

## First Undersea Telegraph to the World

In 1872, Australia first connected undersea via Telegraph to the rest of the World. It coincides with the completion of the Adelaide to Darwin telegraph line and the undersea link from Darwin via Java and further north. By 1901 Federation of Australia was declared and heritage building, later Electra House, was built to become part of the operation of the undersea cable company and other later applications.

by Lloyd Butler VK5BR

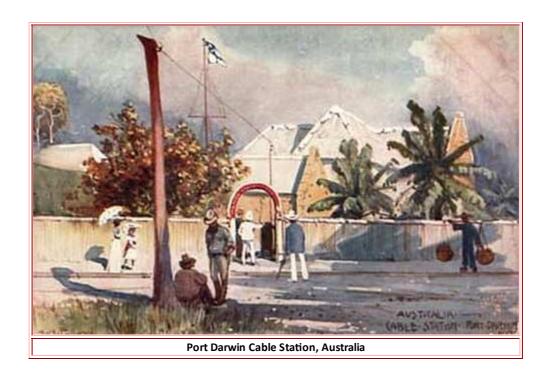
During the early colonial period, letters sent between the Australian colonies could take weeks to reach their intended destination by mail coach, and letters for overseas travelled for several months one-way by ship. The development of the Morse telegraph in the 1840s dramatically changed the speed and ease of communication between colonies, countries and continents. By 1865, the telegraph line from Adelaide to Pt. Augusta had opened. By 1872, South Australia (SA) had successfully completed the overland telegraph line that connected Australia via Adelaide and the Darwin to the rest of the world. By 1877, the telegraph line from Adelaide to Perth had also been opened.

The cable north of Darwin was the work of cable laying Eastern Extention Australia & China Telegraph Company, Ltd. This company was the result of a merger in 1873 of three separate telegraph companies which operated undersea telegraph cables connected with Australia, Britain and Hong Kong. A cable was laid from Singapore to Batavia (Jakarta), west of Java, in 1870, and in the following year, a cable from Banjowangie, east of Java, to Darwin, Australia. Batavia and Banjoewangie, situated at either end of the island of Java, were linked by landline. (In 1876, New Zealand was also connected into the telegraph network circuit.)

As it so happened, the Adelaide GPO building in King William Street was also opened in 1872 and would have been available to commence telegraph operations, via the link to Darwin and undersea to Java and beyond. The Victoria Tower with clock was added to the GPO in 1876. We don't have confirmed information on this, but no doubt the company would have been highly interested in a financial connection with the new telegraph from Australia to overseas at Adelaide.

Before the year 1901, communication facilities in Australia were generally managed individually in each separate State. Clearly, many telegraph telegraph systems around the world were managed by non Government companies including those who installed and operated undersea telegraph cables.

With the declaration of Federation in 1901, the Australian Government ultimately nationalised communication facilities in Australia. The Postmaster General Department (PMG) was created to take charge of national postal, telephone and telegraph facilities, and guidance of radio communications.







## Telegraph Operations Room, Adelaide GPO 1935 Photo: SA Public Library

Related to the new telegraph connection to overseas was a building erected in 1901 at 131 King William Street, Adelaide. Later named Electra House, it was used for some years by the undersea telegraph company as a telegraph terminal for the overseas telegraph connection. The use for this purpose eventually ran out and it later housed several other operations including the world class Adelaide Telecommunications Museum. The creation of the Telecommunications Museum, and its fall due due to events outside of its control, is a story in itself

The building, designed by architect John Quinton Bruce, was erected in 1901 for the Mutual Life & Citizens Assurance Company (MLC), His designs were described at the time as flamboyant and extravagant. The building had Corinthian columns, statues and a widow's walk. It also had an area on the roof with platform and rails which offered a view of the city and hills to the east. An interesting feature of the three story building is that it boasted Adelaide's first electric lift, This was installed in 1905 but it is still a feature of the \$10 million renovation when it re-opened after renovation in 2015. Because of its unique architectural features, the building has been granted Heritage Status. On 29-4-19, the Advertiser included an article on Electra House by regular historian writer Bob Byrne (Ref 1). In his article, Mr Byrne has gone into these details in great depth.

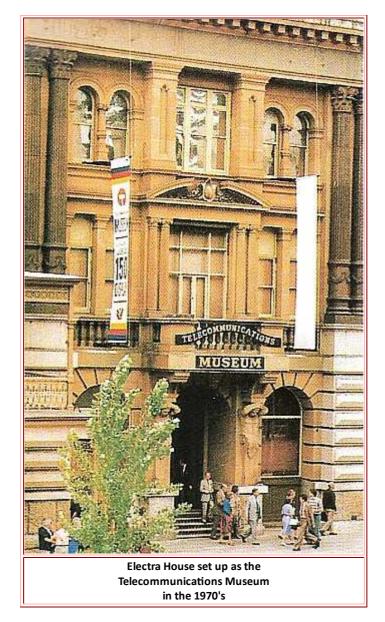
In 1921 Electra House was sold to the Telegraph Company, We don't have confirmed information on this, but no doubt the company would have been highly interested in a financial connection with the new telegraph from Australia to overseas, both before 1901 and after. The telegraph company subsequently moved into the Electra House office building. In 1934, the company name changed to Cable & Wireless Ltd. Electra House and the building remained as the Adelaide office of the telegraph company until 1949.

In 1940, the building became known as 'Electra House', named after the Greek mythological figure Electra, 'the bright one'. Within the period of 1921 to 1949, Electra House was thought to have operated as an Australian telegraph cable station. But did the building actually have the Australian telegraph terminal, with all its telegraph instruments? (Bearing in mind that the Adelaide GPO, with its telegraph station, was just next door along King William Street, the instruments could have actually been in the GPO.)

In 1946, the Overseas Telecommunications Commission (OTC) was formed from the Australian international communication facilities of Amalgamated Wireless of Australia (AWA) and the British company Cable and Wireless Ltd. In 1975, Telecom Australia was formed from the Engineering Division of the Postmaster Generals Department (PMG).

OTC merged with Telecom Australia to form the Australia and Overseas Telecommunications Corporation (AOTC) in February 1992. The new company eventually was renamed Telstra, firstly overseas in 1993 and domestically in 1995. Whilst the companies OTC and Telecom Australia were owned by the National Government, the assets were sold and Telstra became a private company on the Australian Stock Exchange ASX.

In 1949, the government acquired Electra House, ending its time as a terminal for overseas ielegraph. At that point it was occupied by a number of PMG and Telecom Australia sections including the Technicians Training School and the Telecommunications Museum. The Technicians Training school was thought to be operating in the 1970's and the Telecommunication museum in the 1980's. The latter was finally closed in 1992. In its recent history, the once busy city building has sat empty and neglected, other than briefly serving as an art space and also the Fringe Festival's Tuxedo Cat venue in 2011.



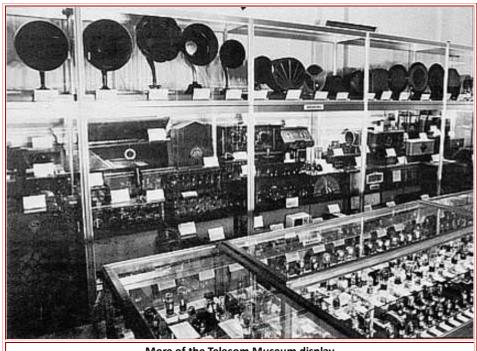
Apparently quite a few other sections in the PMG had made use of the building. Information from Rob Gurr (formally of the Radio Branch) indicated that the Radio Branch had moved into the building in the 1950's and the Power Section office had also moved into the basement about the same time. There was also some occupation by the Investigations section.

The Telecommunications Museum was first set up in 1962 by Telecom Australia (previously PMG) staff in the Engineering Building at 42 Franklin Street Adelaide. To make it more accessible for Public viewing, it was moved to Electra House in March 1976. The display gradually enlarged and spread over the whole three floors of the building.

Quite apart from its fine display of early telecommunication equipment, the museum housed what was well recognised as the finest display of vintage radio gear in the southern hemisphere and one of the best in the world. It was not only an asset to Adelaide but also a national asset.

A typical report was published in a Sydney Morning Herald report: "A genuinely fascinating and unusual museum conveniently located in the city centre at 131 King William Street, it has separated sections devoted to Wireless Telegraphy, Beyond 2000, Early Home Receivers, Telephony, External Plant, Radio transmission, Optical Fibre, Telegraphy and Machine Telegraphy. Given South Australia's importance in the history of Australian telecommunications (particularly the connection of the Overland Telegraph Line with Europe) it is appropriate that this museum, should be housed in Adelaide.





More of the Telecom Museum display

With the forming of AOTC in 1992, the fate of the Telecom Museum was doomed as it was decided that the building would be sold. Unfortunately all the excellent exhibits have been split up and scattered at many different locations around the Adelaide Metropolitan area.

All those interested in historic radio were horrified. Much of the early radio exhibits had been donated or loaned from individual collectors who were certainly not pleased with this result.

In the October 1992 issue of Amateur Radio, Lloyd Butler VK5BR wrote the following:

The museum has a prime location in the heart of Adelaide. It is housed in an historical old telecommunications building called "Electra House" which was owned by Telecom and from the recent merger with OTC, is now owned by AOTC. It now seems that the museum must close because AOTC will sell the building.

Lloyd introduced a feature article by well known journalist Des Colquhoun which says it all. This article was published in the "Courier Messenger" of 12th August 1992, and which was distributed to households throughout Adelaide. A few paragraphs of Mr Colquhoun's article follows:

"If only we could eat museums... The museum has a prime location in the heart of Adelaide. It is housed in an historical old telecommunications building called "Electra House" which was owned by Telecom and from the recent merger with OTC, is now owned by AOTC. It now seems that the museum must close because AOTC will sell the building.

Even if you are only vaguely interested in the early history of radio and telecommunications and you haven't visited the Adelaide telecommunications museum, then you should have. Quite apart from its fine display of early telecommunication equipment, it houses what is well recognised as the finest display of vintage radio gear in the southern hemisphere and one of the best in the world. It is not only an asset to Adelaide but also a national asset.

The ghosts of Traeger of the pedal wireless and of Flynn of the Inland walk the museum's rooms along with those of Marconi and the Flying Doctors. I'd love to see it stay; we can't, even in hard times, allow every decision to be made only on the grounds of finance and efficiency. Seeing it's a museum of communications, you'd think AOTC could talk seriously to itself and work something out, wouldn't you?"

Our Editor of Amateur Radio, Bill Rice VK3ABP, added: "Also we have received from the VK5 Division copies of correspondence between Museum staff AOTC management, and the Division, from which it is apparent that many people are strongly opposed to the threatened closure of the museum."

But clearly, all the concerns of the radio people, and a few others, fell on deaf ears! Perhaps a new home could have been found to set up the museum anew. The engineering division of the PMG and Telecom Australia no longer existed to support the museum and apparently no one else offered the finance to resite the operation.

But what of today? In 2015, as part of Adelaide's King William Street redevelopment, Electra House was given an extensive renovation by a team of architects from Studio 9 who restored the derelict building to its former glory, this time converting it into an up-market restaurant, bar and beer garden. After a \$10 million renovation, historic Electra House. in King William St now has a fine dining restaurant upstairs, and bar and casual diner downstairs.

However, with all the demolition going on in rebuild all around the GPO corner, they haven't dared to knock down Electra House.

There are a few questions about where the actual telegraph equipment for the Adelaide overseas terminal was located. Was it in Electra House, or was it in the GPO building (at least after 1900)? Perhaps Electra House was confined to the system administration and the interface with the public. Perhaps one day in the future we will find out the answer.

## **References**

- 1. Electra House by Bob Byrne Advertiser Monday, April 2019
- 2. Telecom Australia Museum, Adelaide Amateur Radio August 1991
- 3. Adelaide Telecommunications Museum -Future in Doubt Lloyd Butler VK5BR Amateur Radio , October 1992
- 4. The Journal of the South Australian Telephone Collectors Society Inc.
- 5. Communications Across the Generations An Australian Post Office History of Queensland Refer section headed "Overseas Link"
- 6. Some other Internet links:

 $http://www.southernflinders-midnorth.com.au/narrate/n\_telegraph.htm:\\$ 

http://adelaidecentral.info/Links.html:

https://www.telephonecollecting.org/links.html:

https://collections.museumvictoria.com.au/articles/3046