

# AUSTRALIA'S FIRST AUTOMATIC MOBILE TELEPHONE SYSTEM



Handpiece and cradle of Australia's first automatic mobile telephone set showing function and dial buttons and dialled numbers display. On the cradle is seen locking and control key and speaker volume control.

**Telecom's Automatic Mobile Telephone System** will give customers direct access to the national network while they are on the move. It has been described as the ultimate in car accessories.

A driver or passenger will be able to make or receive a call from office, home or another vehicle and STD and ISD calls will be just as easy as making them from an office or home phone.

The attractively designed mobile phones will be operating in Melbourne and Sydney in the latter half of 1981.

Here are some of their major features:

● **HANDS-FREE OPERATION** — you can establish a call and hold a conversation while the handset is still in its cradle, using the built-in loudspeaker facility.

● **VISUAL DISPLAY OF CALLED NUMBER** — shows the number dialled.

● **MEMORY** — up to 16 frequently called numbers may be stored for instant recall.

● **LAST NUMBER RECALL** — if the number you call is busy or doesn't answer, you

can try again without re-entering the number by simply pressing the appropriate key-button.

● **AUXILIARY CALL INDICATOR** — when you leave your vehicle, integrated automatic call indicator options may be in motion, to flash your headlamps or sound the horn, so you never miss a call.

● **LOCKING AND KEY CONTROL** — gives you complete management/control over your automatic mobile telephone allowing you to lock it completely to prevent unauthorised usage or set the control so that there is access to only specific services. For example access to STD, ISD, and even local calling, can be barred without restricting incoming calls.

ANOTHER VIEW  
OF HANDSET  
AND CRADLE



## Telecom

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THE SET AS SEEN IN USE





# TELECOM GAINS \$500,000 GRANT FOR SOLAR CELLS RESEARCH

Telecom Australia has been given a \$500,000 grant to establish a national test facility to assess the performance and reliability of photovoltaic power sources under various Australian environmental conditions.

The first stage of the work is to be concentrated on Japanese produced solar cells, in compliance with the formal agreement for co-operation on energy research and development between Australia and Japan.

The objectives of the program funded by the National Energy Research, Development and Demonstration Council (NERDDC) of the Department of National Development and Energy are:

- to demonstrate the practicability of solar cell arrays to provide power for various applications.
- to demonstrate the reliability of Japanese solar cell arrays in harsh Australian climates.
- to exchange information and transfer technology built up in Japan and Australia on the design and utilisation of solar cells. The project is to be organised by the

Research Laboratories with active co-operation of the Engineering Department and is to consist of laboratory and field installations to assess the performance of the cells as well as detailed laboratory studies of new (and failed) items of both present and future generation products.

Present planning is for the field installation to include some selected panels in the actual working network as with other "non active" trials. In all cases the cells will be monitored continuously to assess their performance.

The project is seen as beneficial for Telecom in giving it access to latest photovoltaic developments in Japan



Assistant Director Applied Sciences Branch Dick Slade, of Telecom Research Laboratories, who is presently studying the latest developments in photovoltaic technology throughout the world.

and qualifying our Research Department as the leading agency in Australia on evaluation of solar cells.

The program will be based principally on field exposure with a thorough back-up of laboratory testing under a variety of simulated and/or accelerated environmental conditions.

Field sites have been initially proposed to provide these conditions

- Hot-Dry (E.G. Central Australia)
- Hot Wet (Nth Queensland or Darwin)
- Hot-Cold (Canberra)
- Temperate-Wet (Tasmanian Highlands)
- Industrial polluted
- Marine
- Dust storms (far Western NSW)
- Control site which will be Telecom's Clayton Laboratories.

Laboratory tests are expected to fall into these four broad categories: Material Evaluation; Failure Analysis, Environmental Tests, Electrical Measurements.

## District allowance increases

"District Allowance rates within Telecom Australia will increase by 12% shortly", said Mr O'Sullivan, General Manager, Industrial Relations. He said the increases follow identical movements granted by the Public Service Board to staff under their control and will have effect from the same date, July 29, 1980.

The new rates will be:

	Single \$ p.a.	Married \$ p.a.
D.A. Grade 1	220	430
D.A. Grade 2	390	760
D.A. Grade 3	460	1210
D.A. Grade 4	970	1690
D.A. Grade 5	1300	2200
D.A. Grade 6	1690	2740

## COMMISSIONERS MEET QLD. LEADERS



The Australian Telecommunications Commission met in Brisbane recently — the second Brisbane meeting in five years. In a two-day visit, the Commissioners met with union officials and some leading businessmen. As a Queenslander, Commissioner Clive Quartermaine, Acting Deputy Chairman, was proud to welcome his fellow Commissioners to Brisbane. Our camera caught this group during pre-lunch drinks. They are (l to r) Commissioner Clive Quartermaine, Telecom State Manager (Mr Paul Dubois), Telecom Managing Director (Mr Jack Curtis) and prominent businessmen Sir Albert Sakzewski, Mr Hugh Cameron and Mr Bill Allen.



# STAFF SUGGESTIONS GROW: \$10,495 PAY-OUT — UP 150%

Telecom staff are keener than ever to help improve operating and administrative procedures and in the past year sent along 653 ideas to the Staff Suggestion Board, a 10 per cent increase on last year.

Of these, 644 were investigated by the Board and appropriate staff, 225 suggestions received awards and 83 were adopted.

During the year, the level of awards was increased and the total pay-out of \$10,495 represented an increase of more than 150% on the 1978-79 figure.

The inaugural suggestion of the year award was won by Mr Howard Rowe from the Victorian Telecom Workshops in South

Melbourne, for his 'Digiform' suggestion. The award consists of \$200 and an appropriate certificate.

These facts are from the Board's annual report presented to the August meeting of the Commission. In it, the Board Chairman, Mr J. P. Ahern, said that staff are now being better informed about the scheme through regular publicity and personal presentations of awards.

"The scheme is

serving to increase morale and understanding within the organisation by providing a means of two way communication between management and staff."

Mr Ahern acknowledged the assistance and efforts given by his colleagues on the Board, Mr L. F. Smith, Engineering Department, Mr A. Beckwith, Customer Services Department, until his retirement and Mr I. McDuffie who has

## New look Telecom

October issue will bring you a new look Telecom — upgraded paper stock with better photo reproduction, more color. Melbourne journalist Simon Townley, a man with much local and overseas writing experience has joined the band of professional journalists who cover Australia with brightly written stories of organisation and staff doings for Telecom.

Unfortunately, once again, news supply exceeds our space and several interesting items and pictures must be held over.

Our editorial policy: If you are interested enough to send items, we are interested enough to publish them. Nobody is ever ignored.

taken up the Customer Services role.

The Chairmen of the State Suggestions Committees have also made a significant contribution to the overall success of the scheme, particularly during the last 12 months.

The Staff Suggestions Board will

continue to encourage participation in the suggestions scheme by providing an efficient medium for staff to submit their ideas. Should you require any information about the scheme, please contact the Staff Suggestions Board on telephone, Melbourne (03) 630 7253.

## Telecom takes Show award

Free telephone calls at the Royal Adelaide Show made the Telecom stand one of the most popular with the crowds this year. In addition to showing past, present and future communications systems, Telecom offered free STD calls.

Telecom won the ANZ Bank Marketing award for the most outstanding government and semi-government display. There to receive the award was the A/g State Manager, Eugene McCann and Telecom's new Commissioner, Mrs Elizabeth Manley.

Mrs Manley said: "I think the display gets across the message that we are a people organisation for them to use. It really is an excellent display, justified by the number of people it has been attracting. There are

queues of people. People talking to people. There are tears and drama, excitement and happiness, laughter — the full emotional gambit."

"It is good just seeing the people around the stand. The children are loving it."

Mr McCann said what we are establishing is that the telephone and other telecommunications aids, are there to be a service, properly used, to save dollars in time, transport cost and they provide a 24 hour convenience.

## Videotex gets first Australian airing



Telecom's Manager, Special Communications Martin Turner demonstrates the call up of VIDEOTEX data to Media representatives.

Business people liked it . . . The general public was cautious — but the opinion was "good". And most said they would love to have it now in their home or business.

That was just some of the reaction following the Prestel International trial held in Melbourne and Sydney last month during the Information and Technology week.

The demonstration of Prestel was a joint venture between Telecom and Logica, the British Post Office representative in Australia for Prestel.

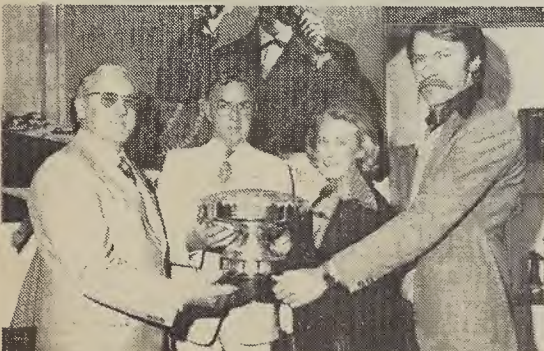
(Prestel is the trade name adopted by the BPO for Videotex which is a public information service. It uses a television set to display selected information from a large store held on computer and the vital link is the telephone network). Telecom's Manager, Special Communications, Martin Turner, was delighted with the trial. He said it gave many people their first opportunity to see and even operate the service.

"They all found it simple to operate and a number of media people who attended a briefing on it were in favor of the service," he said.

Martin said Telecom was discussing Videotex with the television industry and possible information providers.

He said the success of Videotex in Australia would depend on co-ordinating the activity of three groups — the television set manufacturers, the information providers and Telecom.

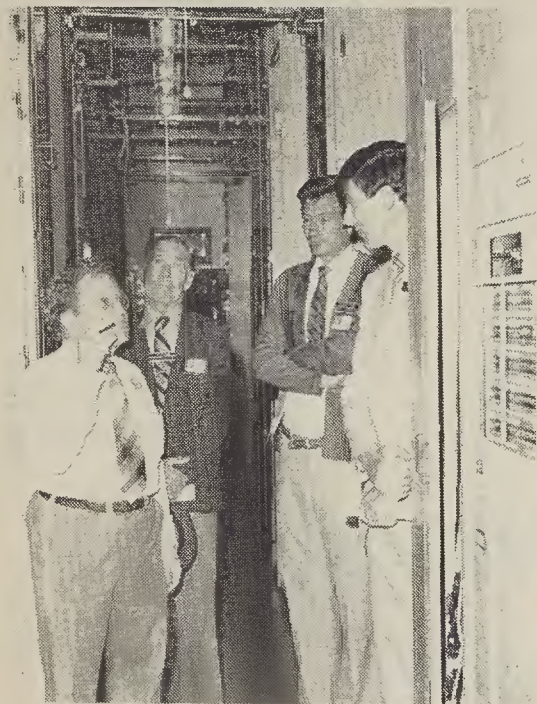
One of the interesting things about the service was the favourable public reaction to calling up information and being able to order different goods and services, international air travel and hotel accommodation, all done through the press of a button," Martin Turner said.



Acting S.A. State Manager Eugene McCann, Commissioner, Mrs Manley and Telecom graphic designer Barry O'Brien receive the ANZ Bank trophy from Manager Banking Services Mr Ern Francis (left.)



# MOBILISATION COURSE VISITS TELECOM



The role Telecom in Queensland could play in Australia's security has been examined by an Industrial Mobilisation course organised by the Department of Defence.

Members of the course — drawn from the Armed Services, Federal and State Government departments, Government and private transport enterprises, research organisations and private industry — spent August 12 looking at Telecom's installations in Brisbane.

The assistant director of the course, Major Jim Cruickshank, of Victoria Barracks, Brisbane, said the visit to Telecom was one of a number of inspections made of industry and support organisations.

It was the first such course conducted in Queensland for seven years.

Its basic aims were to inform members of economic, industrial and other inter-related factors which effect national security, and to encourage co-operation, communication and understanding between industry, the public service, and the armed forces.

At Telecom, section managers and supervisors gave guided tours of the Central, Edison and Woolloongabba exchanges in Brisbane. These dealt with telegraph, telephone, telex, data, broadcasting and special Telecom facilities.

At a panel session headed by Telecom's Queensland manager, Paul Dubois, after the inspections members of the IMC showed considerable interest in Telecom's technical and engineering manpower resources, and the ability of the workshops section to manufacture a diverse range of equipment.

In our photo, Supervising Engineer for the Trunk Services Section at the Edison Exchange, Mr Bernie Backstrom, explains the workings of the trunk terminal to Mr Jim Burke, mechanical engineer Queensland railways; Mr Peter Pink, senior engineer with the Department of Harbours and Marine, and Mr John Barton, assistant secretary of MIM Holdings Ltd.

## 'MORE NIMBLE ON OUR FEET'

Addressing a recent seminar on Public Policy Making and Telecommunications Planning initiated by Telecom Australia, Managing-Director Jack Curtis foresaw many thorny problems and opportunities for Telecom in the future as the result of rapid social and technological change. "The message is clear — Telecom has to be more nimble on its feet," Mr Curtis said.

## PROBLEMS, OPPORTUNITIES IN RAPID SOCIAL CHANGE

What are the effects of these changes on telecommunications? Mr Curtis asked:

● increased travel has resulted in increased use of the existing telecommunications network, but will increased travel costs produce demands for people to work at or near home?

This would need to be supported by a whole new range of services. There could be important social issues.

● to what extent will the demands for the transfer of information increase and computers and communications converge?

● to what extent will businesses and domestic users want electronic funds transfer, pay-television, tele-medicine, tele-education and office/home management and information systems?

"Change will be even more the operative theme in the 80's than it was in the 70's, particularly in the telecommunications area," Mr Curtis said. "As responsible managers and public policy makers we have to learn to cope with it and manage it".

Discussing technology, Mr Curtis said: "Telecom introduces technology to improve existing services, provide new services for which there is a demonstrable demand and improve efficiency and reduce costs. Technology is a means to an end and not an end in itself.

"Telecom must continue to introduce appropriate new technologies and in a way to maximise benefits and minimise adverse effects.

The Managing Director said planning and good management was more necessary now than ever before and the need for planning to be multidisciplinary and cover all elements of the environment — social, political, economic, technical etc. — had increased.

Welcoming delegates who were mainly social scientists representative of Government and large industrial institutions, seminar Director Doug Rowell who heads Telecom's Planning Directorate said:

"The accelerating development of technology in the world today is making the world of the decision maker smaller on one hand requiring a more

responsive and more co-ordinated approach to decision making while on the other hand the accessibility to information is increasing rendering more difficult the sifting and analysis process.

"Then, too, the people of today are more aware of the responsibilities of decision makers and are more conscious and interested in participating in and in contesting where necessary the decisions made about things which affect their future.

"Telecommunications technology in particular is becoming more pervasive in our social, domestic and business lives.

### STAFF REPORT IN FOUR PARTS

Telecom employees this year will receive the Staff Annual Report in four parts:

- Video-tape on "Facts behind the Figures" featuring snooker world champion Eddie Charlton.
- A 16 page printed document
- A separate two-fold card listing fingertip facts and
- A questionnaire designed to gauge staff reaction to the report, its contents and method of presentation.

95,000 reports 90,000 questionnaires and 105,000 facts cards will be issued.



Personalities at the Seminar — Barry O'Sullivan, General Manager, Telecom Industrial Relations Department, John Woodrow, First Assistant Secretary, Labour Economics, Review and Services Division, Department of Industrial Relations, Fred Cox, Manager, Telecom Policy Research Branch, Planning Directorate, Pat Barrett, First Assistant Secretary, Transport and Industry Division, Department of Finance, Peter Nolan, Secretary, Australian Council of Trade Unions.



# BUSINESS SURVEY FORESEES 1350 STAFF INCREASE

Telecom last month issued its Service and Business Outlook booklet which summarises the planned activities for the year 1980-81. The document envisages that strong business growth will mean an additional 1350 staff in the technical, lines and clerical areas.

## CHAIRMAN'S REVIEW

Acting Chairman Tom May said:

The telecommunications business is confidently expected to continue as a strong growth industry through 1980/81. Demand for new telephone services is forecast to reach 534,400, an increase of nearly 7% over 1979/80. By the end of the financial year it is expected that the total number of services will have grown by 7%, passing the 5 million mark.

Traffic is also

forecast to increase strongly with the network handling around 5000 million local calls, up 7%, and nearly 700 million trunk calls, an increase of 13%.

Strong demand is forecast for telex and data services, and for a wide range of miscellaneous facilities.

The capital investment program is planned to rise about 5.5% in real terms.

The buoyant situation will require the creation of some 1350 additional jobs associated with handling the increased business. About 400 will be trainees in order to ensure that

the Commission has appropriately trained staff to meet forecast longer term skill needs.

An increase in productivity will again be a major objective. Taking capital and labour inputs into account, a figure of about 6% will be sought.

## BORROWING PROGRAM

Telecom has received Loan Council approval for a borrowing program of \$220m for 1980/81. This, together with internally generated funds and a portion of its employer contribution for superannuation liability, will enable capital investment in fixed assets and stores holdings of \$1134m to be undertaken.

## SERVICE STANDARDS

A continuing objective is to reduce the time taken for the connection of telephone, telex and data services. Generally, this is met in the plans for the year. However, in some particular areas, customer demand is expected to exceed plant capacity in terms of circuits and telephone exchange number availability, resulting in deferred applications for service and connection times increasing in these areas while the deficiencies are being overcome.

## INCREASE IN STAFF

The strong business growth target in 1980/81 will require an increase in staff of some 1350 (1.5%) in the technical, lines and clerical areas associated with handling increased business. With an increase of about 400, trainees are expected to number around 3000 at the close of 1980/81. Exact staffing requirements will depend on trends in the actual business growth achieved during the year.

## GREATER OUTLAYS

With the planned higher staff numbers and capital program, there is an associated rise in outlays for services used by Telecom; a real increase in capital and operating expenditures of 3.5% is estimated.

## PRODUCTIVITY INCREASE

The target for business growth overall is 11.5%. This reflects the higher traffic levels and additional services on which the 1980/81 plans for an expanded network are based.

## MAJOR PROJECTS

This year Telecom will spend over \$1100 million on expanding the telephone, telex and data networks.

Four major engineering projects worth more than \$10 million each, will be in progress or commence in this financial year, and, in total, more than 120 other projects worth over \$500,000 each will be completed or in progress by the end of the year. These projects cover the installation of large telephone and telex exchanges, large junction and trunk cable work, conduit and cable tunnel projects, major trunk transmission system projects and new facilities for the digital data network and the public automatic mobile telephone service.

## BUILDINGS PROJECTS

Over 80 major building projects, each costing over \$250,000 will either be in progress or commence during 1980/81. New projects totalling nearly \$33 million will commence this financial year, while substantial progress, including some completions, will occur on the \$65.5 million worth of buildings in progress at the beginning of the financial year.

## MATERIALS PURCHASES

Purchases of telecommunications material for network development and expansion will amount to

\$420 million during 1980/81. Most of the orders for this equipment and material will be placed with Australian firms.

## FACILITIES — DISABLED

While much has been done to date, the coming year, 1981, is the Year of the Disabled Person and special attention will be given to both Telecom provided and privately supplied facilities. A wide-ranging study on the subject has been carried out and will assist in deciding on ways in which technology can be used to benefit this community group.

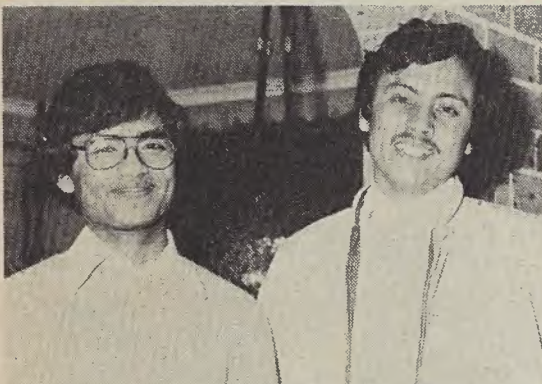
## AUTHORISED ATTACHMENTS

In addition to the wide range of telecommunications terminal equipment and facilities made available to customers, Telecom also operates a 'permit to connect' system whereby private equipment manufacturers and suppliers are authorised to market their equipment for connection by Telecom to the network. Up to June 1980, approximately 6000 authorities had been issued for attachment of data equipment on an individual customer basis and 640 types of voice equipment had been authorised for connection to the network. During 1980/81 it is expected that 800 new authorities will be issued to customers in the data area and a further 110 new types of voice equipment will be authorised. In addition, significant numbers of amended authorities will be issued for new models of existing authorised equipment.

## BUSINESS OFFICES

In response to customer demand, Telecom Business Offices are being upgraded and extended with a particular emphasis on public identification of Telecom's business interface with its customers. At 30 June 1980 there were 142 Telecom Business Offices throughout Australia and a further 11 will be established during the current year. Close attention is being paid to customer convenience in the selection of locations.

## 'EYE OPENERS' FOR NEPALESE



For the past two months, Thomastown (Vic) Installation Staff has had the pleasure of playing host to two engineers from Telecom in Kathmandu, Nepal; Madan Kaji Shakya (left) and Shakti Man Singh.

Prior to their two month stay at Thomastown, they were stationed in Tasmania for 4½ months and in Adelaide for two weeks. They arrived in Australia in February and worked alongside regular Australian Telecom Installation staff at Thomastown, Tasmania and Adelaide to obtain first hand experience of Australian Telecommunications equipment.

Both men being engineers (class 3), their involvement was mainly with Australian ARF 102 equipment as Nepal still uses as its workhorse the rather obsolete ARF 101 equipment. They found the Australian equipment quite an eye opener and have returned to Nepal much enlightened.

This program of education for international telecom staff was established by the International Telecommunication Union (I.T.U.) and their visit to Australia was financed by way of a grant system.

The young engineers proved to be excellent ambassadors for Nepal and are welcome back at anytime.



# Cape York wires give way to modern microwaves

Telecom is well advanced in a \$2.5 million project to give Cape York Peninsula a modern microwave telecommunications system.

It will replace the present open wire links, which are subject to disruptions caused by monsoon rains, flooding and cyclones. Telecom State Manager, Paul Dubois, told North Queensland media the new radio system between Mossman and Coen would be an extension of the Cairns - Mossman broadband system.

The system would be extended to Weipa later to meet the trunk requirements of Weipa and Cape York Peninsula generally.

Mr Dubois said the decision to build the microwave system was preceded by extensive ground and aerial surveys.

The aerial survey, which was to have taken one week, took four months because of continuous heavy cloud.

The initial survey was in 1973 and road construction to the

repeater sites began in August 1978. Tower construction began in May 1979 and is due for completion this year.

Radio installations began this year and are expected to be completed before the next wet season, with long line equipment installa-

tions to start in March next year.

The final commissioning of the project is scheduled for late in 1981.

Cairns District Telecom Manager, Ray Batchelor, said repeater stations would be located at McDowall Range, Mt McLean,

Hells Gate, Fairview, Koolburra, Morehead River, Bamboo Range and Mt Kintore.

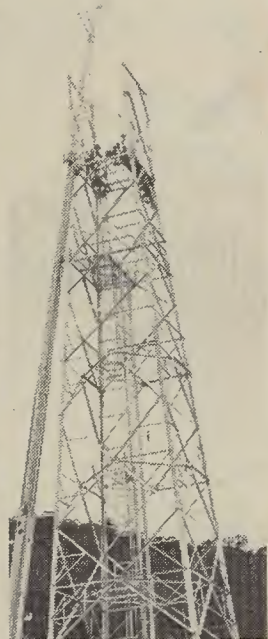
Mr Batchelor said that because of the remoteness of the repeaters and poor roads in the area, a committee of Telecom officers and union officials visited the area

to investigate likely problems.

As a result, each repeater site would be provided with bedding and cooking facilities and one week's supply of emergency rations.

Mr Batchelor said the new telephone system to link all the 14 inhabited islands of the Torres Strait and the rest of Australia was almost complete.

Using solar energy, the \$1.4 million project has been funded by the Department of Aboriginal Affairs and Telecom and built by Telecom.



A microwave tower of the new Mossman-Coen system under erection at McDowall Range on Cape York Peninsula.

## Barometer bustin' safety

The safety record of technicians at Dorrig and Maclean is so good that accident barometers would have to touch the clouds to measure their success.

At Maclean, the last accident involving lost time was recorded 15 years ago, which means 62 man years without mishap for a staff of four or five.

"We're very proud of this record," said Senior Technical Officer Ewen Munro, who has supervised the Maclean Technicians District for the past eight years.

The last accident of any type at Dorrig was recorded nearly 13 years ago, which represents 26 man years for two staff at this station.

"We want to keep it this way," said Senior Technical Officer of the Dorrig Technicians District, George Curtis.

The barometers are calibrated according to the number of weeks since the

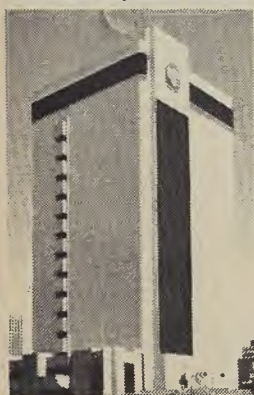
last lost time accident, but they stop at 52 weeks.

The lost time accident-free record of 780 weeks at Maclean and 650 weeks at Dorrig broke these accident barometers a long time ago.



Maclean Technicians District staff: (standing) Laurie Weston (tech), Jack Young (Internal Plant Manager), John Green (tech.), Glenda Johnson (cleaner), and Gregory Crowe (apprentice tech); (kneeling) John Hayes (TO) and Ewen Munro (STO).

What is 17 storeys high, has several huge Telecom logos emblazoning its sides and is a main feature of the City of Perth's western skyline? Perth



Perth's Wellington Telecommunications building — house of mistaken identity.

people win no prizes for guessing it is the Wellington Telecommunications Building ... BUT!

Many members of the public are obviously still not aware that it is an equipment building only. They are attracted by those giant logos from all over the metropolitan area.

The queries that the security staff face many times every day range from "Can I pay my telephone account here?" "Are you the man who connects my telephone?" and then there is the classic question where people walk straight past the huge sign that says 639 Wellington Street and ask: "Is this 99 Wellington Street?"

Custodian Sam Calleja is a friendly guy with a happy smile ...

so too are the security men including Vic Johnson, but from time to time the crowds of the mis-informed were straining the friendship. It wasn't so much all the queries, but more having to explain in detail how to get to the proper destination.

Sam came up with the idea of providing little "mud-maps" that could be handed to the public. Vic, handy with pen and paper and hammer and nails designed the maps and made a dispensing box for the front counter.

Today, when "the man in the street" mistakenly walks into our Wellington building, the staff are efficiency epitomised as they hand over a map pin-pointing the customer's correct destination.

## LEGION OF THE LOST SAVED BY VIC AND SAM'S 'MUD-MAPS'



Custodian Sam Calleja (l) and Security Guard Vic Johnson with their "mud-maps" and dispenser ... A case of self-help ...



# PAM BROUGHT GREENERY AND WIT TO WORKSHOP



The once all male bastion of the Mechanical Aids Workshop of Telecom's South Australian Automotive Plant Section will never be the same — it now has a woman's touch.

Pam Balfour, above with some of her workmates at Kidman Park, the first and only woman in the workshop, has brought changes to the office decor and to attitudes of some of the staff.

Pam is a Clerical Assistant, Grade 2, and she operates the switchboard and processes data.

The most outward change she has brought has been to introduce green plants to the office. She has a rubber plant, affectionately called Roger, and there is Ursula Umbrella Tree, when not toggled with correct botanic titles.

## 'Efficient'

Pam is very efficient — as one of the men put it: "She is the best switchboard operator we have ever had — that's for sure!"

Pam also has her own brand of humor, such as the time when a leaf fell from the rubber tree. She made out a

P400 accident report and referred to Roger Ficus Elastica with a designation of RT4 (rubber plant, grade four). The report went a long way through the system before being picked up by an eagle eye.

Pam said she liked the work and the people around her — everyone is most friendly she says.

Among her past-times she likes the theatre and has a taste for serious literature and fine wines. She is studying for her matriculation certificate.



Keen-eyed Johnno with his ampos locator which detects faults in plastic conduit. Did he get a reading off two men?

# JOHNNO, SUPERSLEUTH, CRACKS CRIME WAVE

Lines Serviceman Peter (Johnno) Johnson was recently carrying out his duties as a faultman, cable locator in the Frankston (Vic) area when he saw two men acting suspiciously at a nearby sports complex.

Convinced the men were breaking in, he rang local police and then blocked the men's escape route with his van.

Police arrived speedily and with pistols drawn apprehended two men. A car alleged to have been used by the men was later found to have been stolen and was restored to a grateful owner.

Johnno was complimented on his initiative by the sporting complex manager who said police believed his action would lead to the clearing up of many burglaries and restore missing property to local owners.

## SILVER JUBILEE GET-TOGETHER FOR WA TECHS.



Mention was made in the June edition of a nostalgic night held by former members of the 1955 Technician in Training class in South Australia. At about the same time, the 1955 West Australian class also held a similar function to celebrate its silver jubilee. Of the 52 trainees who commenced in Perth in 1955, 30 have continued their careers in Telecom and most were able to attend the function. They were joined by eight expatriates and seven of the class's instructors. Many tales were recounted about days in the Training school and early experiences on the job. The following evening wives were entertained at a Reunion Dinner.

Top L to R: Trevor MacIntyre, Gerry Harris, Bob McCann, Bruce Hamann, Eric Begg, Bob Butterfield, Robin Myers, Tom Alford, Dudley Batten. Centre: Kevin Lynch, Alan Strickland, Bill de Marniel, Jim Collopy, Frank Sleight, Clive Harrison, Ross Nicholls, Tony Barley, Barry Carson, Gill Castle, Bob Norton, Ron Easthope, Ray Collins. Front: Robin Hall, Don Weaver, Terry Hemmings, John Powers, Arthur McCarthy, Ian Hendrick, Tony Devlin, John Fowler, Dennis Beresford.



More than half a century of progress in communications is behind the continuing partnership between Telecom and Amalgamated Wireless (Australasia) Limited. Today, AWA, the longest established Australian owned electronics organisation, and a Telecom Approved Quality Assurance Company, continues to work with Telecom in the forefront of the latest communications technology.

## AWA — partner with Telecom in major telephone research and development

AWA's pioneering work laid the foundations for many of the present-day developments in communications. AWA's manufacturing and research facilities are spread across four divisions and three subsidiary companies, a works area of more than 120,000 square metres and a workforce of more than 4,500, including some 180 professional engineers and scientists.

The manufacture and supply of telephone equipment has long been a key link between AWA and Telecom, beginning in 1933, when the Australian Post Office (later to become Telecom) awarded AWA a contract for supply of subscribers' instruments.

This contract was for the Type 162 handset telephone. Originally imported from Britain in CKD form and assembled by AWA, by the end of 1934 many of the parts were produced locally. Bakelite parts for the body and handset were produced by AWA.

Assembly of the telephones called for special electrical testing equipment, which was also developed by AWA.

### 'MOST VALUED CUSTOMER'

Today, Telecom is AWA's most valued customer. Products from AWA are either supplied directly to Telecom or interface with Telecom systems. These products include data modems, PABX exchange systems, test instruments, computers, video terminals, two-way radio, and an extensive range of telephone handsets.

In conjunction with Telecom, AWA is constantly searching for new products and new technology.

In an atmosphere of change brought about by the development of thermo-plastic moulding

## Our major suppliers

Second in an occasional series

material, 1962 saw the introduction of the 800 Series phone in a wide range of colors. AWA has produced more than 4.5 million of the 800 Series phone for Telecom.

The new series phone also heralded a closer relationship between Telecom and AWA. Previously, telephone technology was mostly based on British Post Office standards, but in 1969 a new dial went into production at AWA which was the result of many years of engineering liaison between AWA and Telecom.

The main requirements for the dial were low cost and freedom from maintenance. The new dial was developed, using an acetal resin product of the Du Pont Company of America. This was the first time moulding of this type had been attempted anywhere in the world.

### ACCURATE TOOLING

A team of AWA engineers developed the extremely accurate tooling necessary for the project. The processes used were so different from anything else in the world at the time that Du Pont made a special award to AWA for excellence in pioneering new material and new uses of plastics.

Once again, new testing equipment was required when Telecom found that existing test gear just did not meet the very stringent specifications set down for the dial's performance.

AWA developed special instruments to measure the accuracy of each of the pulses in the dial train, where previously only average values had been measured.

From this requirement came a small but significant business in sales of AWA test in-

struments to Telecom.

In the mid-1960's, to meet the needs of small businesses, Telecom and AWA jointly developed the 1/2 and, later, also manufactured the 1/3 multiline telephone systems. Designed for small offices with no switchboard facilities, these used locally made components derived from the 800 Series telephone.

As the market for this type of phone grew rapidly, to meet Telecom requirements, AWA joined forces with a German associate, Telefonbau Normazelt,



to assemble in Australia the 2/6 and 4/11 family of business telephones, which incorporate both audible and visual signalling.

With increasing local content, these phones have made a significant contribution to employment in Australia and supplemented the comprehensive range of multi-line phones now



Testing a TN (Telefonbau Normazelt) switching unit at AWA Ashfield are, from left: John Blumer, AWA's Assistant Quality Manager at Ashfield; Peter Weston, Telecom Acting Technical Officer Grade 1; and Ron Cottam, Telecom Acting Senior Technical Officer Grade 1. Right — The Wallphone, a great success in the market place, was launched in 1972 following continued engineering and development co-operation between Telecom and AWA.





being offered to business by Telecom.

Continued engineering and development co-operation between Telecom and AWA resulted in the launching of the highly successful Wallphone in 1972.

While AWA has long been a major supplier of telephones to Telecom, 1964 saw the company commence a new role — the supply of PABX switching systems to all parts of Australia.

These range from small systems in remote outback locations to vast systems of more than 2000 lines in some of the country's largest private and public undertakings, including one of the world's most advanced PABX systems for the NSW headquarters of Telecom and Australia Post.

## AUSTRALIAN CONTENT

This equipment is manufactured at AWA's plant at North Ryde, Sydney, with a high degree of Australian content. It combines the expertise of AWA, the only Australian-owned company manufacturing PABX equipment, and the world-renowned Hitachi company, of Japan.

As well as this ongoing relationship with Hitachi, 1979 saw AWA appointed by Western Electric International as the first company outside the USA to distribute Western Electric's new SPC dimension PABX equipment.

This agreement covers distribution, development and manufacture

in Australia of this range of equipment.

AWA has since taken orders for 34 of these systems, with a total value of approximately \$8 million, to Australian business.

With business moving into the computer age, AWA is again co-operating with Telecom to provide new communication facilities.

Payrolls, stock control, banking, and other business activities are being taken over by computers. It has become essential for the businessman to be able to send data from various sources to a central computer.

The latest piece of equipment from AWA, the Data Modem, allows a company or individual with data terminal equipment, to call the computer by telephone. The Data Modem converts data signals to the voice frequency range, enabling the required data to be transmitted over the telephone network.

## DIGITAL DATA INVOLVEMENT

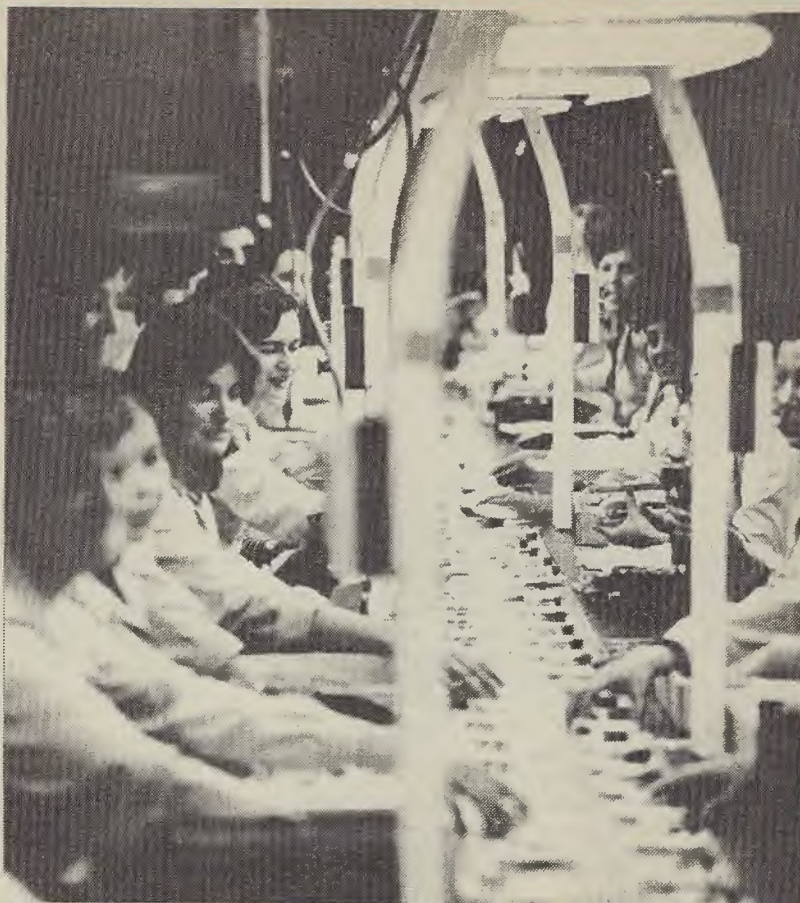
AWA's involvement with data transmission will substantially increase with its participation in the introduction of the digital data network, which will provide leased line urban and inter-state circuits with an improved grade of service when compared with traditional point-to-point services.

The first stage of the digital data network will link Sydney, Melbourne and Canberra, with operations scheduled to commence September 1981.

The network will be extended to the other State capitals by the end of 1982, and subsequent expansion will be to the regional centres.

AWA has long been a partner with Telecom in the practical application of communications technology. And their deep joint involvement in research will help ensure that this technology will keep Australia as a leader in communications in the future.

An example of this is provided by research in Australia into optical



Telephone dials on the production line at AWA's Ashfield works, Sydney. Below, a descendant of the new type dial evolved by AWA and Telecom in 1969 on final adjustment at Ashfield.

fibres — the new message-carrier which scientists see as ultimately replacing the conventional wire cable, giving far greater message-carrying capacity at a fraction of the cost.

In 1976, AWA won a Telecom contract for the development of a local capability to make and supply optical fibres to Telecom specifications.

The following year, AWA and Telecom carried out the first Australian field trial of the fibres at the Defence Department's Electronics Support Facility at St. Mary's near Sydney. Development work is continuing.

## CERTIFICATE OF APPROVAL

The long association between Telecom and AWA was officially recognised on October 25, 1977, when Mr. W.-J.B. Pollock, Chief General Manager of Telecom Australia, presented AWA's Ashfield Division with a certificate of approval under Telecom's ap-

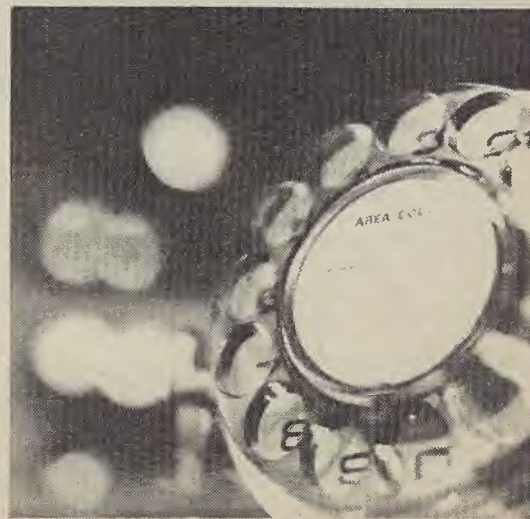
proved quality assurance company scheme.

At the presentation, Mr. Pollock said: "AWA has a very proud record as a pioneer in the world of communication."

This long association was highlighted by the joint-celebration honoring the Bell Centenary on 10th March 1976, when AWA struck a handsome medallion to commemorate the invention of the telephone.

More recently AWA displayed the range of products manufactured for Telecom at the Australia on Parade exhibition in Sydney's busy Centrepoint.

AWA congratulates Telecom on its policy of encouraging local participation in the products it uses and looks forward to doing its part in the future in helping Telecom fill the communications needs of the private and business sectors of Australia.





A data technician in Sydney who spends his weekends bushwalking has compiled a guide to National Parks in New South Wales.

## TECH'S BOOK TELLS ALL ON 51 NSW NATIONAL PARKS

Graham Groves admits he is more experienced at testing and repairing Telecom modems than writing books "but I grew impatient talking about it — I had to get it down on paper," he said.

The book, entitled Gregory's National Parks of New South Wales, includes 51 parks and resulted from a year's research, much foot slogging and some fine photography.

Graham, who lives at Moorebank, joined the PMG 18 years ago and now works with Telecom's Data Equipment Restoration Centre at Flemington.

His opportunity to become an author arose while repairing telephones for Gregory's Publishing company at Ultimo where he became friendly with a former editor, Tom Floyd. "I'd been working there at odd times for a number

of years. Tom knew I was a technical person and approached me about writing a book on CB radios.

I declined and suggested someone else. It was then I put my idea to him about a book on national parks. He was so enthusiastic I nearly fell off my chair," Graham said.

With the help of the National Parks and Wildlife Service Graham collected a wealth of information about the history, development and facilities at each park.

The guide carries a foreword by the NSW Minister for Planning and Environment, Mr Eric Bedford, a section on park

laws, and a code of behavior for visitors.

The book is being serialised in the Sun-Herald on Sundays. Each week a different park is featured with a map and photographs.

So far Graham has appeared on the Steve Raymond Show and been interviewed on Radio 2UE. he has been approached to appear on Channel 10 also.

### 'ALTERNATIVE'

"I was determined to produce an alternative to the 'coffee table' book, for families who enjoyed parks and wanted to know more about them," Graham said.

"Parks in the metropolitan area are popular and well-worn. I wanted to publicise parks further afield which are different and offer different things."

Graham's family has mixed feelings about



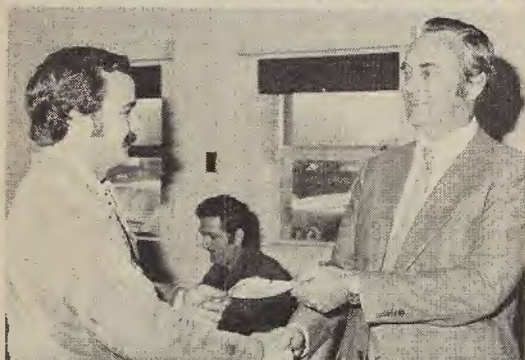
Graham Groves with a copy of the guide he compiled on national parks in NSW.

bushwalking. "My wife is more sedate and my eldest son, Darryn, aged 10 is becoming interested in sports. At the moment, my youngest son, Shane, aged four, is the keenest."

Since Graham began his

research and weekend expeditions to parks in NSW, their number has increased by three to 54. "It was bound to happen but three more NSW parks is good news to enthusiasts like me."

## Boom ideas win \$100 awards



Vince Selfe, left, is \$100 richer with the cheque he is receiving from the Superintendent of the Engineering Branch in South Australia, Mr. Brian Hammond.

Vince, a motor mechanic at the Kidman Park Mechanical Aids Workshop, got the award for some good ideas to modify a trenching machine which Telecom Suggestions Board adopted.

The modifications reduce the time and effort required to remove and replace the boom on the Ditchwitch R30. It also standardises the type of boom stores need to stock.

Part of his idea involves a guard to fit over the drive sprocket on the end of the headshaft — previously a potential safety hazard.

Mr. Hammond said a significant point about the ideas was that they made work on the implement safer both in the workshop and in the field.

"There is always someone coming up with good ideas and they shouldn't be backward in coming to the Staff Suggestions Committee with them," said Mr. Hammond, who is also the chairman of the committee in South Australia.

"Vince took some prompting before he submitted his ideas. Now he has another project with the committee for consideration."

Some years ago when Perth Central's Exchange OIC Wally Stone was faced with a manpower reduction he altered the standard method of testing the Exchange's switching equipment to improve productivity. The only drawback was that there were parts of the Exchange that could not be tested automatically.

Central is the oldest and largest step by step exchange in Western Australia with a large proportion of pre 2000 type switching for which no automated testing equipment had ever been devised.

In stepped Syd Bain ST01, at Central.

Syd had some ideas about this deficiency and in his spare time over a 2½ year period he developed an Access System for a Traffic Route Tester that automatically tested the remaining areas.

The facilities developed by Syd, which improved the routing testing of the step by step equipment, was the subject of a "Staff Suggestion" and the State Suggestions Committee considered Syd's contribution to be in the Important Improvement category.

Recently Syd was presented with a cheque for \$100 by Western Australia's

## TRAFFIC ROUTE TESTER

Chief Operations Manager, John Magee as a result of his suggestion.

Fellow staff members are very grateful for Syd Bain's efforts because it has saved them many manhours of repetitive type work.

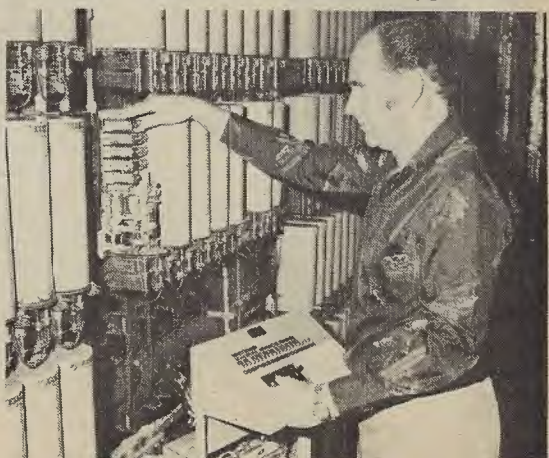


Photo: ST01, Syd Bain completing a routine testing of the step by step equipment at Perth Central Exchange.



## Bare facts on Penrith service

Operations staff in the Penrith telecommunications district, which includes Mt Victoria, have moral standards most people in NSW would accept as their own. However, they cannot and WILL not be held responsible for a threat carried out after repairs were made to the linoleum floor of a local public telephone.

Besides, the job was performed so much to the satisfaction of everyone that the boaster was shamed into eating his words, as it were. Below are two letters from Mr Ezekial Frogbottom, of Mt Victoria, which tell the whole story —

Mt Victoria

The Manager,  
Telecom Australia,  
Borec House,  
PENRITH NSW  
2750

Dear Sir,

My irreverent and cynical friend, Julius P. Offenlike, declares that, if I can succeed in having Telecom place new floor covering in the call box at the Mt Victoria Post Office, he will do a streak from the Post Office to the Grand Imperial Hotel at mid-day on a Sunday.

Much as the staid people of this village would be seriously alarmed and affronted by this action I feel that I must still appeal to you to spend a small amount of time and money on the floor of this call box. The postmistress finds the cleaning of the structure quite impossible although I understand that she has found lost coins under the tattered remnants of last century's (PMG issue) linoleum.

I've told Julius to go into training. Don't let me down.

Yours hopefully,  
E.E. Frogbottom.

Mt Victoria

The Manager,  
Telecom Australia,  
Borec House,  
PENRITH NSW 2750

Dear Sir,

What a pleasure it was, on a recent afternoon, to stand on new linoleum in call box 87101 M2 ★★. It was a very disconcerted Julius P. Offenlike who was called from the public bar and asked to honor his rash promise on the following Sunday. However, he is a man of his word.

At midday Julius shed his clothing in the telephone booth and waited until I signalled a break in the tourist traffic. With a bucket over his head to preserve his dignity he scampered across to the Imperial Hotel looking somewhat like a satyr.

Two ladies from the CWA were having a quiet gossip on the corner of Station Street when this apparition left them momentarily speechless. "How repulsive", said one. "Disgusting", said the other, "He doesn't even live here".

Thank you indeed. The locals are happy. The tourists are happy. The postmistress is happy. Both Julius and the publican are happy because he has not left the bar since his flight across the highway.

Yours gratefully,  
Ezekial E. Frogbottom.

EDITOR'S NOTE:  
ONLY THE NAMES  
HAVE BEEN  
CHANGED TO  
PROTECT THE  
GUILTY.

## AUGER SAFETY GUIDE IDEA WINS \$100 AWARD



A suggested safety modification to augers used when drilling post holes has resulted in an award of \$100 from the Staff Suggestion Board to Fred Simons, Lines Officer, Windsor, NSW. The modification involves a flanged guide attachment welded to the top of the auger to help guide the driving shaft into position. An article outlining the suggestion was published in the April 1980 edition No. 51 of "TELECOM". The award was presented to Fred by State Manager Ken Douglas, (left) during an informal afternoon function at Telecom House recently. Also present were Dick Corin, DTM Penrith (R) and Alan Carr, Accident Prevention Officer, Operations Department.

## John's Kippa Ring TBO boss

Prominent Redcliffe Peninsula personality, John Moy, has been appointed manager of Telecom's new business office at Kippa Ring, on the peninsula just north of Brisbane.

John, a former technician, had acted as manager since the office opened in September last year and his permanent appointment to the position has now been confirmed.

The Kippa Ring office serves one of the fastest growing of Brisbane's outer suburban areas, taking in not only the Redcliffe Peninsula but centres as

far away as Caboolture, Petrie, Dayboro and Deception Bay.

Many of the hundreds of people who deal with the office each week have known John for years, which he says is an asset to him and the customer.

John Moy's name has been linked with Rugby League at Redcliffe since 1950. He's been a player for Redcliffe in the Brisbane Rugby League competition, president of the Redcliffe Junior Rugby League and football writer for the Redcliffe "Herald".

He smiles when he recalls his involvement with junior football. "I had three daughters, no sons, and was able to settle numerous arguments without any bias".

The Saint Vincent de Paul Society, has also benefited from John Moy's enthusiasm and hard work over a long period. He has served as president of the special works committee and secretary of the North

Coast council, positions from which he has gained great personal satisfaction and understanding by working with people less fortunate.

John's career in telecommunications took a new twist with his appointment as manager of a business office; he'd been a technician since he joined the department in 1952.

It's a new challenge and, he says, personally rewarding pointing to figures showing record business traffic for the month ending August 6.

"We handled almost 1,800 inquiries, received payment for 581 accounts, and processed applications for 114 new telephone services and 34 in place services".

John believes his background as a technician has been a big help in his move to the sales side of Telecom and equally beneficial to customers.

## COMBINED CHURCH SERVICE

The Postal and Telecom Combined Church Service and Dinner will be held on Tuesday, October 21 at 5.30 p.m. Scots Church, Collins St., will be venue for the service with the dinner held on the first floor Tivoli Court, 239 Bourke St. Guest speaker at the dinner will be well-known radio and television personality Sir Eric Pearce who will talk on "Communicating". Families and friends of staff are cordially invited to take part.



Prominent Redcliffe Identity John Moy, a former technician, who has been appointed manager of the new Telecom business office at Kippa Ring, near Brisbane. Members of his staff Nola Rauber and Peter Gillis are in the picture.



# Telecom meets a special customer need, and ...

Telecom Australia is using infra-red technology to provide "live" telecasts of capital city races at country meetings in New South Wales.

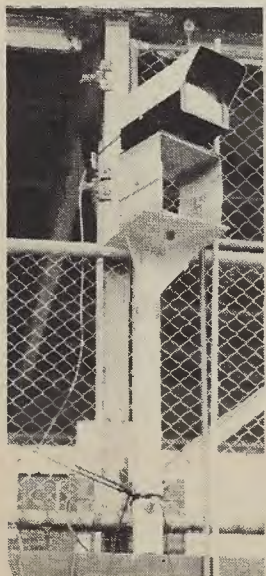
Televised races carried by radio signal on the main bearer between Sydney and Brisbane are being tapped at Newcastle and relayed to Beaumont Park greyhound track and Broadmeadow Racecourse.

How this telecommunications book-up was achieved shows the way Telecom is meeting the special needs of its major business customers.

Although an underground telephone cable runs the short distance from the local exchange at Hamilton to Broadmeadow the pairs were not suitable for wideband colour television transmission.

An idea of running an additional, cheap video cable alongside the main cable, had to be abandoned also because the duct carrying the existing line was completely filled.

To build a second duct would have cost about \$30,000 which added to the expense of special terminal equipment, made this proposal uneconomical.



An infra red receiver at Broadmeadow links the racecourse to Beaumont Park.

Telecom engineers then investigated the possibility of using a micro-wave radio signal or infra red light as a bearer for the "live" TV races at Broadmeadow.

Micro wave radio systems are an established part of the national broadband network providing telecommunications links between for example, Darwin/Mt Isa, Tennant Creek/Alice Springs and Tasmania/King Island.

designed, portable, micro-wave radio system using small dish antennae, of the type applied for television ENG (Electronic News Gathering), was worth trying.

Tests were about to be carried out when the customer's needs changed and the project took a dramatic new dimension.

Encouraged by the prospect of "live" telecasts at Broadmeadow, at an

Telecom special services planners were anxious to employ infra red as there had been a number of requests from customers about the advantages of the system.

Besides, it was already being successfully used on a trial basis by Radio 2UE in Sydney. An infra red link between the Miller Street studios and the top of Northpoint tower at North Sydney gave announcer, Gary O'Callaghan, a "bird's eye view" of the city

by JOEL WEBSTER,  
MEDIA OFFICER,  
NSW

tandem links — a micro-wave link from the local exchange to Beaumont Park and an infra red hookup from there to Broadmeadow.

This has now been achieved and the first "live" telecast of interstate races to Broadmeadow was viewed on August 9.

Another plan of arranging the links in tandem through Broadmeadow proved unsatisfactory because an infra red receiver at Beaumont Park would have faced directly into the setting sun, possibly damaging the sensitive receiver detector.

Independent microwave links from the exchange to the tracks together would have cost about \$36,000 whereas the microwave and infra red systems in tandem cost two thirds of this amount.

According to Special Service Installation Senior Engineer, Phil Cargill, the co-operation of Telecom's Construction field staff in the Newcastle District ensured the success of the project and the introduction of infra red technology.

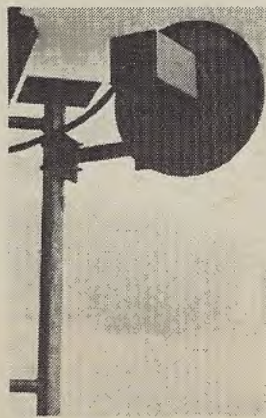
## PUNTERS NOW FOLLOW THE FIELD ON 'INFRA-RED' TELEVISION

attractive Telecom tariff, Newcastle Jockey Club officials were keen to have the same service at nearby Beaumont Park, where greyhound meetings are held on alternative Saturdays.

without moving from his seat.

To serve the Newcastle tracks on alternative Saturdays with live telecasts required two

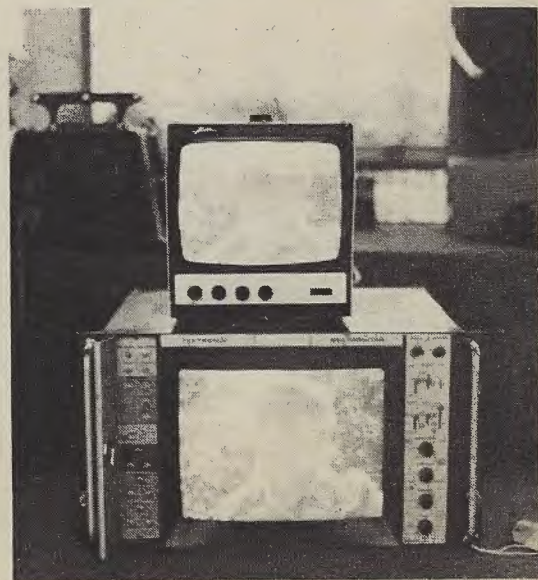
Over the 1.2 kilometres between Hamilton telephone exchange and Broadmeadow, however, a US-



A small dish antenna of the portable, micro-wave radio system that links the greyhound track to the local telephone exchange.

This gave Telecom an opportunity to try a US-designed infra red system between Broadmeadow and Beaumont Park that would have given marginal performance over the greater distance between the tracks and the local exchange.

Whereas the exchange was 1.2 km from the racecourse and 1 km from the greyhound track the distance between the tracks themselves was 600m, which fell within the recommended range for the infra red system of 610 m.



Video monitors provide test pictures using the infra red system.



# An old friend drops in on Qld. museum

One of the most welcome visitors to the Queensland GPO Museum was the popular Eber Lane, former Director General of the Australian Post Office and his wife Phyl.

It was their first visit to Brisbane since the Museum Room was dedicated to him in September 1976. At the same time the adjoining room was officially named the "Claude Faragher Room" in honour of the former Queensland Director of the 1949-58 period.

On his visit, Mr Lane was reminded that it was his blessing as Director, Queensland in 1969, that gave the first official approval to the proposal from the Historical Society for a Museum to be established at the GPO.

It finally became a reality with the opening by the Governor of Queensland, Sir James Ramsay, in February 1979.

During his Directorship in Queensland, Mr Lane's personal support to the preservation of valuable documents and relics was freely given. It was felt that a fitting recognition of this interest should be perpetuated by the naming of the Museum room in his honour.

Starting as a Telegraph Messenger at Dalby in 1927, Mr Lane ended his

Post Office career at the time of the formation of the Commissions after more than 48 years service.

He had the unique distinction of having started as a Telegraph Messenger, served as Director Post and Telegraphs in three States — Tasmania, Queensland and New South Wales and was the only State Director to become Director General.

Proficiency in telegraphy was one of Mr Lane's early ambitions and he renewed the "old art" in demonstrating this ability on the morse line in the Museum. He passed the Morse Test in 1934, to qualify as a telegraphist.

It was whilst he was employed as a telegraphist at Mount Isa in 1939, that he met Miss Phyl Webb, Postmistress, Selwyn and married her.

Today, the Lane's live in retirement at Westleigh, a Sydney suburb. They have two married daughters, Dale in Sydney and Carol in Canberra. Their only son Gary is an engineer with Telecom Australia in Sydney. They are the proud grandparents of six children.



Eber Lane tries his hand on the morse line in the Brisbane GPO Museum. Mrs Phyl Lane looks on while Ray Brown, Qld. Manager, Australia Post (a morse operator himself), is amused at the former "gun telegraphists" approach after such a long absence from the key. Mr Lane qualified as a telegraphist in 1934.

NSW Telecom staff wearing tiny microphones on their collars and black boxes on their belts do not have hearing problems. They are participating in a national noise survey that will undoubtedly help reduce the risk of hearing damage to their successors.

The tests are being conducted at Telecom work-sites around Sydney and in country centres where employees are exposed to noises made by a variety of vehicle engines and mechanical aids.

Typical noises at telephone exchanges include diesel motors, cable pressure equipment, and cleaning machines. Among noises in the field are hydraulic winch trucks, front end loaders, pole hole borers, and pneumatic tools.

Each state was briefed for the survey under the Noise Mitigation Program as part of Telecom's Hearing Conservation Program.

The program aims to identify which employees are subjected to noise at work and when hearing protection needs to be worn.

It also seeks to identify equipment whose noise might be reduced.

In NSW the tests are being carried out by Buildings Branch and the Automotive Plant Section. When completed, hundreds of staff from throughout the State will have worn the tiny microphone and black box for a day.

The device measures automatically the highest noise registered and the

daily average noise dose. The tests are conducted on the naked ear or inside ear muffs if these are usually worn.

Telecom's Accident Prevention Section has identified everyday noises on a scale from zero to 140dB(A), beginning with the rustle of a leaf at 10 and ending with a top reading of 140dB(A) for a jet engine.

According to this noise standard, readings at 85dB(A) or below are safe while those above 85dB(A) require protection for a constant exposure of eight hours or more.

The Noise Mitigation Program aims to reduce

## TELECOM ASSAULT ON NOISE PROBLEMS

noise to acceptable levels or provide suitable protection for all Telecom workers by 1983.

In addition Telecom, together with the manufacturers, is pursuing a policy of buying equipment whose operating noise is safe (up to a maximum reading of 85dB(A)).

Footnote: db(A) is a decibel reading for a particular scale (A) of noise level ratings.

## Payman checks out



Frank Hilleard, who began his career as a messenger boy at Auburn in 1936, was farewelled by about 80 Telecom colleagues at a retirement dinner in Sydney recently. He retired as Manager, Pay and Conditions Section, Industrial Relations Branch NSW.

Before the war Frank worked at Casino as a postal assistant and at the Sydney GPO in the Mail Exchange Branch. From 1941 until 1945 he was stationed at Darwin with the Army's postal unit. Frank returned to the PMG as a clerk with Personnel Branch and during these years visited post offices throughout the State. In 1975 he transferred to Telecom as an inspector with Pay and Conditions. He is a keen golfer and lapidarist.

Pictured at the retirement dinner are (from left): NSW Chief Manager, Personnel and Industrial Relations, Arthur Hunt, Frank Hilleard, and Manager of Remuneration Policy branch, Industrial Relations Department, Melbourne HQ, Frank Jones.



Lines serviceman Dragi Cvetkovski, wearing earmuffs and measuring the noise from a small front end loader at Newtown. (The black box is on his hip and the tiny microphone is pinned to his shirt collar).



# 'Cross between Dorothy Dix and know-all'

The connection of the Coultas and Warrow manual telephone exchanges to their 40 subscribers is dead. Gone is an era of telephone communication for the people of the district, and a way of life for the two women who have manned the exchanges.



Mrs Septima Agars at the Warrow exchange which was installed about 1930.

Both photos courtesy Port Lincoln Times.

The two manual exchanges in the Whyalla Telecommunications District were disconnected and replaced by a single automatic exchange at Coultas. The replacement is in accordance with Telecom's policy of conversion to automatic services.

The two women who have spent a large part of their lives at the exchanges are Mrs Septima Agars at Warrow, and Mrs Kathleen (Kit) Paech at Coultas.

Both women looked back with nostalgia at their years at the phones. With only 26 subscribers, Mrs Paech said they were "just about family".

"You are a cross between Dorothy Dix and a know-all," Mrs Paech said. I was always a shoulder for the callers to cry on. It's more than just a telephone service — you're part of the community".

Mrs Paech has operated the Coultas exchange through bushfires and community emergencies such as a sickness and car accidents.



Mrs Kathleen Paech at the Coultas exchange that her family has operated since it was installed about 1920.

She took over the exchange on July 1, 1959 from her mother, Alice Doudle whose husband John — Mrs Paech's father — had operated it since its installation about 1920.

long hours demanded by the ringing of the exchange bell.

"You often had to get out of bed to answer the phone when people were sick or when there were fires," she said.

With the disappearing of the manual phones will also disappear a community service.

Mrs Agars said she has often been called on by those in distress. Just recently she said a woman who had lost her child came in to see her for assistance. Mrs Agars rang the police and the woman's child was found several miles away.

Mrs Agars has operated the Warrow exchange since it was installed "some time around 1930". Her family has owned the post office building which housed the phone the turn of the century.

She says she will miss the exchange and talking to the people in her area but she won't miss the

## 25 YEARS OF FRIENDSHIP



Seventeen wartime Brisbane telephonists, who have been getting together once a month, recently celebrated the twenty-fifth anniversary of their first meeting.

They attended a dinner at the home of their organiser Lorna Crighton, who is the widow of Ken Crighton, a Telecom technician for 35 years.

Lorna and her group, which originally comprised 20 members, manned the boards 10 p.m. to 7 a.m. during the darkest war days.

Their husbands, many of them Telecom employees, attend most of the meetings. At Christmas they entertain their children and grandchildren.

Two, Carol MacKenzie and Betty Evans, travel from the Gold Coast for the social outings.

The 17 wartime telephonists at their recent 25th reunion in Brisbane (L to R) back row — Jean Hurman (nee McMillan), Iris Moulden (nee Liddy), Ada Johnston (nee Dale), Florence Reynolds (nee Farrington), Win Goldsworthy (nee Nolan), Kath Sparkes (nee Sparkes), Rita Gray (nee Brown), Betty Evans (nee Doyle); middle row — Daphne Postle (nee Mann), Ronnie Rodger (nee Barnes), Carol Bird (nee MacKenzie), Joy Smith (nee Dearlove), Lorna Crighton (nee Fenner); front row — Carrie Barnbaum (nee Eite), Billie Telford (nee Steele), Marie McCarthy (nee Collins), Beryl Olsen (nee Bourke).

## Children's telethon thanks

On behalf of Channel 7 and the Children's Hospital, may we congratulate you and thank you for Telecom's involvement in our recent Telethon for the Royal Alexandra Hospital for Children.

Julayne Flannery and Barry Charles and their 650 volunteer workers did an extraordinary job. This was my eighth Telethon and never before have I seen such efficiency on the telephones. The usual time taken over a call is 2½ minutes — their group of operators managed to get this down to 1½ minutes and maintain legibility. But more importantly however, it meant that we were able to deal with so many more calls and that in turn assisted the final result immeasurably.

The engineers and telephone installation department at Epping and their associates at Ryde were superb. They approached the problems of the installation with such good will and friendliness; overcame many difficulties; and then during the actual installation and throughout Telethon, showed a professionalism which I think will be hard to surpass anywhere.

I will be grateful if you would pass on to them the sentiments expressed in this letter and through you, say to them all a million and more thanks for a job well done.

Don Hutchings,  
Telethon Manager.



Twenty year old Michael Beer, Apprentice Fitter and Turner, Workshops, Concord West is a young man who knows where he wants to go and is not afraid of work to accomplish this desire.

At his Third Year (Final Technical Stage) of his apprenticeship examination at Sydney Technical College, Michael was Dux of the Year, with Honours.

Michael is also studying for a Toolmaker's Tradesmanship at College which he should complete this year.

Not satisfied with these two trades Michael has commenced a Part Time Mechanical Engineers Certificate Course.

As a diversion from his work, Michael is a member of the Datsun Drivers' Club and drives his own car in club races at Oran Park, Sydney's top raceway.

## MICHAEL: DUX WITH HONORS



## MR SOCCER!



Frank Broughton, Assistant Production Superintendent (Mechanical) has been interested in soccer for forty one years both as a player and later an administrator.

Since he ceased playing, Frank has been an administrator of the New South Wales Soccer Federation for fourteen years and has been Secretary of the Canterbury District Soccer Association for the last seven years. Four years ago he became Registrar of the State and Sydney Branches.

Frank is very interested in promoting the juniors and has been Manager of state age teams to National titles in 1978 (14 years), 1979 (15 years) and 1980 (14 years).

Sport has always been a part of Frank's life and apart from his soccer he has played cricket and rugby league with teams from the Workshops during his career spanning 41 years.

Frank commenced as a Junior Mechanic in the Iron Shop, Workshops, in 1939 and all his service has been in this area. He rose from a Fitter and Turner to his present position.

## DEATH OF FORMER NSW DIRECTOR



Former NSW Director, Posts and Telegraphs, Mr Tom O'Donnell who retired in 1974 after 50 years' service, died on September 3.

Mr O'Donnell joined the Department in 1924 as a junior mechanic, progressed through technical grades and became an engineer in 1941.

He became in turn divisional engineer, supervising engineer, superintending engineer and the Assistant Director P and T. He was Director between 1972 and 1974.

Mr O'Donnell leaves a wife, three daughters and a son. He was a keen supporter of API sporting carnivals and a keen and competent golfer.



## PAINTS THE PAST

Some years ago, amateur artist Mrs Bonnie Bird of Wantirna, Victoria, saw a photo of the old Beltana (SA.) telegraph repeater station in Australian Post Office News and thought it would be fun to paint the relic in oils. She did so and the result was so satisfying that Mrs Bird has since made something of a career out of painting old telegraph stations and post offices of Australia. Here she displays two of her works — the Williamstown Vic telegraph station and the Electric Telegraph Office in George St., Sydney.

The impressive old bluestone Williamstown building served the first public telegraph service in Australia which opened in 1854 between Melbourne and Williamstown, only 10 years after erection of the first Morse line in America.

The Electric Telegraph Office in March 1871 was the temporary premises of the Electric Telegraph Department from about the mid 1860s till the mid 1870s when the Department moved into the part-completed GPO in George Street, Sydney.

The old GPO was demolished in the 1860s and during the building of the new Post Office, most sections moved into temporary accommodation in Wynyard Square, west of the present day underground railway station. The Telegraph Office moved into the premises in this photograph which were shared with Mr Savage, "a fashionable tailor of those days".

Mrs Bird is happy to translate appropriate old buildings to oils for Telecom staff at a small fee. She can be contacted on (03) 221 3152.

## Scooped the pool



Customer Services defeated Personnel in a pool tournament contested by six teams from CO Branch API. Ten players took part for each team in a round robin tournament culminating on a knockout contest to decide the winners. Pictured here are some members of the victorious team: Peter Maunder, Denis Kirby, Kevin Drew, Bill Anderson and Graeme Welsh. Other team men not pictured were Paul de la Motte, Ron Otte, Jim Downward, Mike Westaway and Doug Ferrier.



## ASSOCIATION'S BEST & FAIREST



PORT Melbourne ruckman Stephen Allender received a pleasant surprise on the morning of the count for the Victorian Football Association's J. J. Liston Trophy.

He was asked to attend after wide media speculation that he was one of the favorites for the best and fairest award.

An even bigger surprise to Stephen, 20, an assistant clerk with Telecom Australia's Headquarters Personnel Department, was that he won.

"It still hasn't really sunk in. I think it will be after the grand final before I will really be able to celebrate," he said.

Winning the Liston Trophy automatically means approaches from VFL clubs and for Stephen it has been no exception. "I've had a few approaches but I won't be attempting VFL football until 1982," he said.

"I'll be doing a course on the weights during the summer to build myself up and see how I go next season."

Stephen, who is residentially bound to Carlton, won the trophy by five votes from Camberwell follower, Phil Neilson.

## VOLLEYBALLER LYN REPS FOR AUST.

For Lyn Roberts, 22, the volleyball world looks rosy. But for Australia she feels the future is not so bright.

The past two years have been a success story for Lyn, who works in Telecom Australia's HQ, Personnel Department.

But, according to Lyn, there is a lot of work to be done before Australia can lay claim to be a leading volleyball nation.

An Australian representative for the past two years, Lyn recently played in the Australian under 22 side in the Pacific junior championships in Canberra.

Australia finished fifth out of eight sides.

Previously Lyn represented Australia in the second Asian Games in Hong Kong in November

last year, finishing fourth. The Games were a



qualifier for the Moscow Olympics and were surprisingly won by China who defeated the 1976 Montreal Olympic gold medalist, Japan.

Lyn said that Australia needed more international

**Mal Nicholson, a technical officer with Telecom in Sydney, has won a trip to the US to compete in the famous Bay to Breakers footrace over 12km.**

## MAL'S IN BAY-TO-BREAKERS

A veteran of six City to Surf races, Mal was one of three runners chosen by ballot last month to fly to San Francisco next May.

He finished the 14km from Sydney Town Hall to Bondi Beach in just under 52 minutes, placing him among the first 300 runners out of about 22,000 who entered the race.

This year Mal ran with his son, Garry, aged 15, who recorded a time of around 61 minutes. "I didn't see him until after the race," Mal said.

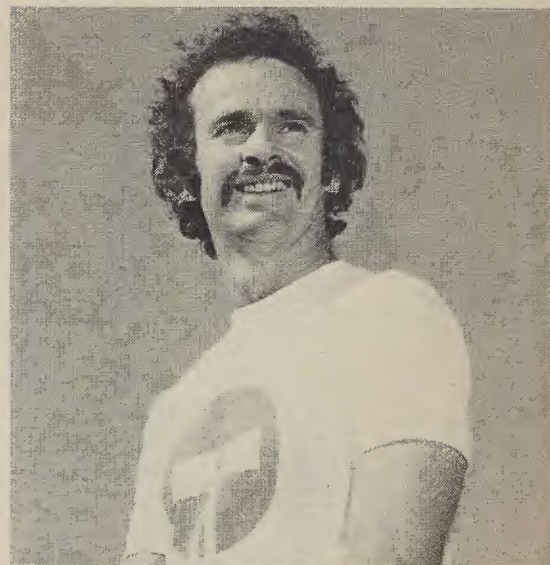
### 'FANTASTIC'

Commenting on his luck in being drawn from the first 5000 runners to complete the race Mal was quoted in The Sun newspaper as saying: "It's fantastic — I never dreamt this would happen. Running in the Bay to Breakers will be a great experience."

During a career of 21 years, first with the former PMG and now with Telecom, Mal has spent much of his time at Balgowlah SID.

"If I can't get a run in before work I run home to Dee Why afterwards, along a pleasant route of about 6km," he said.

A member of Harbord Diggers Runners Club, Mal clocks up an average of 50km a week in training. The club has several runners employed with



Telecom, including its captain, Geoff Thorsen, the OIC at Lindfield Telephone Exchange, who ran this year's City to Surf in 46 minutes.

How many Telecom staff competed in this year's City to Surf is not known, but two teams which definitely ran are "Shipnews Joggers" from North Sydney and "Beep-As CreepAs" of Telecom House in Sydney.

The bulk of the North Sydney runners are from Transmission and Line Planning (Country), and Marketing Branch staff, while the Telecom House crew, who wore Telecom T-shirts, are from Public Relations and Industrial Relations Sections.

## FOOTWORK RAISES \$700



GEORGE

George Burfitt could have been excused for putting his feet up and having a quiet beer at a Frankston hotel about lunch time on August 9.

For he and his brother John had just walked the 48 km from the Melbourne GPO to Frankston to raise money for Meals on Wheels at the Vaulcluse Hospital, Brunswick.

George, who works in Engineer Services, raised \$28.75 despite only going "to keep John company."

The two left the GPO at 5 a.m., arriving at Frankston at 1 p.m.

"John does a lot of social work for the hospital and decided to organise the walk when the Meals on Wheels was in danger of folding through lack of funds," George said.

John had more than 200 sponsors and the two of them raised about \$700.

competition and more intense coaching if it wanted to succeed in volleyball.

"We should be exchanging players for coaches, perhaps with the Japanese, so that we can improve our standard," she said.

To that end, a Chinese team will be touring Australia next year for a series of matches against Australian teams — similar to the tour by the Japanese in April this year.

Lyn lives in Gardenvale but plays with Waverley Bluejays because her previous coach transferred there.