# Minister opens Research Labs' $10m first stage at Clayton

**The $9.8 million first stage of Telecom Australia's new Research Laboratories at Clayton, Melbourne were officially opened last month by the Minister for Post and Telecommunications, Mr A. A. Staley, MP.**

**Academic, political, business and civic leaders were among some 300 official guests and staff welcomed by Mr E. Sandbach, Director Research.**

Post and Telecom Minister Tony Staley was in great form as he formally opened the new Laboratories. Enjoying one of his sallies with him on the platform were Research Director Eddie Sandbach and Telecom Public Relations Manager Brian Luscombe.

As Mr Staley officially opened the Laboratories by unveiling a plaque, he congratulated all concerned with the design, construction and layout of a facility which he said would help to provide the most modern communications to meet the social, commercial and industrial needs of Australians as economically as possible.

Representative displays of work undertaken by the Laboratories were on view throughout the complex and visitors took advantage of opportunities either to wander at will or join conducted parties.

## OPEN DAYS FOR STAFF

Following the offical opening, the Laboratories provided open days for staff and families and friends to inspect the new laboratories and see the vast and sophisticated range of work carried on.

The new laboratories provide accommodation for 200 of Commission's 500 research staff and represent the first step in a continuing programme to centralise the whole of the Department's activities on one site.

Since the establishment of the Research Laboratories in 1923, the provision of building accommodation has followed an ad hoc pattern of leasing buildings in the Melbourne city area. At one stage, seven buildings at the eastern end of Melbourne plus one building in North Carlton were in use by the Laboratories.

These buildings were old, having been erected as factories or warehouses, and required considerable refurbishing and continual maintenance to keep them at a suitable standard for specialist laboratory work. A major problem was the provision of building services to meet the changing needs of a developing technology.

In the late 1960s the then Australian Post Office undertook a comprehensive review of its Research Laboratories' accommodation needs. It was agreed that the leased accommodation was unsatisfactory and it was recommended that the Laboratories should be consolidated in new specially designed buildings located well away from the Central Business District.

This culminated with the purchase, in 1972, of a 7 hectare site in Blackburn Road, Clayton, near Monash University. Subsequently, a further 12 hectares adjoining the first site was purchased for long term development.

Parliamentary approval to proceed with construction of the first stage of development was received in November 1973. This project has become known as the Monash Laboratories project.

The decision to develop a new Laboratories complex in the Clayton area was based on the economics of providing specialised laboratory buildings in a long term multi-staged expansion programme. Feasibility studies conducted by the then Department of Works concluded that the most cost effective design would result from the establishment of a number of low rise buildings in a campus-style setting on a large block of land.

This arrangement made it possible to spread the development of the project over a number of years and required relatively small but regular funds commitments compared to a large investment for one high rise building.

## MONASH UNIVERSITY

Land suited to this style of building was only available in the suburban area and this, combined with the popularity of the eastern suburbs as a residential area, and its proximity to the Monash University, led to the choice of the present site.

The Monash Laboratories project currently comprises two 3 storey and one single storey laboratory buildings designed to accommodate some 200 staff, a single storey plant building and a gatehouse.

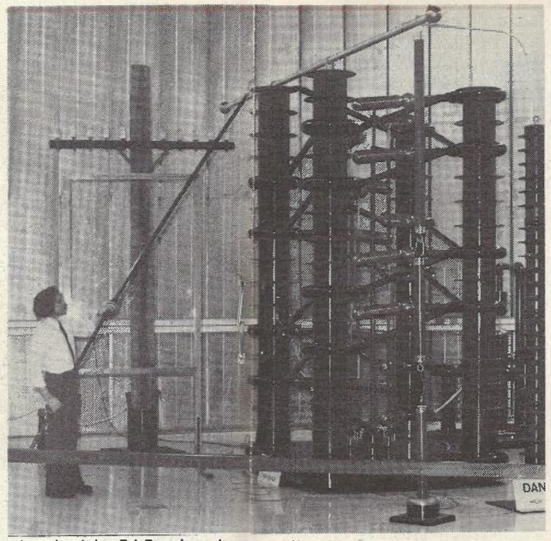
Building 1 houses the Physical Sciences Branch and the Microelectronics Section.

Building 2 houses parts of the Advanced Techniques and the Standards & Laboratories Engineering Branches, the Laboratories Executive and Administrative staff, Cafeteria and Library.

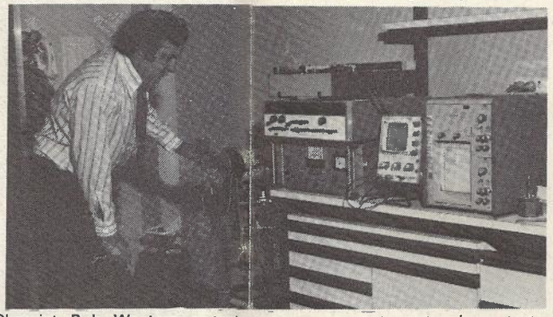
Building 3 houses the Environmental Physics activity.

Building 4 accommodates centralised mechanical and electrical plant for the building services systems.

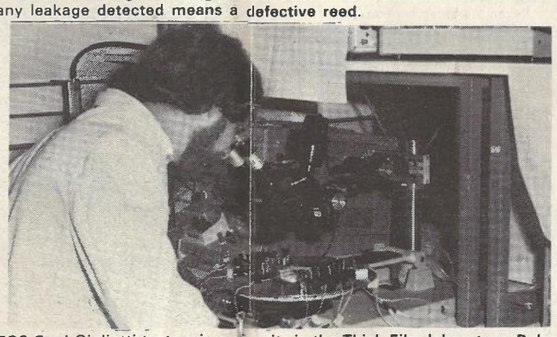
Buildings 1 and 3 are connected by a single storey laboratory and office link to form an integrated structure.



Senior physicist Ed Bondarenko taps off residual high voltage from an impulse generator which in conjunction with a high voltage charging unit tests Telecom equipment for effectiveness against lightning strike.



Chemist Bob Western operates a mass spectrometer in a test of goldplated reed relays which are replacing exposed mechanical switches in advanced design exchanges. The reeds are bombarded with helium and any leakage detected means a defective reed.



TO2 Fred Gigliotti tests micro circuits in the Thick Film laboratory. Below Labs staffer Cheryl Crarey indicates the control panel of a bank of furnaces which fire thick film conductors at up to 850 deg C.


The Minister showed great interest is a sophisticated micro-welder which joins very thin metals. Showing him the technique is Senior Fitter and Turner Neil McKenzie.

## CAMPUS STYLE

The Laboratories Buildings conform to an overall master plan as a group of several low rise (up to 3 storey) buildings arranged in a campus-style configuration linked by garden courts. This approach allows the necessary flexibility for further stages to accommodate those Sections which are still in the City and at Winterton Road, Clayton.

A feature of the modular design of the buildings is the ease with which laboratory needs may be altered in both size and function, and the practicality of converting offices into laboratory space.

## REINFORCED CONCRETE

The three storey laboratory buildings are constructed of reinforced concrete columns and floors with concrete block panel walls. Reinforced concrete has been used around stairs, lifts and service ducts to ensure lateral stability. Mechanical plant is located within the roof space.

The single storey buildings are steel framed with concrete block external walls. The roofs of all buildings are sheeted with corrugated aluminium while facias and ducts are clad with pre-finished steel sheeting.

Windows are of anodised aluminium glazed with reflective double glass to reduce solar heat load.

Air conditioning is provided to all laboratories, offices, cafeteria and amenities rooms for comfort conditions.

The buildings incorporate amenities in accordance with the Commonwealth Amenities Code which applied at the time of their design. These include a temporary Cafeteria (Ground Floor, Building 2) to seat approximately 120 people, active and passive recreation rooms, showers and tea-making facilities.

The second stage of development will provide three buildings to accommodate sections currently in the city; Electrical Standards, Time & Frequency Standards, Laboratory Instrumentation and Customer Apparatus. Further facilities will be provided for an enlarged Cafeteria, main library, etc. Documentation is now well advanced and completion is expected by 1982. A further stage will then be considered for those Sections currently at Winterton Road, Clayton.

Tech. Asst. Eta Horvath setting up the Lab's new $ 70,000 numerically controlled machine which automatically and extremely accurately drills holes in printed circuit boards for exchanges. This was previously a very slow manual process giving varying quality.

## Paging Mr Stinson

**Mention of reunions held by Technicians in Training has prompted me to ask for your assistance in locating one of the members of the 1939 Queensland intake. Of the otal intake of nine only one cannot be located. L.W. Stinson who left the then PMG about 15 to 20 years ago. On his return from the Air Force after World War II he was working on telephone surveys.**

**One report indicates that he had been working as an Air Traffic Controller in the Adelaide area.**

**If anyone has more up to date information it would be appreciated if they could pass it on to me as we hope to stage a reunion on January 9, 1979**

**K. C. Ebeling,**
**Internal Plant Manager,**
**Gold Coast Telecom District**
**07 225 7487.**

## Salute the Subaltern

**Tasmanian P.R.O. Steve Delaney — was commissioned as an officer in the Army Reserve, at a Graduation Ball held in Hobart last month.**

**His commission to the rank of Second Lieutenant was the culmination of 18 months of study and training with the Officer Cadet Training Unit in Hobart.**

**During this eighteen months, Steve studied leadership, man management, administration, minor tactics, weapon handling, military law, communications and navigation.**

**At the ball, Steve was presented with his commission papers by Colonel J.D. Stewart, the Commander of the 6th Military District. (see photo).**

**A highlight of the evening came when the ten graduating cadets formed up on the dance floor to have their "pips" pinned on by their wives or girl friends in traditional military style. The new officers and their partners then danced the Graduation Waltz.**

**Steve has been posted to the 6 Ordnance Platoon.**