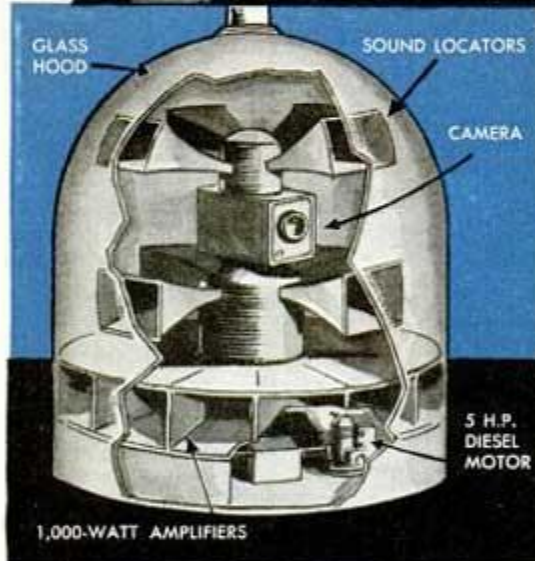
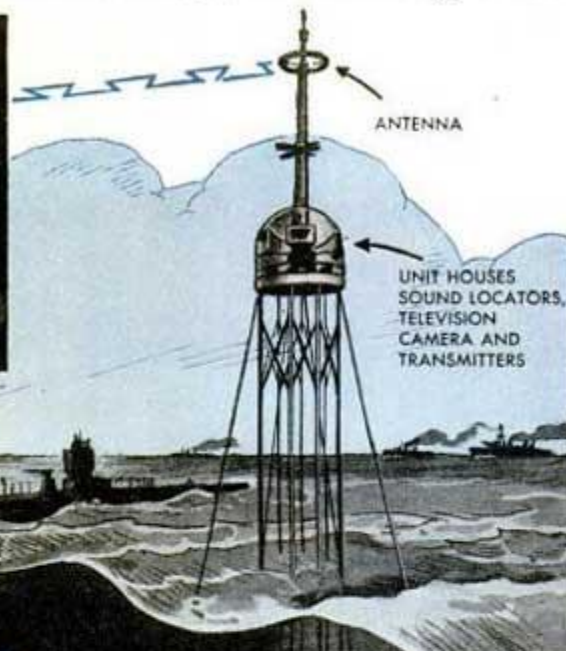
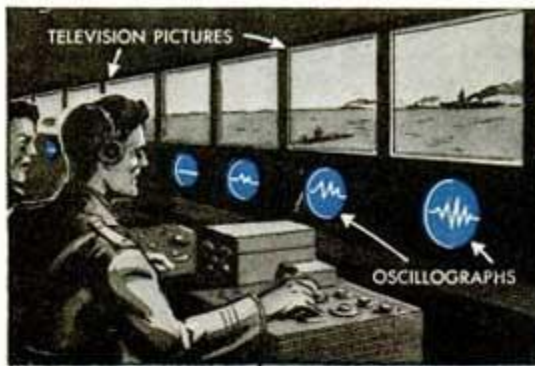
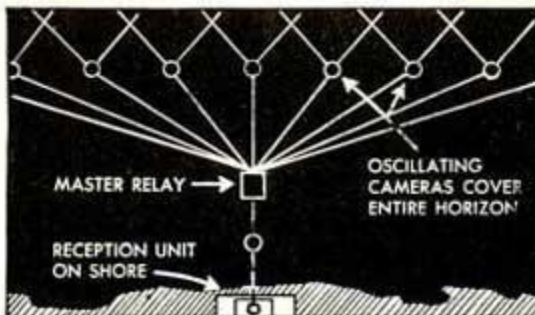


Television and Radio Patrol for Sea Proposed



Probable appearance and arrangement of sea radio outposts. Top, left, interior of shore receiving station. Above, details of mechanism in housing for television camera. Below, is suggested pattern for relay if cable transmission is used



Robot Lookout Would Warn Us Of Enemies Near Our Coast

Television and radio outposts may become the eyes and ears of our coast defense, automatically spotting the approach of enemy vessels, submarines and airplanes far out at sea. U. A. Sanabria, a Chicago radio engineer, in collaboration with Dr. Lee De Forest, has proposed that a series of automatic transmitters, each consisting of a television camera, several listening horns, and a submarine sound detector be anchored to buoys 300 miles off the coast. These instruments, equaling the efficiency of human eyes and surpassing human ears, would report to shore stations by cable, relay radio or direct radio, the sight and sound of any activities within their range. Wireless "feelers" could be sent from shore stations, and if they failed to establish the identity of any ship, scout planes could be dispatched to the scene. The television camera, with high-powered lens, would be mounted on a moving platform inside a transparent shell atop the housing that contains all the mechanism. Listening horns connected with an amplifier would be mounted above and below the camera. Sufficient power to operate the frequency modulation transmitter and to oscillate the camera would be generated by a five-horsepower Diesel engine. To minimize the effects of waves, the housing would be mounted high above the surface on long posts having their foundation in a huge buoyant tank anchored to the ocean bottom by chains that would hold it several yards below the surface. Within the tank would be stored 500 gallons of fuel oil which would be sufficient to run the Diesel engine unattended for three months. It is estimated that 300 such units spaced 20 miles apart could patrol all of our coastline. Enemy action might destroy many of the units, but the cost of replacing them would be small compared with the loss of a single naval vessel. Also ships would be relieved of considerable patrol duty. At shore stations, operators would watch television screens and oscillographs. A separate screen for each camera would show a picture of any ship or plane within its scope, and the oscillograph patterns would indicate unusual sounds, which could be heard by plugging-in headphones.

Sentimental Journey

This week is the anniversary of Australia's first TV transmissions

1934—King Alexander of Yugoslavia was assassinated in Marseilles. Hindenburg died and Hitler was installed as Germany's chancellor. The London Conference on Disarmament failed. In Australia the UAP won the Federal elections, and Lyons formed a coalition cabinet.

In Brisbane a council spokesman was proclaiming that electricity was going to be cheaper, and the Orient Line was advertising trips to London on the Oronsay for £39.

That same year, ignoring the sceptics who said that talking pictures wouldn't last and that radio "was not proper entertainment," two men in Brisbane started Australia's first regular TV transmissions.

In the convict-built tower on Wickham Terrace which started life as a windmill and later became an observatory Thomas B. Elliott (now manager of Stanford X-Ray Ltd. on the same street) and the late Dr. Val McDowell set up test TV equipment under the auspices of the Royal Society.

Others had demonstrated closed circuit television in Australia before, but the Brisbane pioneers are recognised as having set up the first regular TV service.

Last week, TV Times made a sentimental journey to the Museum at Newstead House with Mr. Elliott to see his pioneer equipment, which is in the safe keeping of the Queensland Historical Society, and to hear the story of Brisbane's first TV station.

"We had been experimenting for about eighteen months before that day—May 6, 1934—when we gave a demonstration for members of the State and Commonwealth Governments, Government officials and the press," he recalled.

"They were astonished at the clarity of the picture, though we were only using the 30-line system."

Mr. Elliott spoke rapidly as his thoughts carried him back 27 years. Under a thatch of white hair is a mind as active and enquiring as the one which launched him on his early experiments in radio and TV.

"Technical data came from overseas experimenters. Many of the parts we had to make ourselves. A firm which specialised in neon lighting helped us with some of the special tubes. A motor mechanic helped with the complicated mirror drums used for the first system."

Visitors to Newstead house will notice how odd items, like pieces of car-tyre inner-tube and Meccano were pressed into service.

"It was makeshift, but it worked," said Mr. Elliott as he stood before the display.

"Our low definition telecasts began in 1934 with about an hour of transmission each day," he continued.

"By 1935 we were experimenting with a high definition system of 180 lines."

But for a Commonwealth order that activities should not be commercialised until such time as they thought it fit to permit such a service, the Brisbane experiments would have become more comprehensive and widespread, Mr. Elliott believes.



This photo of the convict-built tower on Wickham Terrace where early experiments in television were carried out, was taken at Ipswich on an experimental receiver which had picked up the transmission of the photo.

The station had only an output of 100 watts of vision — one thousandth of that of Brisbane's present stations—yet signals were picked up as far away as Ipswich.

A typical program would consist of test patterns, pictures of film stars, headlines from a daily newspaper, and later, short silent films.

Some of the latter are keenly remembered by Mr. Elliott — especially the *Horrors of Drink*, a temperance film which was used in the first transmissions.

One of Mr. Elliott's loyal viewers was Mr. W. Stephens of the Queensland Government Railways mapping office, who built a set and operated in his home at Graceville—about five miles from the observatory tower.

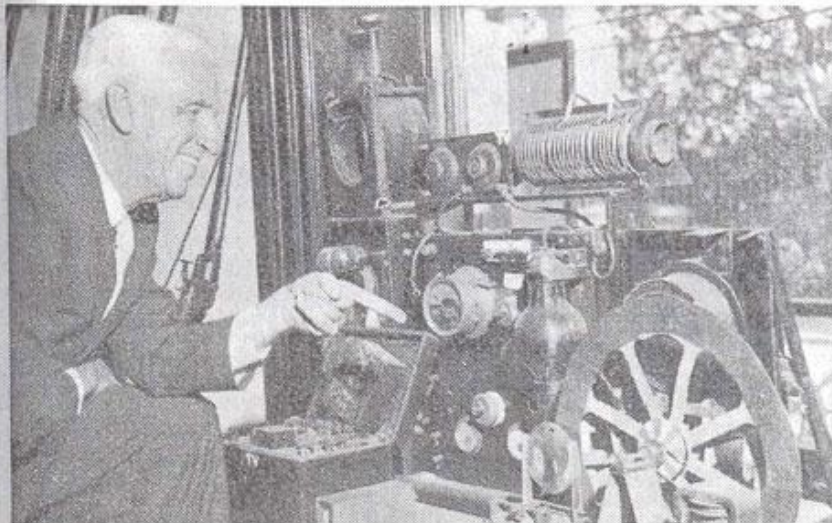
"There were a lot of disbelievers who thought we were just phonies," said Mr. Stephens today, "I can remember how the neighbours used to come in and look at the picture of a film star on that tiny screen in amazement."

"They couldn't believe pictures could be transmitted through the air."

Other receivers were operated in other parts of the city. Mr. Elliott believes there were at most eighteen sets on which his transmissions were received.

From one, at Ipswich, the photo of the observatory pictured above was taken, showing remarkable clarity for the 30-line system which was used to transmit it.

Today Mr. Elliott is still a TV fan. At home he prefers to watch news and documentary sessions, and Channel 2's 7 o'clock news and newsreel each night are his evening highlight.



At Newstead House, Brisbane, Mr. T. M. B. Elliott, Queensland television pioneer, pays a sentimental visit to see the equipment with which he started Australia's first regular TV transmissions in 1934.

TV Times, May 4 1961

Courtesy of Harry Dalek