## 2 NEW COMMISSIONERS APPOINTED — P.7

It's 6000 feet above sea level, it's degrees below freezing point and the landscape is heavily mantled in snow ... and still they want telecommunications ...

In fact, the colder it is and the more snow that falls, the more telecommunications they want because this is the ever more popular Victorian snow resort of Mt Buller.

## SNOWFIELD **CUTOVER**

Exhilarating sport for most . . . a tough, slogging, often uncomfortable job for a few — Telecom Australia staff who install and maintain the efficient, easy and economical communications for the many.

Their work only now and then makes news ... now because Telecom Australia last July opened a new Mt Buller exchange of 400 lines of ARK = M equipment housed in an 800 line

To this was attached on site a transportable custom made staff amenities container, all surmounted by a special snow roof and clad in Western red

The building also houses a 120 channel radio system, using a new tubular type tower at the Mt Buller site, via a passive repeater further up Mt Buller, then to the Mansfield ARF parent exchange.

The new exchange building, replaced a 400 line ARK-D, and old RAX huts which were used as amenities buildings. The ARK-D building was short of equipment space for facilities like the new CT3 public telephones and subscriber private meter equipment, and further, the site was required by the Committee of Management.

The staff comforts of the new exchange are impressive, even when compared with the other three above-snow-line exchanges at Mt Baw Baw, Falls Creek and Hotham Heights.

The building is electrically heated, there is a shower recess. flush toilets, ski storage rack, clothes drying cabinet, sink, stove, 4 sleeping bunks, and a mini garage outside for a ski-doo.

There were major problems for the Construction Branch staff Victoria. Although programmed to cutover in April 1978, hold ups in the various phases up to the time staff of Country Installation East could commence to commission the equipment, meant the date had fallen back to mid June.

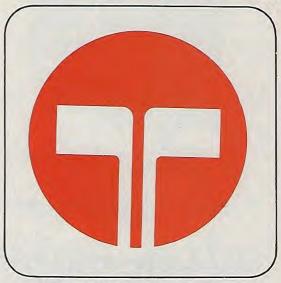
On 2 June, 1978, a storm at Mt Buller damaged the passive repeater and a temporary radio system was installed in shocking weather conditions.

Because of this setback the cutover was again deferred to July 11 so that repairs could be effected to the radio system. Heavy snow fell and Country Installation staff TO1 Stewart Burns and Technician Jim McAnanly were working in a very pretty, but very cold environment.

On cutover week, Roving TO2

Ron Summers and Project Engineer Keith Lierse (who is a member of the Ski Rescue Service), brought up additional test equipment through a rather heavy snow fall.

Although the weather conditions were not good, it is to the local and installation staffs credit that the cutover was successful and relatively free of faults compared to cutovers in more hospitable environments.



## Telecom

No. 34

September 1978

Correspondence to the Editor "Telecom" Telecom Australia 199 William St Melbourne Vic 3000 Telephone 630 6505



Staff checking MDF before cutover at Mt Buller. Stewart Burns (T01) left and Ron Summers (T02). Note the ski rack in the background,



tower, sloping roof. The building is actually two transportable containers joined together on site.



Country Installation East staff outside door of Mt Buller Telephone Ex-Mt Buller Telephone Exchange from the rear. Note new type tubular radio change on day of cutover:- L-R — Stewart Burns (T01), Keith Lierse (Senior wer, sloping roof. The building is actually two transportable containers Engineer), Jim McAnanly (Technician). Note special wall cladding and sloping roof.





## Development opportunities

Development opportunities open to officers of Telecom Australia take the form of full-time study and work experience awards provided in these four main categories:

- Undergraduate scholarships
- Postgraduate scholarships
- Study awards

Development training programmes
The arrangements for the areas of full-time study assistance have been revised since last year and have been officially advertised in the Australian Government Gazette of August 24, 1978.

ment Gazette of August 24, 1978.

A new category, Development Training, has been introduced mainly to isolate and identify awards of a "work experience" nature.

It will also be utilised for short full-time courses closely related to work area responsibilities. These courses may not necessarily lead to a higher qualifica-

Development Training Programmes will be provided to enable staff to keep abreast of developments in research, techniques and practices, technology applications and operational methods which are of direct relevance to Telecom Australia.

Development Training also offers opportunity for non-graduates to undertake full-time study other than

to obtain a degree or diploma.

Postgraduate scholarships and study awards now

Postgraduate scholarships and study awards now cover only postgraduate study at universities or other recognised academic institutions.

Officers interested in the "work experience" or specific investigation type of scholarships previously granted under these categories must now apply under the Development Training category.

Undergraduate scholarships will continue to cover the completion of a degree or diploma at an Australian university or college of advanced education.

Application forms and further detail outlining the conditions and benefits of the awards, are available from the Training and Development areas of the Headquarters and State Administrations.

All applications must be lodged through the State Administration (or Headquarters Administration for Headquarters staff) in sufficient time to enable Undergraduate scholarship applications to reach the General Manager Personnel at Headquarters by October 6, 1978.

Postgraduate scholarship Study Award and

Postgraduate scholarship Study Award and Development Training Programme applications should reach the General Manager Personnel at Headquarters by October 27, 1978.

## THE CASE FOR BETTER MAINTENANCE

Technicians Attache Case, tool No 38, Serial/Item 399/2, that schoolbag-like vade mecum of field maintenance staff for the past 39 years, has yielded at length to a slick new item that wouldn't seem out of place in the hand of an ambassador or a business tycoon.

Not only is it a smart looking job, but it has been carefully designed inside for functional efficiency and users have been invited to forward suggestions for further improvements.

As the user area, Customer Networks and Equipment Service Section, were invited to comment on the case with regard to retaining the present design or recommending a new case.

A new case was either available off the shelf or of special design to suit our own requirements.

#### OPPORTUNITY

Here then was the op portunity to completely depart from the old style and meet present and future maintenance requirements both functionally and in appearance.

Technical specifications had to be prepared which would form part of a schedule to be distributed for open tender. During field enquiries a case, already being used in a number of areas in at least two States, was used after further improvement, as the basis of the specifica-

The assistance and contributions received from the field are gratefully acknowledged. A personal thank you goes to Duncan McDonald, Bankstown Operations Sydney, for his interest and continued in-

volvement. It was the intention to conduct a field evaluation in all States of 100 cases prior to finalising the design and commencing full production but this was not possible due to urgent requests for this item on each State Supply

A NSW company, Stamford Industries, was awarded the contract and has supplied 960 cases on the first order.

Those areas who contributed to the technical specifications have already field evaluated and commented. Further comments, good or bad, are invited until December 1978 from all staff who come into contact with the new case.

Some of these com-ments could lead to improvements in design and quality. Comments can be written or telephoned to Trevor Kuskey, Network Performance and Operations Branch, Customer Networks and Equipment Service Section, 3rd Floor, 518 Little Bourke Street, Melbourne 3000. Melbourne 3000 Telephone: 03 630 5149.



Tech Henry Winterbottom (Lonsdale Fault Despatch Centre, Melb.) models the new tech's attache case.

A quick and resourceful Telecom operator on the main Hobart switchboard was recently responsible for the arrest of an obscene telephone caller. She kept a man talking while the call was traced to a public phone box. The man was still talking to the operator when Telecom security men arrived and arrested

## Child Care Centres consideration

The Telecom Consultative Council (your joint staff - management body) is investigating the question of the provision of child care facilities. A survey is being undertaken to find out the extent of the requirement for child care centres, now or in the near future.

Such centres would be run in accordance with State health authority conditions and regulations, on a non-profit basis a committee of management, which may consist of parents, Telecom and union representatives, and the staff of the centres.

Employees using the centres would contribute to the running costs.

Child care is the responsibility of both parents, and accordingly any facilities would be available to parents of either sex, including single

All staff working in the

Melbourne metropolitan area have been invited to participate in this survey, and a questionnaire has been distributed for completion and return no later than 29th September to your staff clerk or direct to Mr Livingstone, secretary, Mr Livingstone, secteday, Telecom Consultative Council, c/- Industrial Relations Department, Telecom Headquareters.

Completed question-naires are to be returned through the normal internal clearances from your work area.

## TELEGRAMS RISE AGAIN

Because of continuing losses on telegrams, new delivery charges will be introduced as from 1 October 1978.

The charge per word will remain fixed, but the delivery by messenger charge will rise from 80 cents to \$1.50 and delivery by telephone or to a telegraphic code address will cost 50 cents.

Delivery by telex or mail will be free. Where long distances are involved, delivery by mail could be attractive, as telegrams could be lodged late in the afternoon and delivered in the first mail next day.

Managing Director, Mr. J. use the world over. In H. Curtis said that during 1977/78 the public telegram service cost \$72m to run. Only half of these telegram senders.

The subsidy paid by telephone customers to maintain the telegram service was \$9 for each telephone service.

Efforts will continue to

Announcing the vice, Mr. Curtis said, but Australia reducing telephone, telex and fac-

changes, Telecom's telegrams are declining in simile transmission charges have made ped by 13% in 1977/78 and telegrams an unattractive way of sending a message.

Telegram traffic dropwill show a similar decline

Telegrams average 22 words in length and the following table shows a comto run. Only half of these costs were recovered from depending upon the mode of delivery:

DELIVERY	PRESENT	NEW	PERCENTAGE
METHOD	CHARGE	CHARGE	INCREASE
Messenger or fastest			
available means	\$4.10	\$4.80	17%
Telephone or code address	\$3.30	\$3,80	15%
Telex or mail	\$3.30	\$3.30	NIL
A 45 A 4 A 4 A 5 A 5 A 5 A 5 A 5 A 5 A 5			

Efforts will continue to reduce the cost of the ser-duce the cost of the ser-

## 'Technology Creates Jobs'

Technology and Employment in Telecom Australia was the major theme of an address by Deputy Chief General Manager Jim Smith to the FYEOP\* Conference at Headquarters last month.

Mr Smith emphasised that new technology creates jobs — "the other side of the debate we hear too little about". Technology, he said,

• Helps us keep charges down and demand up that increases employment

 Helps us provide new services and facilities at reasonable prices — that increases employment Increases development work — that increases

employment.

Mr Smith said:

"Firstly, technology is an indivisible part of telecommunications.

Telecommunications cannot develop without technology and technological change.

"Secondly, Telecom introduces technology in a planned way. There is no lack of consulta-



WA Telecom engineers don't intend to be caught unprepared by future cyclones. Here at Bulgin Rock near Meckering they practice erection of zip-up microwave masts to replace damaged towers.

Arrow indicates men on Jury mast.



Deputy Chief General Manager Jim Smith

tion with the staff involved and there is no lack of consideration of the personnel issues involved. "Telecom is planning

its way into new technology so as to avoid abrupt staff reductions and social disruptions.

'There are long lead times involved with new technologies and change usually takes

place progressively. "With the healthy business growth in telecommunications

forecast in the well circulated Corporate Plan and Telecom 2000 there is no significant decrease in staff predicted and there will almost always be job opportunities in other areas of Telecom.

"The third point is this. Technology is one of the most important ways of improving efficiency, and the community expects that.

#### DEPUTY CGM

"Slowing down technological change in Telecom Australia can push our costs and our charges up, not down. Higher charges reduce demand and reduce staff needs.

"One of the main reasons our demand is strong is because our charges have not been increased.

'Without the increase in demand since 1976 we would want something like 8000 less installation, maintenance and support staff.

"I believe strong demand for service, stimulated by our keeping prices down through efficiency, will do more for employment levels in Telecom than any other factor.

"Technology helps us keep charges down and demand up - that increases employment. Technology helps us provide new services and facilities at reasonable prices that increases employ-

ment.
"Technology increases development work - that increases employment.

#### UNEMPLOYMENT COMMUNITY ISSUE

"Unemployment is the real community issue to be tackled and that is a national one Unfortunately on many occasions it is regarded as a political issue by

the parties and by their usual supporters instead of a crucial human and social issue warranting the atten-tion of the best brains on all sides to explore solutions.

"These must be sensible solutions in both a macro and microeconomic sense in that they do not reduce overall demand or increase prices.

"They must be sensible in an industrial sense in that while it seems to me inevitable that some traditional union views about work must change if more employment is to be generated we also need to remember that the employed, who are the ones potentially af-fected, outnumber the unemployed by something like 20 to 1 and their views must be given considerable weight. "Telecom can do

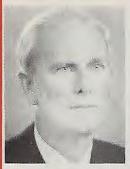
relatively little on its own except:

avoid increases in basic charges, and where practicable reduce them;

• introduce new services, extend existing ones, and promote their use within the limits of its resources:

• install equipment which will control costs and provide extra facilities.'

\*FYEOP is an acronym for Telecom's Five Year Engineering Programme. — Ed.



Mr Schmidt

Redesignation of his posi-

tion came about because it

is envisaged that the NSW

State Manager will be more

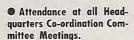
actively involved in the

Headquarters management

through:

## DUTIES EXPANDED FOR NSW STATE MANAGER

From now on, the State Manager for New South Wales will also be the Assistant Chief General Manager of Telecom Australia. Current State Manager Bill Schmidt is the first to hold the new position.



● Inclusion on other appropriate top level Headquarters Policy Committees.

Representation of

Telecom Australia in Sydney, on certain national matters.

On day-to-day matters relating to the control of State operations, existing arrangements will continue to apply i.e. the Deputy Chief General Manager (Mr Jim Smith) will continue to act on behalf of the Chief General Manager (Mr Bill Pollock) in directing and coordinating major State activities and the allocation of resources between the



Mr Pollock

States to achieve service, efficiency and financial targets.

The additional role of the State Manager, New South Wales will not alter this arrangement.

# Telecom's shop list: \$315 million

The table below shows Telecom's likely shopping list for 1978/79. Over 90% of the equipment will be supplied from Australian industry. The final ordering pattern will be determined during the year in the light of resources available.

	Value
	1978/79
	\$m
Exchange Equipment	74.0
Underground Cable	43.0
Telephones	24.5
Radio Relay Equipment	3.7
Conduit	11.5
Long Line Carrier Equipment	8.0
Channel Modems	3.2
Mechanical Aids	8.5
Data Transmission Equipment	2.5
PABX Equipment	5.0
Switchboards (Cordless and Cord Type)	6.9
Teleprinters and Telex Equipment	9.5
Radio and Line Transmission Test Equipmen	it 4.7
Switchboard Cable	2.3
Multi-Line Telephones	13.8
Loading Coils	0.8
Power Rectifiers	2.0
Public Telephone Instruments	8.3

#### DEATH BENEFIT REPORT

The Public Service Death Benefit Society of Queensland which numbers a considerable proportion of Telecom workers in its 4366 membership has just issued its 43rd annual report which shows:

which shows:

Families of 45 contributors received money within 24 hours of the member's death. Included was the family of a lineman killed in a trench cave in

- Assets topped the \$500,000
- The first real estate invest-

mark

- ment was made in Brisbane

  Membership was extended
  to all public servants
  throughout Australia
- throughout Australia

  All bonuses were increased by 10%.

The Society has only one aim

to provide instant financial
assistance to next of kin on the
death of a contributor.

# All Bananalanders to be trained as defensive drivers



The first group of Telecom officers from Brisbane has completed a defensive driving course as part of Telecom's national accident prevention program. State Manager, Paul Dubois, and Chief State Engineer, Doug Baker, were among the 35 participants who received certificates for completing the course. The course was held over four weekly sessions of two hours each and was conducted by Queensland Road Safety Council field officer, George Goddard.

Chief Accident Prevention Officer, John Florence, attended the Brisbane course and is co-ordinating the program which aims to reach all Telecom staff in Queensland. He said it would be about two years before all of the state's 5000 Telecom employees had completed the course. The Queensland Road Safety Council is conducting the courses with full support from Telecom management.

• Pictured during the Brisbane course are (from left) driver, Ted Carlow, Metropolitan Central External Plant Manager, John Harding, and Queensland Road Safety Council field officer, George Goddard.

## **BLOOD** WORTH

Telecom Australia Headquarters personnel have enthusiastically supported "Operation Lifesaver" — a campaign to replace a huge quantity of blood plasma recently lost by the Victorian Red Cross Bloodbank in a coolstore fire.

Within hours of the announcement of Telecom's support, 260 staff had volunteered to donate blood and names were rolling in so well that the previously largest corporate donation of 400 volunteers was expected to be easily eclipsed.

The early response has been so good that the visit of the Red Cross Mobile Unit has now been extended to two days — October 5 and October 13 at 199 William

Still more are needed and you can volunteer to help this most worthy cause by telephoning:

FIRST AID SISTER on 67 2204 NOW. About a week before the Mobile Unit's visit, you will be given a form to fill in and instructions when and where your blood donation will be taken. It is totally painless experience. "BLOOD IS LIFE ... PASS IT

### Personnel Manager dies

Chief Manager, Personnel and Industrial Relations WA Hal Roberts died early this month after a short illness.

Hal joined the department as a clerk in Hq Melbourne in 1938 and was promoted to WA as Asst Supt (Education and Welfare) Personnel

He became head of Personnel Branch in 1966 and when Telecom Australia was established in 1975, he was promoted as Chief Manager Personnel and Industrial Relations.

One of Hal's main interests was his membership of the Post Tel Institute. He served as a councillor for more than 25 years.

## compact

This PABX, smaller than a 3-drawer filing cabinet does not require an equipment room can be located in the office area. Tt has no switchboard to tie a receptionist to a desk, Incoming calls can be answered from any phone, by anyone, with calls speedily directed to the right person. It is claimed office efficiency is increased with internal and external calls dialled day or night direct from extensions with costs strictly controlled through selective trunk and local barring. The mini PABX has provision for 26 extensions. It is an STC product.



## DISASTROUS MUSEL

An early evening fire on Thursday, September 7, destroyed the Telecom Museum in Perth. The first floor of the museum premises, shared by Australia Post, was gutted leaving three years work by curator Doug Gimm in ruins.

Many of the items were irreplacable and the loss will severely hamper Telecom W.A's plans to mount extensive displays throughout W.A. in 1979 when that state will celebrate its 150th anniversary.

One of the items, of which only a charred handpiece was found, was part of an early experimental telephone similar to that developed by Alexander Graham Bell.

Ironically, the museum was to have been transferred to new and larger premises by early 1979. That site is fitted with an automatic extinguisher

The building caught fire between 4.30 and 6 p.m. when the blaze was spotted. Firefighters were hampered by insufficient water from the fire hydrants. Two water trucks were brought in to join seven fire tenders.

## t. Gam's Good Sams kids' telethon



District Telecom Office Mt Gambier SA recently gave its support to a telethon appeal for the Children's Leukaemia Cancer Foundation which attracted 11,000 telephone calls and a donation total of \$32,000. The telethon was run by the South Eastern South Australia and Western Victoria Apex Clubs in conjunction with television station SES8 and Radio 5SE and had a listener/viewer potential of 70,000 people. Telecom assisted with temporary exchange services, land lines, display material and T-shirts for the telephone operators PLUS the services of 14 Telecom staff members who worked voluntarily on donation reception and general organisation over a period of about 60 hours. In the photo, Helen Martinella and Juanita Flower (left) of DTO Mt Gambier staff with showbiz personalities assisting



L-R D. Baker, T.A., E. Williams T.T.O., and T. Barnes Technician, listen as Ron Honnor S.T.T.O., explains some of the hazards in the use of petroleum. Ron of Country Installation East, Victoria, uses posters such as 'Spotlight-on-Safety' produced by the H.Q. Accident Prevention Section as the theme for safety presentations to staff in the depot. He produces panels such as those illustrated and places them in strategic locations to foster in staff the attitudes of safety consciousness

## QLD. EXPERIENCE HELPS TANZANIAN TELECOM PROBLEMS



• Pictured during cable jointing demonstrations in Brisbane are (from left) Tanzanian businessman, Mr R. Mehta, senior purchasing officer, Mr H. Abeid, executive engineer, Mr S. Kyaruzi, and senior Telecom engineer, Mr Leon Gregg.

Two representatives from the Tanzanian Post and Telecommunications' Corporation recently completed a fact-finding tour of Telecom facilities in Brisbane. They were Mr S. Kyaruzi and Mr H. Abeid and were accompanied by Dar es Salaam businessman, Mr R. Mehta.

Mr Kyaruzi is executive engineer (long and short term planning) with the corporation and Mr Abeid is senior purchasing officer with the corporation's external telecommunications department.

The three men visited Fortitude Valley telephone exchange and Telecom's mechanical aids workshop, at Bulimba, during their Brisbane tour.

Assistant superintending engineer for the metropolitan and South Queensland areas, Leon Gregg, hosted the visitors' Telecom inspection.

The Tanzanians visited Brisbane to seek technical advice from Telecom on upgrading Tanzania's telecommunications network. Their tour included inspection of gas pressure systems and equipment at the Fortitude Valley exchange.

Mr Kyaruzi was particularly interested in Telecom's cable jointing equipment demonstration at the mechanical aids workshop.

Tanzania is a fast developing country and telecommunications engineers there are faced with problems of how to provide and power telephone services in remote areas.

"We have a similar

situation in Queensland and were able to discuss methods of solving these problems through such systems as the radio con-centrator," Leon Gregg

"The representatives were also interested in Telecom's use of solar energy technology in the field.

"Tanzania's climate is similar to that of North Queensland where Telecom is now constructing one of the first major telecommunications systems in the world to be powered by solar energy.

"Other discussions centred on material purchasing procedures and methods of local telephone cable distribution," he said.

The three Tanzanians spent two weeks in Australia and visited Sydney, Canberra, Newcastle, Grafton and Brisbane.

## **Emergency 4:** Your Accelerator



You ease back on the pedal to reduce speed and nothing happens, it's stuck.

The remedy is easy. Turn off the ignition and brake to a stop - but there are some problems.

- 1. If the car has power steering, it may be hard to steer as it comes to rest.
- 2. Power brakes will lose some pressure, so reduce speed without pumping the pedal and be prepared to use more leg-power if the pressure fades
- 3. When switching off, be careful not to lock the steering if it has an in-built steering lock. Most cars do these
- 4. It's best to leave the car in gear' after switching off, whether it's an automatic or a manual gearbox.

## **ABORIGINAL EMPLOYMENT**

Telecom Australia is participating in the National Employment Strategy for Aborigines, a scheme an-nounced by the Government during 1976 which aims to relieve serious unemployment levels among the Aboriginal population. Implementation involves both public and private sectors.

As part of its contribution, Telecom intends to increase the number of Aborigines recruited through normal processes and provide training under the

Mational Employment and Training Scheme.

Telecom currently employs 120 Aboriginal staff throughout Australia according to a recent survey. Commenting on the survey results, the General Manager-Personnel, Mr Jack Ahern, said 'Positive achievements are expected to result from the new measures being introduced and to be reflected in future annual surveys of Aborigines employed by Telecom.

For more information contact Ms Del Stitz on (03)

## 100 years late?

J. E. EDWARDS'S



AUSTRALIAN LOUD-SPEAKING Combination

TELEPHONE.



AND NOW THE LOUDSPEAKER, we headed a story in last month's Telecom as if we were announcing something pretty novel to the world. We were just a century late as the advertisement herewith proves. But who was J. E. Edwards and how did his combination Australian Loudspeaking Telephone fare after it was introduced in 1878? Forward historical telephone buffs with the facts

## AND NOW ... THE LOUDSPEAKER

Samples of a new fluorescent red safety jacket for use by staff working on or near roadways have been distributed to all State Administrations for comment. Its features include:-

- Strips of a lime yellow material that turns brilliant white under illumination have been sewn onto the jacket to increase the visibility and thus the safety of field staff during dull or overcast weather and
- It can be worn comfortably over work clothing
- Shoulders in the jacket reduce the chance of skin complaints due to sunlight exposure when it is worn over the skin

If the jackets are accepted by State Administrations, action will be taken to provision sufficient jackets for issue of all staff working on or

## NEW PART—TIME **COMMISSIONERS**

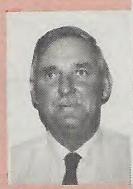
### Clive Quartermaine

The new Commissioner from Queensland is Mr Clive Quartermaine, of Laura, in Cape York Peninsula. Formerly a well-known Queensland businessman, he moved about five years ago to run a cattle property with his wife and two eldest sons — Cameron and Andrew.

The property, to quote Mr Quartermaine, is "all around Laura", which is inland from Cooktown. Mr Quartermaine said he had always been interested in raising cattle and had chosen Welcome Station for the family venture.

Before his move up to

Laura, Mr Quartermaine was an executive with the Shell Oil Company of Australia for 241/2 years and with Bandag Manufacturing Pty. Ltd., at Wacol, Brisbane for three years. Bandag is engaged in tyre-making.



Mr Quartermaine is an executive member of a committee advising the Administrator of the Cook

The administrator is appointed by the State Government.

Mr Quartermaine said that as a businessman, and now as a primary producer, he had taken a keen interest in problems of telecom-

### Peter Nolan

Peter Ian Nolan, ACTU Secretary since last year served an apprenticeship as a machine compositor in the printing industry and acted in various union positions as a part-time officer until 1965 when he was elected secretary of the Printing and Kindred Industries Union, Tasmanian Branch.

Then followed:

1970 — Appointed Research Officer Victorian Trades Hall Council

1971 — Elected Industrial Officer Vic. THC

1972 — Elected Assistant Secretary Vic. THC

1975 — Elected Assistant Secretary, ACTU.

1977 — Elected ACTU Secretary.

Mr Nolan has represented the Australian Trade Union Movement as a delegate to the International Labor Organisation Conference 1973-74. He is a foundation member of the Australian Council for ACTU training and of the Victorian Council. He is currently a member of the National Council.

A group of eight Chinese scientists last month showed keen interest in Telecom Australia's solar powered telecommunications developments during a visit to the Telecom experimental field station at Maidstone (Vic.). The Chinese group, all concerned with solar energy utilisation came to Australia under a study exchange agreement between the Australian Academy of Science and the Academia Sinica of China. Senior Telecom Engineer Arnold Holderness here through interpreters, answers questions on the transportable solar power plant which was prototype for production units now in use in Central Australia and

other outback areas. The Chinese party included: LEADER, LO WEI-CHIU. Professor, Deputy Head of Power Department, Shanghai Mechanical Engineering College. Speciality: Solar thermal electrical power generation. KUNG PAO. Responsible member, Solar Energy Laboratory, Peking New Technique Institute. Speciality: Solar collector. CH'ENG JU-KUANG. Deputy Laboratory Head, Shanghai Institute of Chemistry and Technology of Ceramics. Speciality: Spectrum selective material. LI TSUNG-NAN. Responsible member, Solar Energy Laboratory, Kwangchow Energy Resources Institute. Speciality: Solar saline water convertion. TU TZE. Lecturer, Energy Resources Laboratory, Tientsin University. Speciality: Solar collector. CHANG CH'I. Lecturer, Energy Resources Laboratory, Tientsin University. Speciality: Solar thermal electrical power generation. YAO YUNG-CHING. Scientist, Institute of Mechanics, Academia Sinica, Peking. Speciality: Solar collector. NI SHOU-YAN. Scientist, Institute of Electrical Engineering, Academia Sinica, Peking. Speciality: Solar thermal electrical power generation. SHAO MING-HSIN. Interpreter, Foreign Affairs Bureau, Academia Sinica, Peking.

## RAINING COURSE FL



Pictured back row, from left. Dr. Durand; Del Stitz (Recruitment and Selection); Joan Mc-Callum (network Performance and Operation); Carolyn Gardiner (Customer Services Dep.); Dianne Mogg (Customer Services); Helen Goldsmith (Buildings Branch); Pam Maple (Customer services Dep.); Michael Robinson (Training & Development Branch): Front row, Collen d'Offay (Drafting Policy and Development); Marie Monagle (Customer Services); Margaret Jones (Customer Services); Judy March (Customer Services).

The Personnel Department's Training and Development Branch recently conducted an Achievement Motivation Training Course for Headquarters staff.

The course is based on

US research into the concept of Achievement Motivation and, although the concept is not new, this is one of the first courses of this kind conducted in an organisational setting in

Participants were

presented with the tools to realistically define and achieve career and life goals, therefore benefiting the person's own the person's own development as well as that of Telecom.

Thus this new training approach using the achievement motive concept has the potential to be used with management, base grade administrative staff, the handicapped or virtually any other identifiable group within the group wi Commission.

As part of the course participants were provided with the opportunity to determine definite career goals and it is intended that follow up interviews will be conducted to consider progress.

Dr Douglas Durand, who has conducted research into this type of training in the USA, ran the course.

#### TELECOM TOM......By DAAG



Telecom Australia has published a booklet to acquaint Local Government, Statutory and Planning Authorities with its technical needs in relation to sites and buildings.

Here are some extracts from the booklet which is issued by the Buildings Branch, Engineering Department, HQ.

To provide essential public service in a way which will be of maximum benefit to the community, we rely on the co-operation of Local Government and Statutory Authorities in the development of the network through the purchase of sites and the construction of buildings

Sites and buildings are required in the right locations and at the right time to satisfy the expanding demand for telecommunications services. Not only is the demand for existing services expanding, but a variety of new services, such as improved data transmission, radio paging and confravision services are presently being implemented.

### Planning 20 vears ahead

Telecom Australia must plan site acquisitions to meet requirements about 20 years ahead of the date of initiation. Once a suitable site has been purchased, a further 2 years or more are required before construction can commence on a telephone

exchange building.
Installation and testing of the equipment must then precede the date by which effective service can be given to the customers involved.

Delays in acquiring a site, or in obtaining an expression of opinion from local authorities will inevitably retard provision of improvements in the

standard of telecommunications services.

Close liaison between local planning authorities and Telecom Australia on future developments which involve telecommunications services is recognised as being in the best interests of the community concerned.

When selecting sites, acquiring land and developing a building proposal, Telecom management gives regard to possible long-term requirements as well as to immediate needs.

Allowance must always be made for future building extensions (particularly of telephone exchanges) where, both for technical and economic reasons, it is necessary to extend facilities on the same site as the initial building.

These extensions, however, may not need to be

built for up to 20 years. Every effort will be made, when submitting plans for an expression of opi-nion, to indicate the general nature of possible future extensions.

#### Harmony with environment

Telecom does all it can within the constraints of operational parameters and cost to ensure that buildings will be harmonious with the environ-

Our planners and construction agents co-operate closely with local planning authorities, statutory bodies and the Department of Environ-

ment, Housing and Community Development.
Required procedures under the Environment
Protection (Impact of Proposals) Act of 1974 are
scrupulously observed in all development

proposals.

The Community Telephone Plan for Australia was adopted in 1959 as the basis for the development of extended Subscriber Trunk Dialling (STD) facilities and an integrated telephone system for the whole nation.

In Australia, with its great distances and parallely and the statement of the statement of

ticular distribution of population, four classes of

switching centres are used to take the maximum advantage of the automatic switching system. Such centres are classified in order of their posi-tion in the community network and, invariably, incorporate a number of subscribers lines connected to the local area in which each is situated.

## **AUTHORITIES** AND OURSELVES



These classifications are:

a Terminal Exchange which performs no through-switching of inter-exchange circuits.
 a Minor Switching Centre which switches links

to Terminal Exchanges only.
a Secondary Switching Centre which switches

a Secondary Switching Centre which switches links to Minor Switching Centres and also, where required, to Terminal Exchanges.
 a Main Switching Centre which switches links between Secondary Switching Centres and also, where required, Minor Switching Centres and Terminal Exchanges.

Automatic telephone exchanges vary in size depending upon the nature and size of the community served, as well as the classification of switching order in the national network.

Exchange buildings range from the smallest rural equipment capacity of 90 lines to the largest multi-storey building accommodating many thousands of subscribers lines and associated network switching equipment.

### No waste pollutants

Exchange equipment is quiet in operation and does not generate waste or pollutants. The smaller exchange buildings are unstaffed on a permanent basis and even the largest multi-storey buildings pasis and even the largest muti-storey buildings require relatively few staff in comparison with a similar sized commercial establishment.

Telephone exchange buildings must be specially designed to meet the precise requirements of modern switching equipment. These include:

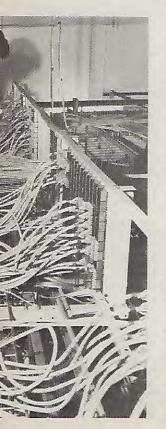
• A floor to ceiling height of up to 4.8 metres. The height of equipment racks is governed by

height of equipment racks is governed by operational and economic factors. • Adequate structural strength to support the



### New **Telecom** booklet









heavy equipment (9.5 kPa).

A controlled internal environment.

Provision for an emergency power supply.

Multi-storey buildings are not favoured for a

variety of technical reasons, but may have to be provided if sites are limited. The ideal shape is a cube with windows limited

to about 10% of the wall area to reduce solar gain. Buildings are planned for horizontal rather than vertical extension wherever possible. This minimises interference to working equipment during building operations and reduces the structural

cost of additions when required.

The design and siting of the original building is, therefore, of particular technical importance.

A telephone exchange should be as near as possible to the cable reticulation centre (copper-centre) of the area it will serve in order to make efficient and economic use of very costly external equipment, such as ducts and cables.

### Prestige sites not required

This often means a site in the town centre. Prestige sites, however, are not required; back land is preferable provided the distance of cable routes are kept short.

Sites adjacent to industrial developments (such as chemical works, or industries producing smoke or dust) are not suitable because such installations may severely affect the working of exchange equip-

Good vehicular access to the exchange is important to facilitate deliveries of stores and equip-

Although infrequent, such deliveries are made by heavy transport vehicles which need room to manoeuvre.

Although telephone exchange buildings are designed to meet growth requirements for a period of between 10-20 years, ideally, sites should be large enough to provide for accommodation needs for the next 50 years development.

The most economic and efficient method of meeting future growth is to extend telephone ex-change buildings on the same site as the initial development or on an adjoining site.

The provision of a new building elsewhere involves heavy expenditure on ducts and cables which could be as high as \$1,000,000 (on current prices) for every kilometre of separation.

In addition, common exchange equipment must be duplicated at the new site which significantly increases the size and cost of the development.

The booklet is illustrated with attractively colored photos showing the various types of building Telecom Australia needs. Some are reproduced here in black

#### IN OUR PHOTOS:

Top: Telecom Operations Depot, Northcote, Vic. A TOD is a base for staff working in the surrounding district installing customer line plant and terminal apparatus.

Lower: We must have training establishments. This is the Technical Training Centre, Manning, WA.

Bottom left: Upper level working area above exchange equipment racks . . . thus need for high exchange ceilings. Top left: A secondary switching centre at Shepparton,

## First Telecommunications Museum opened in Adelaide

Telecom Australia's first "wholly owned" telecommunications museum was opened recently at "Electra House", 131 King William St., Adelaide by noted scientist and former SA Governor Sir Mark Oliphant.

The Electra House ground floor display represents the first stage of a larger project which in the next few years will result in the whole building being taken up with displays of historical items and archival material.

In due course it is intended to devote in-dividual rooms to particular types of equipment including some working displays of telegraph and telephone equipment, and to name such rooms after prominent people who have contributed greatly to the telecommunications art in Australia.

#### **PORTRAIT** OF TODD

One such is Sir Charles Todd, and the centre piece of the Sir Charles Todd room display will be the very fine portrait of Sir Charles which is presently located in the Telegraph room of the present dis-play. We are indeed fortunate to have this fine

work of art to display.

For many years interested staff had been collecting material with an historic interest, but it was not until 1962 when, on the initiative of Mr V. F. Reeves, then Assistant Director Engineering, the collection was organised in

a form suitable for a museum display.

The Museum was originally located in Engineering Building, 42 Franklin Street, but in order to make it more accessible for public viewing, it was relocated in Electra House in March 1976, commencing with a special display to commemorate the centenary of the invention of the telephone.

The building is itself of historical importance. It does not have National Trust Classification, but the Adelaide City Council lists it as a building of historical interest.

#### HISTORICAL SIGNIFICANCE

historical significance to telecom-munications arises from the fact that Electra House was for many years the office of the Eastern Extension Telegraph Company which operated submarine cable transmissions via Perth to the U.K.

The building has a floor dimension of approximately 400 m² with a basement and three floors. There is a mezzanine floor above the ground floor of

area 50 m.
On the Ground Floor, there are displays in three principal categories; telegraph, telephone, and radio apparatus

The First Floor contains many small rooms suitable for storage of historical items. An archival area is about to be established on

this floor.

The Second Floor will be used for display purposes, and a small theatrette/lecture room in

the coming years.
The present lift is not in service since it is an early DC-operated model which, although it has aesthetic and historical value, does not meet pre-sent safety standards. It will be preserved as a static display.

The telephone section includes apparatus dating from early hand-made items to current models including some public telephone instruments. Early instruments include an Ericsson "skeleton" an Ericsson "skeleton" telephone of 1892 and a magneto desk set of 1904 from the Central Exchange, Adelaide.

#### **TELEGRAPH** SECTION

The telegraph section includes magnetic telegraph equipment similar to that used on the first telegraph line in South Australia, that is Adelaide to Port Adelaide 1856. There are examples of electric telegraph ap-paratus used on the Overland Telegraph Line to Darwin and on the



Sir Mark Oliphant showed interest in many of the exhibits at the museum, including this early type telephone. Explaining the instrument to Sir Mark is Milton Gooley, retired Telecom engineer.

original East-West Telegraph Line, and a

Telegraph Line, and a variety of other early telegraph equipment.

Of special interest are binoculars, a bible, and riding spurs which belonged to Sir Charles Todd, and recently donated to the Museum by Miss P. Fisher, a descendant of Sir Charles.

The radio display con-

The radio display contains a wide range of transmitting and receiving equipment, including early spark coils, experimental transmitters, crystal sets, early battery receivers, horn speakers, valves and components.

#### EXPERIMENTAL TRANSMITTERS

historical interest include a valve used in the first music broadcast test in S.A. in 1923, a valve used in the experimental transmitter which made the first Australian contact with USA in 1925 and an experimental transmitter used by an Adelaide operator in 1930 to switch on the lights of a house in New York.

Also included in the microwave section display are a few samples of magnetrons including an early NT89 type, one of the first tubes used in centimetre radar during the war. Only 2000 of this type were made.

Others on display in-clude a package magnetron and a modern type used in domestic

Overseas visitors who

have inspected this display have on a number of occasions indicated that in their opinion the display is equal to any they have seen elsewhere in the

A great deal of voluntary effort has been applied by many people in the way of collection of material, restoration and research for cataloguing

Public attendance averages about 70 persons per day excluding school groups with the number increasing as the museum has been enlarged. There has, as yet, been no plan-ned publicity apart from a reference in Tourist Bureau publications and display of our brochure at the SA Public Museum.

#### PLENTY OF MATERIAL

There is a large amount of material and historical records not yet displayed, but plans are in hand for preparation of displays at a pace which is consistent

with availability of funds. The Museum is open to the public 10.30 a.m. p.m. Mondays to Fridays and is staffed by retired Telecom officers. It operates under direction of an internal Museum Com-

mittee.
NOTE: The Hobart Museum is a joint Australia Post-Telecom Australia venture. Telecom plans to establish also in Hobart a substantial museum display of historical apparatus and documents.



Looking at some of the radio equipment. Messrs Al Smythe (Museum custodian), Jack Ross (Supervising Engineer, Radio) and Len Cooper (custodian)

### NELL ERA ENDS

An era bas ended for Queensland telephone operator, Mrs Nell Sherlock, of Borallon, a small settlement about 30 km west of Brisbane.

Mrs Sherlock, 74 has operated the manual switchboard at Borallon for the past 44 years and recently retired follow-ing conversion of the exchange to automatic

Borallon is a fastdeveloping outer suburb of Brisbane's satellite city, Ipswich, and the new \$240,000 automatic exchange there now has about 90 customers.

It was one of the few remaining manual ex-changes in the Ipswich district.

Mrs Sherlock handled about 60 calls a day during the last few weeks before cutover. "I'm in very good health and I think it's because the exchange kept me young," she said. "I didn't know all the

callers' faces, but I knew their voices."

Mrs Sherlock first began working at the switchboard in 1934 when she married and moved to Borallon. Below: Ever smiling Nell.



## TORRES STRAIT

Work is proceeding satisfactorily towards establishing a UHF/VHF radiocommunications network to compet 12 islands in the Torres Strait into the Australian National Network.

This work was initiated following receipt in December 1977 of a Letter of Intent from the Department of Aboriginal Affairs requesting work to proceed on the basis of their contribution of the order of \$750,000 towards establishment costs and \$10,000 per annum towards maintenance costs for the first two years of operation.

The network will comprise four bops of multi-channel (12/24) UHF radio links connecting single channel VHF links from individual subscribers back to the Thursday Island Exchange. Solar power systems will be used at the outlying stations but diesel plant will be employed at the inner islands to meet the higher power downers.

meet the bigher power demands.

Contracts have been placed for the antenna support masts and the VHF single channel subscriber links, and a Tender Board recommendation has been prepared for the multi-channel links. Over half the diesel power plant has been delivered and the solar power equipment will be ordered under a schedule to be issued.

Commissioning of the multi-channel systems is expected for March 1979 with overall completion planned for June 1979. The total cost of the project is of the order of \$800,000.

## **OUTPOSTED TELECOM STAFF** No. 2: Tony Deren



Tony Deren supervises trainee radio technician Rino Poka of Marshall Lagoon,

## RESOURCEFUL TONY INVENTED, IMPROVISED

Tony Deren brought a bush practicality and inventiveness from maintaining telephone exchanges in the wilds of Papua New Guinea to helping to install and maintain the first solar energy array to appear on that country's mountain tops.

Tony was seconded from Telecom Australia (then the PMG) in Geelong, in 1967, for a two-year contract, maintaining outstation telephone exchanges which were mostly Rurax uniselector exchanges.

Not long after he arrived, Papua New Guinea's Postal and Telecommunication Services decided to install crossbar exchanges, a project which involved Tony in four years' work all over the country.

Along with the installation of the new exchanges he continued to maintain the Ruraxes until they were replaced.

At the end of four years, Tony's expertise on Rurax exchanges was put to good use in the Department's Telecom Planning Division Laboratory, where he built a mini-Rurax from discarded Rurax exchanges.

This mini-Rurax, a small single cabinet exchange, has been operating in Bereina, in the Central Province, since June 1977. Its installation saved the Department 75 per cent on the cost of installing a conventional exchange.

It was in the laboratory that Tony found his niche. There he became involved in bringing solar energy into use in the depart-

He assisted Gus Suarez, the engineer who has pioneered the use of solar energy for telecommunications in PNG, in building the first solar array to power a microwave repeater station in PNG.

#### NO MAJOR **PROBLEMS**

The plant, a P&T designed array charging Nicad batteries, was commissioned at the Mount Nambamati microwave repeater station in June 1976. It ran for 12 months without any major problems, proving the project a going concern.

As a result, Postal and Telecommunication Services are now installing solar powered microwave communication systems and converting existing repeater stations to solar power.

The first solar-powered microwave system in PNG will connect Port Moresby to Alotau, on the eastern tip of the Papua New Guinea Mainland, by telephone. It will be one of the first solar-energypowered systems to operate in the Southern Hemisphere.

#### READINGS **ANALYSER**

Tony's laboratory work has not been confined to solar energy research. His latest project is to build a processing machine to analyse telephone meter readings and send the analysis to a computer, which will in turn make out accounts and bill subscribers.

This machine will have for its base a microprocessor on which Tony is already working.

Another machine he has built will soon be in operation in PNG. Designed and built in the laboratory, it is a relay set which will enable village people to have a public telephone connected to the country's STD service.

Tony has now returned to Telecom Australia where he is a Technical Officer (Grade 1) in Sydney.

## NEVER-NEVER **TELEGRAPHIS**

The previously unpublished memoirs of Telegraphist Frederick Goss who served for 24 years in the Northern Territory from 1878 to 1902.

## **PART 9: DALY WATERS** THE UGLY DUCKLING

Settled in our cottage in Darwin we engaged a Chinese boy at one pound per month and his food. He was about fourteen to sixteen years of age. He was a general helper, very clean and polite, and was preparing himself, I think, to become a waiter, or boy at a hotel or on a steamer, preferably the latter. He was honest and conscientious in his work. One day we missed our two boys, Fred and Ern. There was a great 'to do'. The Chinese boy was the most concerned of all. He was nearly frantic, and must have travelled miles, rushing about making enquiries. The kiddies were eventually found on board a steamer at the jetty.

Dan Kell, of the banquet incident, had now been appointed to Powell's Creek. The Darwin Dramatic and Debating Society was rehearsing 'The Merchant of Venice'. I was roped in to take the part of Antonio, which I am quite sure I would have made a hash of, but was saved that calamity by receiving orders a couple of days before opening night, to go to Daly Waters.

l arrived at Daly Waters, 1891, without incident, and almost immediately the Stationmaster, Roach, became ill. His malady was of such nature that he required constant medical supervision, so he was transferred to Darwin.

1 took charge and bade goodbye to assistantship for ever. Having been appointed to the fixed list early in 1890, I was eligible to take over any

#### UGLY DUCKLING

On the Northern Section of the Overland Telegraph Line, Daly Waters was known as the Ugly Duckling. From the Elsey to the North Newcastle, a dis-tance of 185 miles, there was tance of 185 miles, there was only one really permanent watering place. This was No 2 Well, twenty eight miles South of the Elsey. In most years, of course, waterholes would see the 'Dry' through. More than once, though, No 2 Well was the only watering place. Under these circumstances, the two stages of 75 and 80 miles, from the Well to Daly Waters and from Daly Daly Waters and from Daly Waters to the Newcastle waters to the Newcastle, were only undertaken for emergency causes, such as line faults or medical cases, either of which took no account of the lives of men or horses. All other cases had to wait for the raine.

wait for the rains.

Foot travellers headed the list of men in distress.

generally trying to interrupt the line to bring relief. We had many such calls for as-sistance, but I knew of none that succeeded.

that succeeded.

In my own time one man, named Little Coffee, walking from Port Augusta to Darwin, attempted to cut the line, south of Daly Waters, but had apparently left it too late. It was seen where he had tried to climb a pole, and fell, striking his head on a stone, leaving blood and hair on it. He

ing his head on a stone, leaving blood and hair on it. He was dead when the party, who was going to The Katherine, found him.

Another man doing the same journey came to Daly Waters, and I offered, if he liked to wait a few days, to send him with a party who was going to The Katherine, but he declined, as he preferred walking. He went to the Ironstone, 34 miles away, and there was no water.

He went on to another

He went on to another waterhole in the Birdum, still no water, and a third with a like result, so he gave in, crawled under a bush and died. Had he gone to the next hole, he could have got water.

#### BOTH DIED

Two others travelling in opposite directions, met about midway and tried to persuade

each other to turn back, neither would and both died. Of course they could not cut the wire to get assistance, that would be almost impossible with their equipment. Their only course was to try

Their only course was to try and break an insulator, either by throwing stones, or climbing a pole and smashing it with a stone.

One man had a mania for damaging the line. I had to send a party out to travel with him to The Katherine to prevent his causing damage. I knew of one man who walked from Port Augusta to Darwin, then turned around and walked back again, and when

asked why he undertook such journeys and such risks, said he was looking for work, yet when I offered him a job, he

when I offered him a job, he had half a dozen reasons for refusing it. I was on and off in charge of Daly Waters, until I left the Northern Territory in 1902 for good.

One of my first acts was to add another boy to the staff. Toby was a boy belonging to the tribe. He had a wife and daughter in the black's camp. I had two official boys for oaugnter in the black's camp.
I had two official boys for whom I received 1/- per day each, Billy and Tommy, to provide them with clothing

I wanted a boy for the house and for my own par-ticular service and Toby was the boy. I had known him for years as a good and trustworthy lad.

#### FACTOTUM

There is an Arab saying that 'the food prepared for two will suffice for three, and the portion for the birds shall be none the less'. I applied this formula to the boys' clothing, and in this case I represented the birds. Toby became my horse boy, road boy, and ultimately nursegirl, washerwoman and general washerwoman and general factotum.
Sometimes during the

Sometimes during the Wet', when we could not get out among the stock or other outside work, we were hard put to it to pass the time. All books and papers had been read and re-read, games and cards tried until all were sick of them.

of them.

Then, one day, something put it into my head that it would be interesting to get a skeleton and assemble, or is it articulate, the bones, and give it a coat of luminous paint, and stick it up somewhere with a spear in the hand.

Even if it was of no use, it would be a novelty and above all it was something to do. I called up Toby, told him what I wanted, and he immediately

became wooden, as I knew he would. He didn't know of any 'bones' that could be made

available.
"Very well," I said, "You get me the bones, unless you can get another boy to get

He thought he might get one in camp and away he went. I was not hopeful of the result, because all natives are result, because all natives are superstitious, particularly with regard to the dead. I was more than surprised when he turned up later and said he had got a boy who would get the bones. The boy he brought to me was a native of Alice Springs who had adopted the Daly Waters' tribe by cunning and bullying.

#### NIGHTMARE

He was a nuisance and a nightmare to them. Several times they appealed to the Station authorities to do something, but what could we do! Binghai was too cunning to fall out with the Station people, for that would have meant his banishment at least. He, being a stranger, ac-

meant his banishment at least. He, being a stranger, accounted for his willingness to supply bones, especially those belonging to somebody else. "Now Binghai," I said, "Can you get me those bones?" "Yes, Boss." "I want them all, no more lose them." "I savvy, Boss. Can I have a pipe, Boss?" "Yes Binghai, when I get the bones. This is a P.O.D. transaction."

transaction."
He grinned and departed knowing he had no chance of

getting a pipe beforehand.
Next day he turned up with
a gunny bag containing the
bones. As far as I could see (I am not an anatomist) they were all there. I had to take risks, so Binghai was paid and was turning away when it oc-curred to me to ask him, "Binghai, did you know this man before he died?"He looked surprised at the ques-tion and said loftily, "Im my brother."

#### UNTHINKABLE

Well, I had to laugh. Of course it was not his brother. If he had brought a brother with him from Alice Springs, the other natives would have known it, and it was un-thinkable that he would carry his brother's bones (if the brother was dead) 800 miles

Still that was not my con cern. Binghai went off satisfied that he had made a good deal, a thought in which

I agreed with him. Now, since I had started this Now, since I had started this thing going, my enthusiasm for the business had abated and was still abating. A lagging conscience awoke and suggested that though this man had had a black skin, his could regist he as white or man had had a black skin, his spirit might be as white, or whiter, than mine. And again was it quite cricket to take ad-vantage of his being a black, to stick him up as a sort of glorified Aunt Sally for any fool to take a cockshy at? I decided it wasn't.

fool to take a cockshy atf I decided it wasn't.
Binghai's alleged brother also was eloquent in his own way in protesting against this tampering with his bones, so I gingerly rebagged him and at night went out and buried him with an unavasesed with him with an unexpressed wish

Contemporaries of Fred Goss on the Overland Telegraph circa 1900. Unfortunately names are unknown.

that he would now rest in

It was only a few months later that the rumour reached us that Binghai had transfer-red his activities to Hodgson Downs Cattle Station, 120 miles N.E. of Daly Waters, where his notions of personal property were not ap-preciated. One day when he had been getting his hand on and uses getting nis nano on and was getting out with his loot, a 450 colt revolver bullet overtook him, and at the same time undertook him, and it is presumed that Binghai's spirit has now gone to what one writer described as that 'turn whence no traveller returns.'

Information came that Lord Kintore, the recently ap-pointed Governor of South Australia would be proceeding to Darwin, and from there travel overland to Adelaide, This, it was under-Adelaide. This, it was understood, to be at the instigation of the English Government.
Everybody became very busy. Stores from Adelaide were sent to each station from Paly Waters southwards, to

Daly Waters southwards, to replenish stores consumed on the journey and to save carry-ing a large supply. Horses had to be broken in to the buggy. Plenty would be needed.

#### GREAT STIR

During April 1891, the party arrived at Darwin. It consisted of His Excellency, Dr. Stirling, and a coachman. Of course there was a great stir in Darwin. The information that the Governor was not delay-ing anywhere or for anything caused some disappointment. One of the reasons for the haste, was that the Governor had to be in Adelaide on a certain date to hold a levee. The time allowed him to do this was exceedingly short.

There were three four-in-hand buggies, and five men

including three drivers. A leader in charge of the travelling arrangements, a police es-cort of one man, and the other whose name I have forgotten, made up eleven all told.

told.

The coachman, brought from Adelaide, drove the Governor's buggy for one day, then admitting his inability to negotiate such roads, resigned and was sent back. A lineman from the line party took over the job, and of course there was no more trouble on that score.

trouble on that score.

There were between forty and fifty horses and the two buggies, apart from that of his Excellency's, to carry the equipment. The leader, Mr Alf Pybus, the trooper and the



two blackboys rode horseback.

I received orders to meet

the party at No 2 Well. I suppose it was considered as a gesture of courtesy for the head of the Station to meet him instead of an assistant, so I proceeded with a blackboy to No 2 Well, 75 miles, and arrived there a few hours before the Vice Regal Party.

Introducing myself I was

before the Vice Regal Party.
Introducing myself, I was kindly invited by His Excellency to join his mess whilst we were travelling together. The mess would consist of the Governor, Dr. Stirling, the leader and myself. I did a good lot of telegraph work. The Governor wished, each day, to know what was being done and said in Parliament, and other important news.

It was clear that the Governor

It was clear that the Gover-nor thought he was roughing it in the wilds of Australia — but, ye Gods, I never had travelled in such a luxurious way before. There was plenty of spirits and wine, but no one, however, had too much.

one, however, had too much. Nothing much befell the party, until it arrived to about sixteen miles from Daly Waters, where there was a patch of Bay of Biscay, which was wet and sticky enough to be difficult and decidedly uncomfortable, and not sufficiently sloppy to free clay from feet or wheels.

#### *'PANCAKE'*

Each step would take up a pancake of this clay, until it tell off by its own weight. The same with the horses, and with the wheels of the buggy it was worse, for in about a hundred yards the wheels would lock with the clay, then it was out with snades. it was out with spades, tomahawks and knives to cut

His Excellency was as handy with a spade as anybody else and bore a full share in the job. When we reached the fourteen mile, however, that sticky trouble ended. From there to the Station was good

oing.

The party remained for about three days to reorganise itself, and then went on to Powell's Creek, but without me. I had managed to dodge the second part. An assistant took my place.

I had been troubled for some time with my eyes, and

some time with my eyes, and Dr. Stirling's advent was too good an opportunity to lose. I therefore got him to examine them, with the result that he Post Office authorities, recommending that I should visit Adelaide to have the eyes attended to, and, coming



from such a source, the certificate produced immediate success, and within a few weeks I was on my way.

In due course I reached Adelaide, and had my trouble seen to, and as I was not otherwise sick, and was not on holidays, I was taken into the operation room at the Chief Office till the next steamer was due to sail.

They forgot all about me apparently, and so I remained there for about eighteen months until Mr Little wanted to know what had become of me, then I got instructions to

me, then I got instructions to be off again.

I had now been promoted to the 5th Class, and was not likely to be shifted from pillar to post as formerly, so I decided to take my wife and family with me.

#### DUPLEX

We left for Sydney to join the steamer "Menmuir" for Darwin. Before leaving Adelaide, however, Sir Charles Todd asked me, "Mr Charles Todd asked me, "Mr Goss, have you had any ex-perience with Duplex?" "No, Sir." "Then you should make yourself acquainted with it. The Darwin line is to be duplexed and your station will be one of the repeating stations, and you will need to be in a nosition to train your. be in a position to train your staff."

Before I went to Adelaide in 1887, I made the acquain-tance of Mr James Crawford, who came over from Sydney via Queensland with a travelling party. He was the owner of Hodgson Downs Cattle Sta-tion, 120 miles N.E. of Daly Waters.

He was on his way out there to manage it himself. He had apparently depended on his companions to see him through to Daly Waters. As they were going to Darwin, they had to leave him to shift to himself from Daly Waters. for himself from Daly Waters.

Being in a fix, he came to me. As it happened, I was able to assist him to go out to his Station. It was a small service on my part, but one that Crawford much overestimated. We became good friends. He was well read and a well informed man. I was always glad to see him come over to us, which he oc-casionally did on telegraph business.

#### BECAME ILL

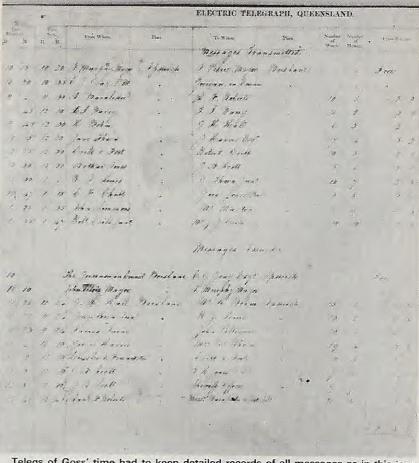
Knowing he would be welcome, he generally arranged to stay for a few days with us before returning. In 1895, just after being made a J.P., Jimmy paid us one of his periodical visits. Now about a fortnight or so before he came, one of the hands, named Charles Harrison, became ill.

Satisfying myself that he

Satisfying myself that he had something more than malaria wrong — malaria and malaria wrong — malaria and other recurrent troubles, we could deal with ourselves for could deal with ourselves for we had a good medicine chest supplied by the Department — I wired the doctor at Darwin and received a prescription. Harrison was German, a surly sort of chap, not liked by anybody, and who never spoke unless spoken to, and then never wasting a word.

A few days later I wired the

A few days later I wired the doctor again and got another prescription. This was repeated on two occasions, the last being when I reported symptoms that had not ap-peared before. The prescrip-tion on this occasion was, in



Telegs of Goss' time had to keep detailed records of all messages as in this journal of the first day of telegraph operations between Ipswich and Brisbane, Qld. April 13, 1861.

effect, that Harrison had only a few hours to live and his friends had better be informed.

I was on duty at the time and received the message, and I was considerably per-turbed by it, because it meant I had to go and tell the sick man he was to die immediatelian news to the immediate-ly, a most unpleasant job. For a while I did not see any way of avoiding it. At length, however, remembering that Crawford was a J.P., I thought I might shove the job on to

#### MEAN THING

Rather a mean thing, I admit, but there you are, so whistling up a boy, I told him to go over to the house and ask Mr Crawford to come over to the office. Jimmy came and I handed him the telegram. He looked as sorry as the occasion demanded.

as the occasion demanded. Harrison was a stranger to him, and he said tentatively, "A bit unpleasant for you this, isn't it?" "For everybody," I said, "But more for you than anyone else." "How so?" he asked in surprise. "Well," I said, "If there were any police here, I should hand that wire over to them and let them deal with it, but as there are not, and you are a J.P. and the only representative of the Law only representative of the Law

here, it seems that it falls to you to take on the job." "Oh!" he said, looking glum, "I don't like it but if con: The same result of that is the position I suppose I must do it. I'll tell you what, Fred, you'll have to give me a spot of rum to set me up."

This I concluded to regard a medical case and got out

as a medical case, and got out a bottle and we had one. He That was about 3 p.m. I was shaking hands with myself on my astuteness, but alas too soon. About 4 p.m. he came

Throwing the wire on the table, he said, "It's no good. I tried a half dozen times, but could not find an opening. I can't do it, and what's more, I am not going to try and that's final. I think it should be your business." And I had to agree with him, but silently.

We had another reviver apiece. Then getting an assistant to relieve me. I went

tant to relieve me, I went around to the bunk houses, assuming as casual an air as possible and smoking. I entered the room, nodded to the other chap and went over to Harrison's bed.

#### MUMBLED

He was lying with his face to the wall and his back to me. I sat on the foot of his bed, and sat on the foot of his bed, and my way of an opening, said lightly, "Well Charlie, how are you now?" He turned himself half around, mumbled something, which might have been anything, and turned again to the wall. This would not do. I had to adopt a more business like fone.

tone. "Now, look here Charlie," I said, "You have been pretty bad for a good while now. Don't you think it would be a fair thing to let your friends know, otherwise they would have good cause to feel hurt to hear from an outsider that to hear from an outsider that you had been ill. If you care to send word to any of them it won't cost you anything, you know.

For a time he said nothing. I was beginning to think the job was harder than ever I thought, when he suddenly turned around and looked

me straight in the face.
"Is that what the doctor says?" he asked me. I took the chance he gave me and nodded. There was no need for words. We understood each other. He did not speak again, but turned to the wall. We never knew whether he had friends or not. No one knew of his ever having received or written a letter. He died that night at 11 p.m., without ut-

night at 11 p.m., without ut-tering another word.

We had no timber with which to make a coffin. We used two sheets of galvanised iron, one under and one over him, having first carefully wrapped him in his blankets, then lashed the iron sheets together.

#### PROTRUDED

Harrison was about five feet Harrison was about five feet six inches in height. The iron was only five feet, so his feet protruded a little, but tidily wrapped in his blankets. I ar-ranged for a grave to be dug and announced that the funeral would take place after breakfast. breakfast.

About 7.30 a.m. we assembled for the function. It was rather an unusual, but impressive scene; all of

the men with hats off, the cof-fin supported on cross pieces on top of the grave, the two Chinese with their arms around each other, a short distance away, and a small group of natives a little further off.

I read the Church of the men with hats off, the cof-

England service and hoped for the best. Now we had two occupants, instead of one, in our little cemetery, both named Charles.

Copyright (To be continued)

## HECTIC CHASE SAVES



Peter Porter with below right, the course of Mr Hallam's terrifying ordeal. Illustrations courtesy Eudunda Courier SA.

A young apprentice Telecom tradesman helped rescue a man from a terrifying 30-minute ordeal during which he was swept through five Adelaide suburbs in a fast-flowing stormwater drain.

Peter Porter, employed at Kapunda, was at Morphettville on a Sunday afternoon when his cousin, Martin Hall, called him to help pull a man from the Sturt River drain.

This is how Peter tells the story:

#### GRABBED SLEEP BAG

"The first I heard about the man in the drain was when my cousin, Martin Hall came to my Auntie's house in Morphettville. After grabbing a sleep-ing bag we drove up to the next bridge but were unable to get down quick enough to help him.

"We made the next attempt where the drain goes under Morphett Road. I grabbed the

bridge with one arm and supported Martin with the other, while he swung the sleeping bag

over the water. "The man, Mr Hallam, managed to swim over but was unable to grab the sleeping bag. At the next bridge I advised the waiting police what was going on.

#### UNSUCCESSFUL ATTEMPT

"They had one unsuccessful attempt with some rope. Mr Hallam was eventually rescued by my cousin who climbed down a steel ladder and swung the sleeping bag into the sleeping bag into the man's path. He couldn't have lasted much longer."

Mr Paul Hallam of Oaklands Park had slipped down the concrete bank of the drain near Sturt Rd., Marion. Martin chased him

from Oaklands Rd. to Saratoga Drive, Novar Gardens where he was pulled from the rushing water and taken to hospital suffering from

## MAN **FROM STORM** DRAIN

shock, exhaustion and minor abrasions. During his ordeal he was swept through five suburbs and under four major roads.

Describing how he tried to rescue Hallam before seeking his cousin's help Martin Hall said he had seen the man in the river and thought he was "some lunatic swimming" until he heard his call for

Martin said he chased him along the river and tried to get down to him but there was nothing to hold on to and Hallam nearly pulled him in. He called Peter to help and tried to rescue Hallam by forming a human chain. This method failed and they succes-sfully used Peter's sleeping bag.





 Brisbane Telecom clerk, Alan Endicott, checks through a script following his selection for a part in the long-running television series, The Young Doc-

Brisbane Telecom clerk Alan Endicott has won a part in the National television serial The Young Doctors through bis 10 years' experience in Brisbane amateur theatre and in repertory circles in Oueensland.

Married with three children, he is a member of one of Brisbane's oldest repertory companies, Villanova Players.

His selection to appear in about 20 episodes of the long-running television acting out a role on stage series is the first step towards expanding bis "With television peracting experience.

"The audition followed my involvement in courses run by the Queensland

Film and Television School," Alan said.

"I decided to branch out and bired an agent. I was selected for the part because I happened to be what the producer was looking for at the time."

Alan bas completed filming and videotaping for his part in the serial at locations in Sydney and on Queensland's Gold Coast. He plays the part

of a solicitor.
"Playing a part before

formances, there's virtually no time to rehearse with other actors — it's all done in private."

#### COMBINED CHURCH SERVICE

The annual Postal and Telecom Combined Church Service and Dinner will be held Tuesday, 17 October, at the Baptist Church, 174 Collins St., Melbourne, at 5.30 p.m. The dinner which follows will begin at 6.30 p.m. at G. J. Coles & Co., 236 Bourke St. Guest speaker will be the former Anglican Archbishop of Melbourne, Sir Frank Woods.

#### 9 : (6 6

Re Telecom No 31 June 1978 page 11, article "His ancestors OK to 1795. How about Yours?

1795 is an early date for arrivals to Australia. However, one comes up with names of ships such as "Supply" January 1788, "Neptune" June 1790, "Salamander" August 1791, "Mary Anne" July 1791, "Experiment" June 1809, "Lady Castlereagh" 1818.

The above vessels carried my ancestors to Sydney in that far off era. As a typical example — I found Elizabeth Russel was born 20th August 1786 in England and arrived in Australia per "Mary Anne" 9th July

Elizabeth was the daughter of Eleanor Davis and she was baptised by Samuel Marsden, (the Rev. Samuel Marsden was claimed to be the first

man to introduce sheep for wool growing purposes in Australia). She mar-ried Andrew Mahon in 1828 at Kurrajong N.S.W. and they had a daughter Catherine born at South Creek N.S.W. Catherine married Joseph Shelton and they had a daughter Esther Ann Shelton born 16.8.1868, Castlereagh N.S.W. who married Francis Riley Gavin Nov. 30th 1889, Penrith N.S.W. To this union my mother was born in 1903, Castlereagh N.S.W.

I have quoted the above ancestor because she was not a convict although her mother was. To me, hav-ing convict ancestors especially when ing convict ancestors especially when this country was being first settled gives me a firm bonding with this great country — but even to-day, a great number of people do not want to hear about their convict ancestors.

Other things that emerged from tracing ancestors was that they were here before Australia was divided into separate States. Parts of my family N.S.W. and Queensland before and after responsible government, and all Governors-General of the Com-monwealth of Australia.

#### LIVERPOOL **SUBURB**

The name Heckenberg is well known in N.S.W. — there is a suburb called Heckenberg near Liverpool named after my great grandfather who was born in Sydney in 1843 (near where Grace Brothers are to-day).

My great grandfather was an early pioneer of Green Valley, his father

was Captain Theodore Heckenberg who had his own fleet of ships and mainly traded in cedar and horses between Sydney and the East and also between Brisbane and Gladstone before Queensland became a state in

My wife and I were invited as guests to the Centenary Dinner at the Brisbane City Hall in 1959 along with others whose ancestors were in Queensland while it was a Colony,

prior to it becoming a State in 1859. Other incresting facts are that Harriett Beatrice Brockmann married Augustus Herbert Heckenberg at Augustus Herbert Heckenberg at Sandgate QId. 1st Feb. 1901. Harrieti's father August Brockmann's name ap-pears in the Brisbane Directory of Pugh's Almanac for the first time in 1870 as the Licensee of the Duke of Edinburgh Hotel,

He held this hotel until 1874 --between 1875-1877 he was licensee of

the West Riding Hotel Queen Stree The name Heckenberg was associated with the Post Office for a Heckenberg was a Post Office employee and then a mail-guard.

I am a member of the 1788-1322 Le-

are— to submit proof the ancestors arrived in Australia the period 1788-1820. spent at least ten years training - family history.

Edgar Hecken Telecom Technology Radio Section Dis-Brisbane, Old. 4000 Ph. 225 8730

## 1000Serves of rhubarb



On August 2, Rostrum Club No. 17 in Melbourne held its 1000th public speaking meeting, 23 years after it was started by a handful of Telecom Australia personnel. Among speakers who traced the history of the club and foresaw a bright future were Bill Pollock (Chief General Manager) and Alan Kellock (Acting Director, Planning Directorate). Bill (right) and Alan (left) were respectively the first secretary and president back in 1955 and are pictured with the current president Philip Woodall. Below, members toast the club's future in champagne.



## Scoa is watchdog for the retired

The Superannuated Commonwealth Officers' Association is a non-political, non-profit organisation composed of superannuated officers of the Australian Government Service. It has been in existence for over fifty years and has branches in all States. The decisions and policies are determined by Federal Conference and management is vested in the Federal Executive on which each State is represented.

The objects of the Association

To defend and improve the pension rights of members by all constitutional means as provided in the Commonwealth Superannuation Acts, and other pension rights of superannuated officers and their dependants.

● To afford opportunities to discuss matters affecting the welfare of members.

The membership is:

● FULL — A retired Australian Government Service officer in receipt of a superannuation pension or the widow of a deceased officer of the Australian Government Service and shall be entitled to a vote at all general and

special meetings.

• ASSOCIATE — An Australian Government officer who is a contributor to the Commonwealth Superannuation Fund and who, on retirement, will become a superannuant. Associate members are not entitled to vote.

● SPOUSE — Any spouse of a full member shall be eligible to become a member, if elected by a simple majority at a general meeting. Spouse members are not eligible to vote at meetings.

The Association is vitally concerned with any Parliamentary action relating to the Superannuation Acts. Direct contact is maintained with Ministers (particularly with the Minister responsible for the administration of the Acts) to keep them aware of the Assocciation's concern. During the

prolonged discussions, reviews, reports and final debates concerning the new Superannuation Act of 1976, the Association had representatives working closely with the Council of Australian Government Employees Organisation and its working party. This ensured that all aspects of the new Act — and its effects on superannuants retired under the previous Act — was under constant scrutiny and the interests of all officers concerned were safeguarded.

Old mates thought so

much of colleague STO 3

Ken Hunter, North

Melbourne Exchange

that more than 80 of

Full membership is \$2 a year. Widow's membership \$1, Spouse membership \$2, Associate membership \$2.

## Jann's the

Ms Judith Henderson of O'Connor ACT saw something in a shop window as she passed through Armidale NSW recently and wanted to buy it when she returned to Canberra.

She couldn't remember the name of the shop or the street it was in so rang Telecom in Armidale for help and encountered an outstanding ambassador for our organisation — Jann Ross.

Ms Henderson says Jann:

- gave the correct name of the shop and the address.
- searched for a number but concluded it was not connected, offered to go to the shop in her lunch hour, find out if the article was still available, and arrange for it to be posted.
- called back after lunch with a description of what she had found (which was the correct article), the information that it was reduced in price and the home phone number and name of one of the proprietors in case further discussion was needed.

Says Ms Henderson: "If that attitude does not deserve praise, what does? Apart from the fact that Telecom was the wrong body to ring (I could have been told that and the matter not pursued any further), Jann Ross went to a lot of trouble on my behalf and in no way could she have benefited by her helpfulness. I consider it necessary that good employees like Jann should be commended."

## HUNTER FRE



Footscray DTM Ken Smith (left) gives Ken Hunter a humorous farewell roast.

cent retirement farewell at the Exchange. Ken had plenty of mates to draw on because in a career which began in 1930 he made friends at Postal Workshops, Hopetoun, Installation at Batman and West Essendon, Brooklyn, Altona and Footscray Exchanges where he was Supervising Technician. Which all brought him up to his retirement position, allowing for some spells as acting PTO at the District Office. A keen radio and television buff, Ken was presented with a FM tuner and a high quality test meter. As you read this, Ken and his wife are on an overseas trip with lifelong friend and workmate Joe Little and Joe's wife.

Kids gape, adults goggle and mutter "What next?" as they watch a garish lime green and black Monaro GTS circle a grassy sports oval at 60 km an hour ... perform all sorts of manoeuvres ... with no one behind the wheel.

The \$60,000 green machine belongs to Neil Vickery, of Mornington Telephone Exchange, something of an electronics genius who has spent eight years perfecting the car which has \$28,000 worth of computer in the boot, programmed to implicitly obey his instructions.

#### WALKIE-TALKIE COMMANDS

Simply by talking through a walkie-talkie, which sends messages to one of the 10 aerials whiskering from the vehicle, the car will start, stop, accelerate to a hair-raising 180 km/h, toot its horn, turn on its lights and even sound an imitation of a police siren.

And if that isn't enough, the car also has an infra-red sensor on the windscreen that makes it stop at red traffic lights, a radar system that stops the car if anything moves in its path (it also slows down to the speed of cars in front) and automatic windscreen wipers.

Other handy accessories include a telephone, closed-circuit television, a digital electronic clock

# Stop'n stare stuff: TECH'S \$60,000 ROBOT CAR



Neil Vickery indicates some of the \$28,000 electronic gear which operates the car through the command walkie-talkie he holds in his hand. Below: Backseat driving that doesn't worry anyone ... the car is moving here at 60 km an hour.

(the only one of its kind in Australia) and a fourtrack tape deck.

"It started as a hobby," Neil says. "Now it's almost a full time occupation and I'm beginning to make money out of it."

This year, Neil has the chance to make a lot of money — \$50,000 to be exact. All he has to do is win the bet he's made with the editor of The National Enquirer newspaper in Miami, Florida.

"I've said I can leave

the car in a Melbourne television studio, and talk it into starting from 20,000km away in Miami.

"Electronically it can be done."

The US paper is flying Neil to Miami and will allow him three weeks there before the actual transmission "to study atmospheric conditions".

"But I hope to be 100 per cent sure before I leave Australia. I'll carry out tests from as far away as Queensland and New Zealand. So far, I know it starts in from Wangaratta (about 290km).

"I will work out of a local television station in Miami. I'll use the walkie-talkie to transmit my voice into a receiver. My voice then will be fed into the satellite over Australia and beamed to the Melbourne television station.

Neil admits there is a slim chance that the car won't start. But he's not too worried about losing the money as sponsors have agreed to pay out the \$50,000.

"No bet would be worth taking on if there wasn't any risk involved," Neil concedes.

"My voice quality could change during transmission. You must remember that the car has only been programmed to my voice. By the time it comes from Miami, via satellite and all that other equipment, to Melbourne, I could sound like King Kong."

The National Enquirer is arranging international television coverage of Neil's green machine stunt.

The 30-year-old bachelor is "loving every minute" of his new-found fame.

### FREE FOR CHARITY

"I particularly get a kick out of seeing the kids enjoy the car. I do a lot of charity shows. You could mention that I will take the car anywhere in Australia, free of charge, for charity organisations."

Neil has completed a lot of electronics courses in computers, and has other inventions to his credit

He has just developed a voice-operated wheelchair for quadriplegics. It costs \$7000 for the computer alone, but his hopes lie in mass production to bring down the price.

He is also responsible for a cordless telephone and a ballpoint pen with an inbuilt alarm system for detecting bank robbers (a complicated device that has been sold to a security company in the IIS)

