to take up the role of Technical Aide in the Broadcasting Operations Section.



Eric (centre) with Betty and Harold Stanford OIC ABS2.

### NEW SOUTH WALES

The New South Wales Branch extends a warm welcome to all those who have recently taken up appointments. These include Kenneth Hayward, Michael Gardner, Malcolm Alexander, Kevin McFadden, Neil Gray, Glen Perry, Alan Scott, Nikola Tanceuski, Thomas Meale, William Hammill, Walter Bell, Anthony Bender and Grant Moehead.

Recent retirements from the Branch include Norman O'Connor STO1, Ron Eldridge STO1 and Noel Southwell STO1.

## Profiles

Leon Sebire is the Director, Broadcasting and has headed Telecom's broadcasting activities since 1976. He began his working career in the radio manufacturing industry in 1947 at the same time embarking on courses of night-time study which led to formal qualifications in Engineering and Management. He also studied Accounting and Commercial Law in ensuing years. He joined the P.M.G.'s Department in 1956 and has, since that time, been actively engaged on all aspects of radiocommunications and broadcasting. Mr Sebire has been a long-term proponent for recognition of the broadcasting transmission function within Telecom and was the architect of the proposal which led to the eventual formation of the Broadcasting Directorate. His major spare time interests are in the maintenance and restoration of motor cars and home workshop activities.



Leon Sebire

Harold (Harry) De Souza, Manager Programming and Resources Central Office, was born in India and migrated to Australia in 1968. Before joining Telecom in 1978, he obtained a wealth of valuable experience in the ways of the Australian Public Service following work experience with the Taxation, Supply and Housing and Construction Departments.

Harry holds a Bachelor of Business Degree and is an Associate Member of the Australian Society of Accountants. His specialist skills are in Accounting, Administration and Systems, all of which find considerable application in his day-to-day involvement in the Directorate's financial and administration activities.

Harry is married with two children, enjoys watching television, reading and organising social functions.



Robin Blair

Harry De Souza



Robin Blair, Assistant Director of the Development Branch, joined Telecom as a Cadet Engineer in 1961. After finishing a Post-Graduate Degree, he worked in the then Television Division in Brisbane, but gave up the warm Queensland climate to join the PMG Research Laboratories Melbourne in 1969. The call of Broadcasting is strong, however, and he came back into the field in 1973, just in time to be immersed in the Colour Conversion Program. Since then he has graduated through most aspects of the art, up to managing our first involvement with satellites, prior to coming to his present position.

Robin's current favourite pastime is researching the history of scientific ideas. He is married with two young daughters.

Max Chadwick, Assistant Director Operations, commenced work in the Postmaster General's Department in South Australia in 1948 as Technician-in-Training. He subsequently accepted an offer of a cadetship in the Drafting Section and it was during work as a Draftsman that he became associated with broadcasting. He cut his teeth on the design of studio consoles and the construction of transmitting facilities at the Metropolitan Transmitting Centre 5CL/5AN and Television station ABS2 Mt Lofty.

Following successful graduation through the Trainee Engineer Scheme Max lobbied for appointment to the Radio Section and soon became involved in the construction of regional television stations. After a brief sojourn in Workshops, Buildings Engineering Services and Training Sections, he was brought back into broadcasting to assist with commissioning of the Radio Australia facilities at Cox Peninsula, later becoming Section Manager until the station was rendered inoperative in 1974.

Since moving to Central Office in 1976 Max has been principally involved in the development and oversighting of broadcasting operational policies and practices, and with the advent of the Directorate, became head of the Operations Branch.

Away from the office, Max can generally be found tinkering with miniature aircraft engines in his well equipped workshop, on the bowling green whenever Melbourne's weather permits or when absolutely necessary, tending the domestic garden.



Max Chadwick

## Achievers

### DAN THE MARATHON MAN

Dan Ringuet, Clerk Class 2/3, Management Services Section, Queensland, has no trouble filling in his spare time. He runs between 120 and 160 km a week preparing for road championships, marathons and cross country events.



Dan Ringuet

His impressive record includes:

- Represented NSW in the 1977, 78 and 81 Australian Cross Country championships.
- Represented NSW in the 1982 Australian 25 km Road championships.
- Represented Queensland in the 1983 (placed 5th) and 1984 (placed 2nd) Australian 25 km Road championships.
- Represented Queensland in the 1983 Australian Cross Country Title.
- Member of the Queensland team for the SGIO Games in 1983.
- Won the NSW 10,000 m Cross Country championship in 1977 (at the 5th fastest time over the 55 years the race had been run up to 1977).

He is regarded as being one of the best 5 distance runners in Queensland and in the best 10 over 25km in Australia.

Some other interesting facts are that Dan has a salt free diet; naturally he does not smoke and he enjoys a good wine and an occasional beer.

His ambitions are to be No. 1 in Queensland and to run for Australia and win a major international marathon. With these goals in mind he and his coach have developed a 5 year program and if confidence is any guide, Dan will succeed.

We wish him every success.

P.S. Sponsorship is always a problem for this type of sporting event and there may be an opportunity in the future for Broadcasting people to show their support for one of the team.

Dave Walker

## From the Back Room

Every organisation is highly dependent on a number of 'back room' people for its successful operation — key staff who are not always in the limelight but who perform vital tasks.

The Broadcasting Directorate is no exception and has a number of highly important sections and groups that fall into this category. Operational Services in Central Office is such a group — not always seen by the field staff but its efficient operation is vital to the smooth running of our international broadcasting obligations through the Radio Australia transmitting stations.

This article prepared by Chris Dobson outlines two areas of activity.

It is interesting to note that about 180 people at the studios and some 120 people in Telecom are involved in the daily running of Radio Australia. This year about \$9.6m will be spent by the ABC and about \$9.8m by Telecom on Radio Australia operations.

It is the responsibility of the Broadcasting Operational Services Section at Central Office to ensure that all this expense and effort results in audible signals for listeners in the target countries. So, as an introductory article for this news letter, I thought it might be useful to outline, briefly, the two main areas of activity. These are: frequency scheduling and monitoring.

### Frequency Scheduling

There are four seasonal periods for which Radio Australia schedules must be prepared. They correspond closely with the four seasons of the year during which the ionisation of the ionosphere, at a given time of day, is assumed to be constant.

Preparation of each schedule commences six months in advance, with final notification being given to the International Frequency Registration Board (IFRB) four months before the start date. All short-wave broadcasting authorities, who are members of the International Telecommunications Union (ITU), must notify the IFRB so that a list, showing intended usage of the HF spectrum, can be published in time to allow frequency co-ordination to be carried out between authorities. (Telecom acts as the authority on behalf of the Department of Communications in relation to RA scheduling).

Preparation of each schedule begins at a meeting with the ABC to determine what their program requirements are expected to be. (The basic priorities for RA are worked out by a government committee comprising representatives from the various interested bodies, including the Department of Foreign Affairs). Also the Ionospheric Prediction Service in Sydney is requested to provide a set of predictions for us so that we can select the optimum broadcasting band for each transmission. Next we allocate available resources to fit as closely as possible the outline of program times, optimum bands and priority worked out earlier.

When new frequencies must be found an initial selection is made based on the current band occupancy. Final selection, within a

particular band, is often made by a monitor in, or near, the target area. There is no substitute for having someone on the spot for this.

Once a schedule comes into operation, there remains the task of co-ordinating any changes brought about through equipment failures and to carefully monitor each transmission to ensure continuing audibility.

### Monitoring

By far the most difficult and time consuming of our work is the effective monitoring of our overseas broadcasts.

A major source of information is our paid monitors living in the target areas. We have about 40 monitors who send us weekly reception reports. Analysis of monitors reports is carried out with the help of a range of computer programs.

A friendly, informal contact is maintained with our monitors who receive regular payments for their efforts.

Monitors reception data is entered directly onto the computer each day.

A major problem is that whilst monitors will tell you whether a transmission is good or bad, it is often difficult, if not impossible for them to identify sources of interference, so that offending broadcasters can be contacted with a request to move. It is also very difficult to find monitors capable of finding clear, or quiet, channels when we are obliged to change frequency. What we do, when we can, is put a test transmission on a likely frequency and ask monitors for reports.

As well as receiving weekly reports from monitors, we have reciprocal monitoring arrangements with 23 overseas countries and receive regular reports from an additional 6. We also exchange bandscan information.

The staff of High Park receiving station Kilmore, Victoria, provide weekly, reciprocal reports and periodical bandscans to our overseas colleagues.

Altogether we receive a very large amount of information every day which we must try to digest if we are to keep ourselves apprised of the performance of Radio Australia, and developments in the short wave broadcasting environment.

Chris Dobson

### The Imposter

1928

Sir,

I pay a lot of money for my wireless licence and I expect quality and accuracy in the programs. Do you check the credentials of the speakers who talk on your station? That blithering idiot last Monday evening who spoke on 3LO about his trip to the South Seas has never been there. I have known him all his life — much to my sorrow — and the only boat trip he has ever made was up the Yarra River one Saturday night on a pleasure trip.

You should have checked the facts when he said he earned his living with a pen. He is not a writer at all. He is a pig farmer and the only pens he has are for the pigs.

Yours etc.

4RK Newsreader:

"The man was pissed off the end of the jetty. (Pause.) I think that should read: 'The man was pushed off the end of the jetty.'"

2BL commentator describing visit to bakery during Easter: "The cross hot bums, er — I mean hot cross buns were taken from the oven."

Announcer:

"The time at 3LO is bang on. Any minute, if you're lucky, you will hear the GPO Chimes."

3AR announcer reading a list of places of entertainment in Melbourne:

"If you have nothing on tonight, ladies, I suggest you go to the concert at the Williamstown Town Hall."

3LO racing commentator at Flemington at the end of a hot day and a few drinks:

"That last race was over nine furlongs - er - ah - well, you all know of course that's a mile."



"Where are you Radio Australia?"

## Let's Play it Safe

### COP THIS

A staff member was proceeding to work at one of the mountain-top stations in New South Wales when on the mountainous section of the road he collided with a downcoming vehicle which belonged to the local constabulary and was being driven by a member of that force.

Result — the staff member was charged with negligent driving.  
Reason — he was driving TOO slow at 20 kph!

### THE HUMAN ELEMENT IN SAFETY

When the early broadcast transmitters were designed and constructed not much attention was given to the safety of the operating staff. Transmitter and power board controls, like the transmitter, were basic and simplicity was the goal. Accidents happened from time to time and when they did occur, the blame was clearly put as either transmitter or control operator error.

With the introduction of higher powers and more complex mechanical and electronic equipment in the 1930's particularly with the water cooled transmitters and their associated power generating machines, the human task became more difficult and despite in built features, close supervision of staff and improved training, accidents still happened.

Modern technology has seen the introduction of sophisticated equipment and nowhere more so than in the sound broadcasting and television transmitter fields. The advances in recent years have been nothing short of spectacular. But what advances have there been in human beings who design, construct and operate the equipment. None, really. We may be better educated today with greater exposure to the need for safety in the work place but our mental and physical abilities are the same as those of the early broadcasters.

Although the judgment and decision making abilities of the human mind far outstrip the abilities of safety control features of any modern transmitter, we are susceptible to moods, fatigue, illness and injury to our person and ego and therefore we are the less predictable element in the operator/transmitter interface.

Whether an accident is the fault of the operator or a mechanical or electrical failure is immaterial because the transmitter was designed, constructed and serviced by a human being. Human error can also be present in areas such as supervision, executive policy and planning.

At the root of nearly every accident is a human factor cause, and control of these factors is the key to accident prevention. Even highly trained and experienced people make mistakes but these should not be synonymous with accidents.

Regardless of the importance or application of their tasks, all staff of the Directorate have an important role to play in accident prevention. For only by a diligent and conscientious approach to these tasks will the human factors cause in accidents be diminished.

Jack Ross



*What Price Safety With This 1930 Transmitter.*

### MUTTON GRASS CUTTERS SOLVE THE FIRE HAZARD PROBLEM

The sheep at Radio Australia, Shepparton are as much a part of the scenery as are the numerous high frequency aerials that are spread throughout the Station's 250 hectares. With the high voltage open wire transmission lines running through the paddocks the risk of "flashover" sparks starting a fire is always present.

The first sheep were purchased in the early 1950's and, by rotating the flocks, were an effective and economical way of reducing the extent of the grass growth and therefore the fire hazard.

The sheep are purchased and sold using the standard forms S400 — Material Requisition and S417 — Surplus Material Advice and it was recent practice to use the form E689 — Condemned Plant and Tools Advice to account for any dead or missing sheep while the form E208 — Transfer of Surplus or Recovered Material was used to account for any "natural increases". At one time, a dog maintenance allowance of £1 per week was paid when a sheep dog was in use on the Station.

In recent years, Jack Russell, Stan Green, Brian McKenzie and other Lines staff have cared for the mutton grass cutters by performing such tasks as droving, drenching and dipping as required. Although the involvement of the local Lines staff has been reduced, with much of the work being undertaken by the local Stock and Station Agent, several items on the tool kit register such as the crutching shears, the auto drench gun and the 12 gauge shotgun (for sheep protection) indicate that the sheep are not entirely maintenance free.

Depending on the seasonal growth of grass, up to 850 sheep are grazed on the property. Proceeds from the sale of the wool clip usually bring a sizeable return and it is only during times of severe drought, when additional feed has to be purchased, that running the sheep produces a loss.

Ray Weeks



*Part of the Flock of Mutton Grass Cutters.*



*Dipping Operations in Full Swing.*

### CARNARVON ANTENNA FAILURE

At about 11 o'clock during the night of 29 February last year some 20 tonnes of steel, insulators, copper, aluminium and fibreglass crashed to the ground when the main support rope broke on the No. 1 antenna at Radio Australia, Carnarvon.

Operators on duty at the time were unaware of the collapse. When the transmitter automatically shut down and staff attempted to put it back on air, a vivid pyrotechnics display could be seen through the transmitter hall window.

On inspection, staff found it hard to assess the real situation in the darkness. One of the huge two tonne spreader beams which should have been 95 metres in the air was on the ground 80 metres away from the tower base. Dipoles, feeders, strainers, wire ropes etc. were strewn over the antenna farm and draped over slew switches, phasing loops and transmission lines.

A morning inspection revealed that a winch cable had failed in service resulting in one end of the 110 metre by 90 metre array of screen, antenna and feeders falling to the ground.

Repair work was subsequently carried out by the local Broadcasting Branch Radio Lines staff.

Investigation into the failure mechanism found that the failure was the result of fatigue fracture of wires in the rope, in such numbers that eventually the rope failed under tensile stress. It is evident that under the mode of operation of the rope, over a moving pulley, where the rope is continually being flexed, wire rope has a limited life. Maintenance procedures have been implemented to ensure that different portions of rope are subjected to the flexing during the service life of the rope. This is achieved by "docking off" the end 7 metres of rope at about 2 yearly intervals.

Another important discovery was that the lubrication treatment in use for the ropes was not entirely effective in the moist marine air environment of Carnarvon. It was found that although the surface of the wire ropes was well protected by the grease applied, the inner strands were showing signs of corrosion and deterioration. This indicated the need for improved lubrication and corrosion protection for these vital ropes.

All associated with the restoration learnt a great deal from this failure and in the exercise to put the antenna back into service.

Les Chidgey



Ron Bennett Station OIC examining the wreckage.

2FC announcer at concert in the Parklands during the rain, in response to cheers from a group in the middle of the crowd: "Good afternoon, ladies and gentlemen, out there in the middle - er - middle."

Announcer on 6WF during church service broadcast: "The police are now coming up the aisle. Did I say police? I mean priests."

Lady giving cooking lessons on ABC Women's Session: "Soup made from pig's head is really delicious. No recipe is necessary. Just use your head."

From a play over 3LO: "Nobody could live there except the dead."

A man being interviewed on 3LO over bad play during a football match between Footscray and Richmond:

"Half the lies told about my filthy tackling are not true. I deny them categorically."

Announcer during ABC Women's Session: "Our guest speaker has something special to say to mothers, especially those with children."

4QG announcer commenting on what he had seen in the Brisbane Botanic Gardens: "He grabbed her in his arms, and they stuck together like maggots - er, maggots."