

4ZZZ: The Move to High Power (1975 – 1978)

(This is a work in progress, updated 13th July 2025)

4ZZ/Z was the first radio station to broadcast in both FM and stereo in Queensland, and was the first FM stereo rock-music station in Australia.

4ZZ/Z operated with an experimental licence for the first three years of broadcasting, starting with its inaugural transmission at noon on Monday, 8th December 1975. The station used a low-power transmitter with a temporarily-assigned frequency of 105.7MHz (FM). The original transmitter was hand built by the station engineer Ross Dannecker with the help of a volunteer engineer, David Aberdeen. The transmitter was set up in a space behind the cinema screen in the Schonell Theatre.

David Aberdeen describes Zed's first transmitter as follows:

"The first transmitter was a copy of one made by 2MBS-FM. It was a modified 2-metre transmitter using two 4CX250 valves giving a theoretical output of 500 watts but it never actually achieved this output. The transmitter sat behind the wall behind the screen in the Schonell Theatre. It was dangerous to work on as there was no safety interlocks and it wasn't unusual to have to come out in the middle of the night to get it up and running after it shut down for some reason. I seem to recall the HT (High Tension) was about 2KV (2000 volts). Everything was designed by Ross Dannecker and built by Ross and myself."

The 4ZZ/Z studios were housed in the Student Union complex with the broadcast antenna mounted on the roof of the nearby Schonell Theatre. This was not a very high vantage point for broadcasting as it was only a few metres above sea level. David Aberdeen said: *"The signal came from the studios via two balanced cables. The antenna on top of the Schonell was a crossed dipole phased array with about 4 sections."*

On Sunday, 1st February 1976, seven weeks after the inaugural broadcast, the station's call sign was officially changed from 4ZZ to 4ZZZ in accordance with a requirement that all FM radio stations in Australia were to have a three-letter call sign. By adding an extra "Z", the radio station has since been known as "4ZZZ" (pronounced "Four Triple Zed" or simply "Triple Zed").

As reported in *Radio Times*, a new high-power transmitter was delivered to the station in May 1976. Ross Dannecker described it as a *"Sintronic DFM-3K-A transmitter capable of 3KW output power and incorporating a direct F.M. exciter..."*

Due to successful lobbying and skillful application-writing by Fiona McLeod and Haydn Thompson, the station applied to renew its licence in mid-1978. They submitted an "Application for Grant of Licence for a Public Broadcasting Station" dated 1st June 1978 and signed by Haydn Thompson (who was the station manager at the time). See image of document below.

In September, Haydn Thompson reported that The Postal and Telecommunication Department issued a temporary licence with the original specifications to allow broadcasting from Saint Lucia with 1 kilowatt ERP. Additional steps needed to be taken to upgrade the licence to "full power."

(Reference: *Radio Times*, September 1978, page 11)

David Hinchliffe, later a Member of Parliament for Wakefield and who served as Deputy Lord Mayor for 23 years, was among those providing support to help the station get a suitable allotment of ground on Mount Coot-tha to erect a mast.

Starting in 1977, 4ZZZ staff and volunteers combined their talents and skills to construct a transmitter hut and erect a broadcasting mast on Mount Coot-tha (Brisbane's highest point). The Zed mast was next to Channel 0 and opposite Channel 2. See photographs below.

David Aberdeen: *"As all you listeners and/or TV freaks know the men from marrs landed and erected 4ZZZ's much awaited monolith on Mt. Coot-tha. A pleasant day on the mountain was had by all except the marrs crane people who were heard to contact their boss on the two-way and have "words" with him for telling them the job would not be difficult. In fact, due to the slope of the land and too many trees, the job was very difficult, and so full marks (and a few cans) went to the men from marrs.*

Many thanks to the couple of fellows who fixed the antennae to the mast over the next two days. It wasn't much fun working at 90 feet up on a wet, windy day with only narrow pieces of steel to stand on. Those of us with no stomach for heights stayed below and fed the millions of starving mosquitoes.

Finally, the engineer and others at 4ZZZ would like to sincerely thank the huge number of people who contributed their labour and knowledge which was required to successfully complete this project." (Reference: The Erection on Mt. Coot-tha, Radio Times, January 1978, page 21)

The station made use of an existing mast that was relocated from an AM radio transmitter site (4BH?). The 120-foot mast had to be removed because of extensions to the Brisbane airport. The mast was taken down, moved in sections, and re-erected on Mt Coot-tha. It was taller than needed, so they took away about 30 feet from the top which left about a 90-foot mast on which to mount the 4ZZZ antenna. The remaining section of the mast went to 4EB where it still stands at Meiers Road, Indooroopilly.

David Aberdeen: *"We removed about 30 ft of mast from the top and I think that may have gone onto the other mast which 4EB used. That left about 90 ft. It was interesting digging the 4 guy block holes...about 3 or 4 ft cube. One we had to use explosives on. The other mast went to 4EB under the technical direction of Frank Jackson (ex-ABC engineer) who was a big help to me when Zed moved to Mt Coot-tha."*

The new mast and transmitter were first used for the 4ZZZ Radiothon in January 1978. (Reference: Radio Times, June 1978, page 15)

After a three-year probationary period, the station was granted a full licence on 30th November 1978 giving the station the right to broadcast with "full power" on its originally assigned frequency.

At noon on Friday 15th December 1978, John Woods officially launched the transmission from Mt. Coot-tha with approximately 4 Kilowatts ERP (Effective Radiated Power) from the new Sintronic high-power transmitter. As required by the licensing authority, the station changed from its temporary frequency of 105.7MHz (FM) to its originally assigned frequency of 102.1MHz (FM).

David Aberdeen recalls: *"I think the original Zed transmitter went to 4MBS-FM as a back-up to their main transmitter when ZZZ got the Channel 5A transmitter from a TV station in Toowoomba to use as a back-up. That TV station had to move off Channel 5A because it was in the new FM radio band. "*

"Zed scored a nice little Italian 250-watt transmitter and other gear

(dummy load etc.) for, I believe, no cost. Their engineer was really nice."

"There was another station in Murwillumbah that also had to move and I rang them to see if we could buy it and the engineer said he would rather dump it in the sea. I don't remember if it was because 4ZZZ wanted it or just because of the cost of moving because of the introduction of FM pissed him off. "

The elevated location on Mount Coot-tha and increased power output raised the profile of the station across Brisbane, which helped to greatly expand its listening audience. 4ZZZ became a notable presence in Brisbane's media landscape.

Soon, 4ZZZ became the highest rating youth station in Brisbane and was recognized as a leader in alternative, progressive radio across Australia.

A selection of 23 photographs follows...

COMMONWEALTH OF AUSTRALIA

BROADCASTING AND TELEVISION ACT 1942

APPLICATION FOR THE GRANT OF A LICENCE
FOR A PUBLIC BROADCASTING STATION

The Secretary
Australian Broadcasting Tribunal
153 Walker Street
NORTH SYDNEY NSW 2060

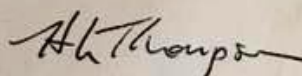
In pursuance of the provisions of the Broadcasting and Television Act 1942, application is hereby made for the grant of a licence for a public broadcasting station to serve the Brisbane area in the State of Queensland.

The particulars and information required by the form of application supplied by the Minister are attached.

I certify that the statements in this application are true, complete and correct to the best of my knowledge and belief, and are made in good faith.

Name of Applicant:CREATIVE BROADCASTERS LTD.....

Address: .UNION BUILDING, UNIVERSITY OF QUEENSLAND, .ST.. LUCIA, QLD 4067.....
.....


MANAGER OF CREATIVE BROADCASTERS LTD
Signature and capacity
of person signing

Dated this 1st THURSDAY..... day of ...JUNE..... 19.78.

01. "Application for Grant of Licence" 1st June 1978.



02. David Aberdeen (engineer) explains:

"This photo was taken (of me) at an AM radio transmitter site near the airport where the Zed mast came from. It had to be moved because of extensions to the airport."



03. Clearing the allotment on Mount Coot-tha.
(Photograph: © Allan Martin 1977)



04. Clearing the allotment on Mount Coot-tha.
(Photograph: © Allan Martin 1977)



05. Clearing the allotment on Mount Coot-tha.
(Photograph: © Allan Martin 1977)



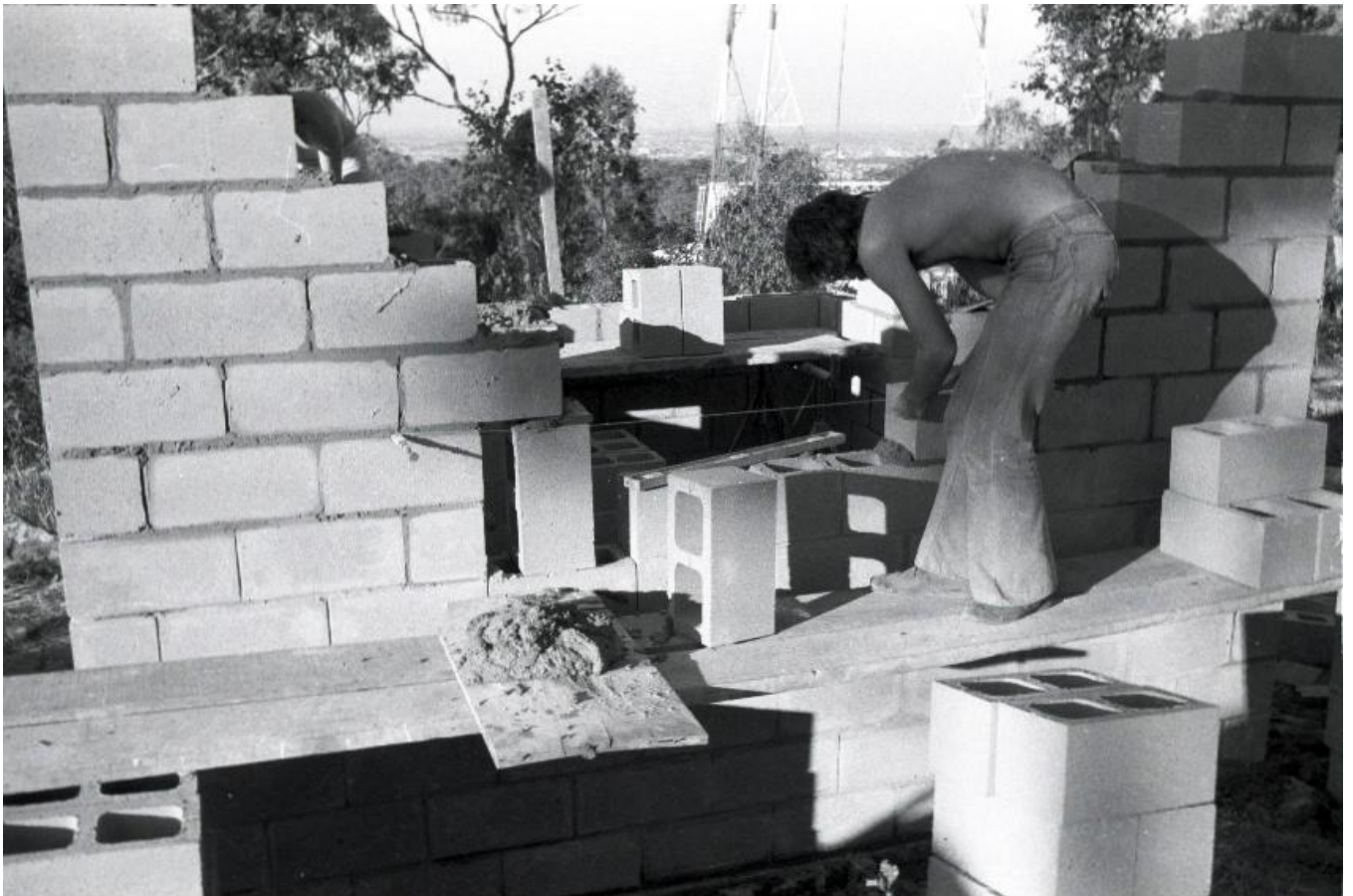
06. Clearing the allotment on Mount Coot-tha.
(Photograph: © Allan Martin 1977)



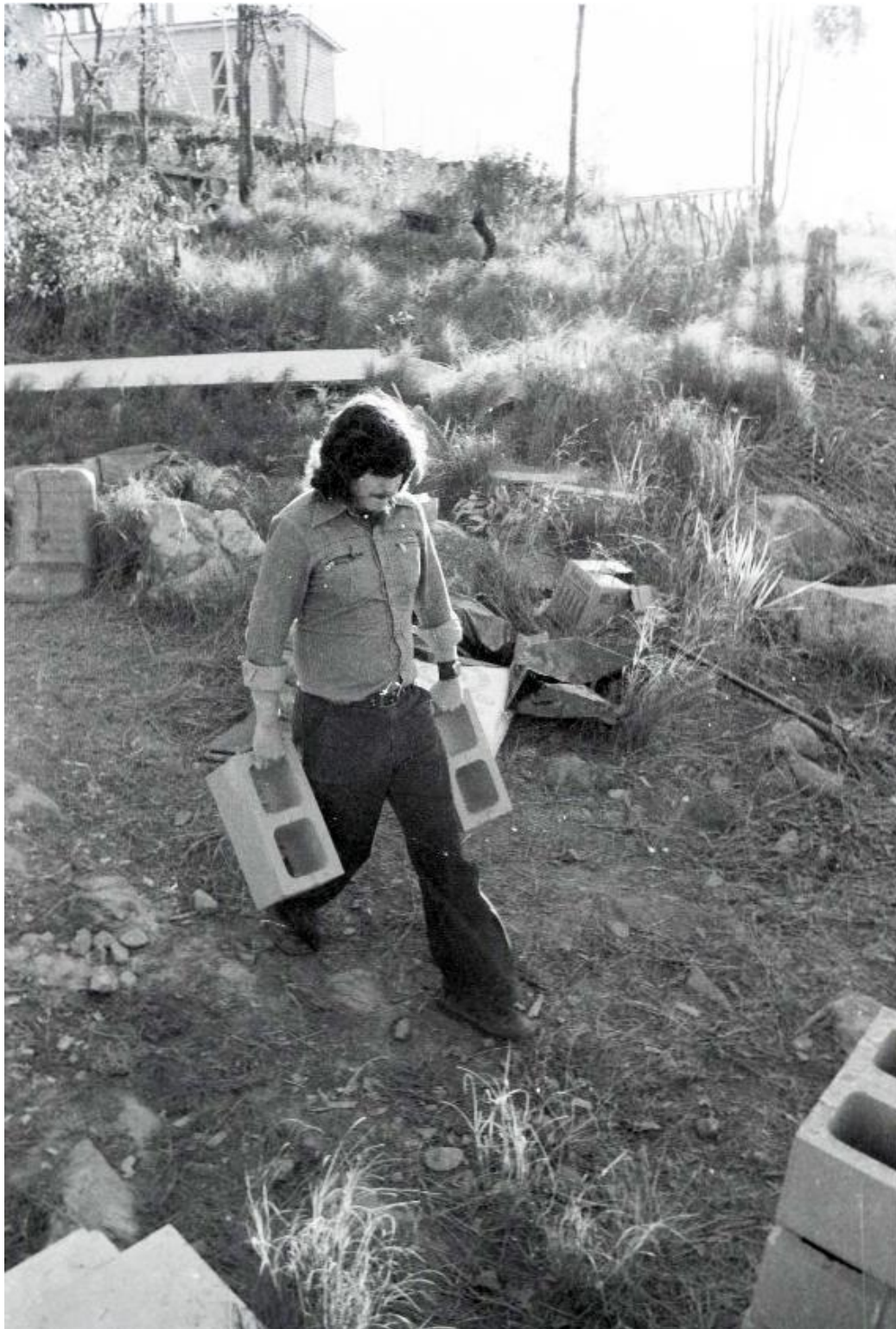
07. Mixing concrete.
(Photograph: © Allan Martin 1977)



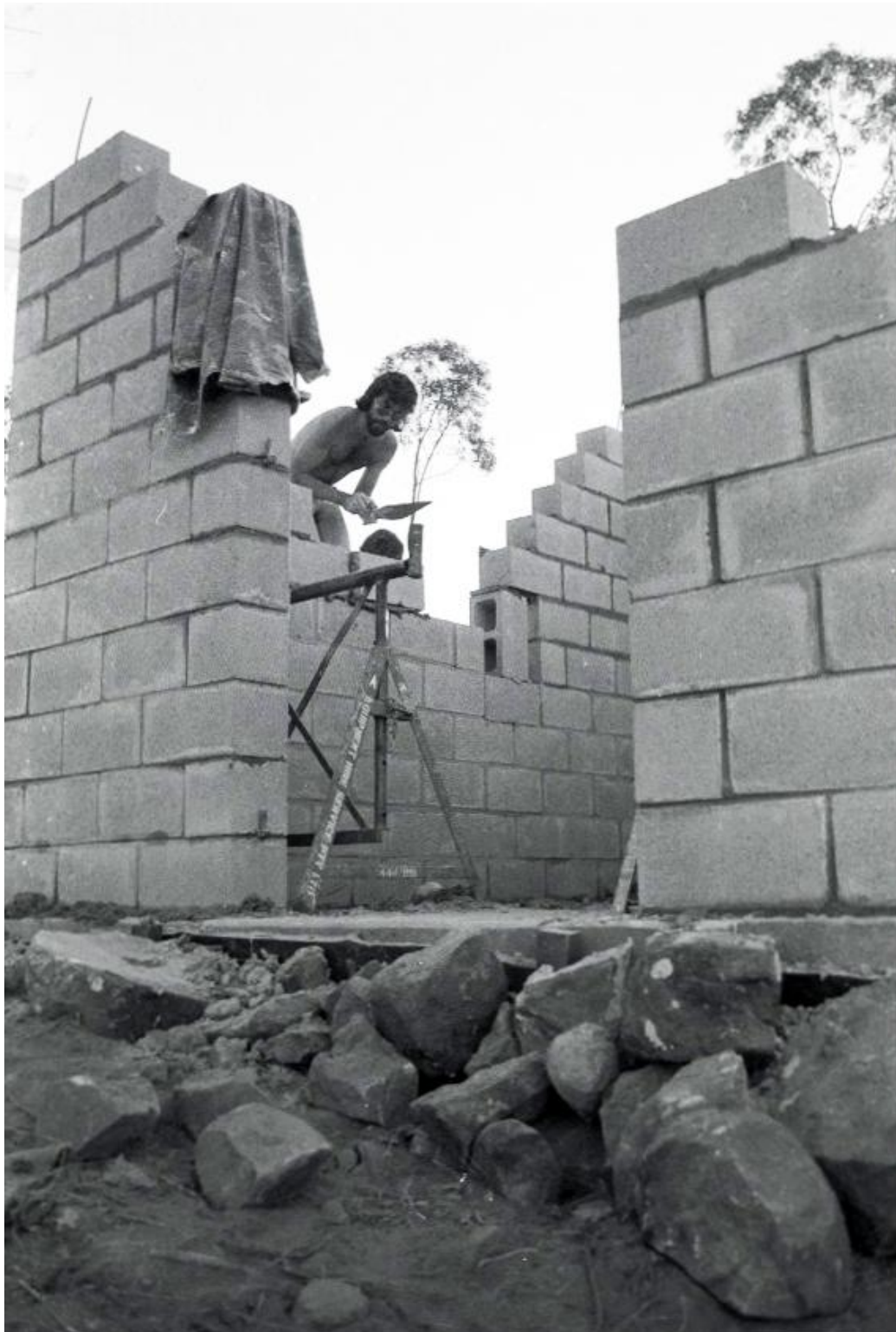
08. **Kevin Hayes laying concrete blocks.**
(Photograph: © Allan Martin 1977)



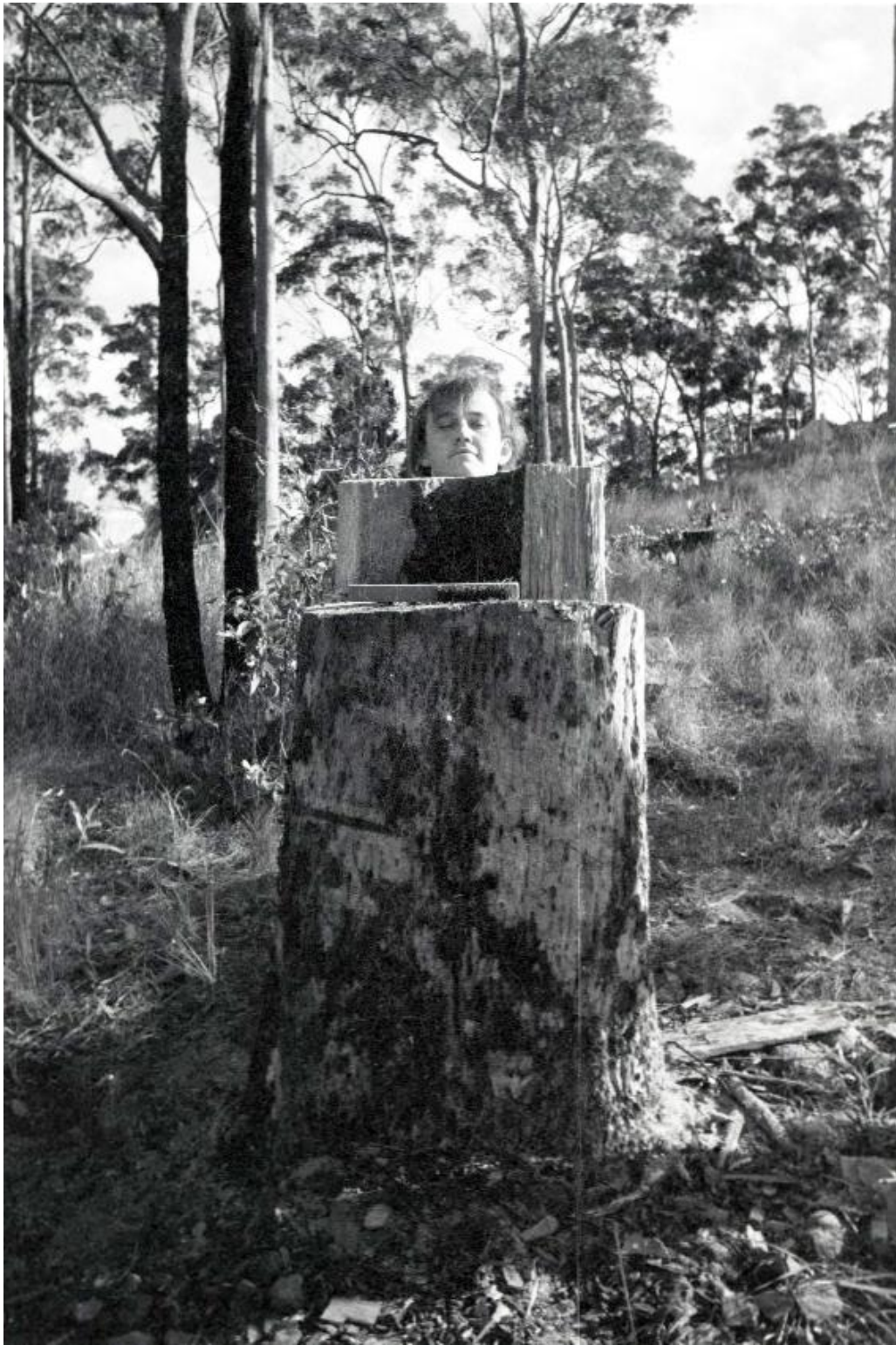
09. **Haydn Thompson laying concrete blocks.**
(Photograph: © Allan Martin 1977)



10. John Stanwell
(Photograph: © Allan Martin 1977)



11. The transmitter hut taking shape
(with Haydn Thompson).
(Photograph: © Allan Martin 1977)



12. **Damian Ledwich.**
(Photograph: © Allan Martin 1977)



13. David Aberdeen.
(Photograph: © Allan Martin 1977)



14. **Georgina Guilfoyle.**
(Photograph: © Allan Martin 1977)



15. Sections of the mast.
(Photograph: © Allan Martin 1977)



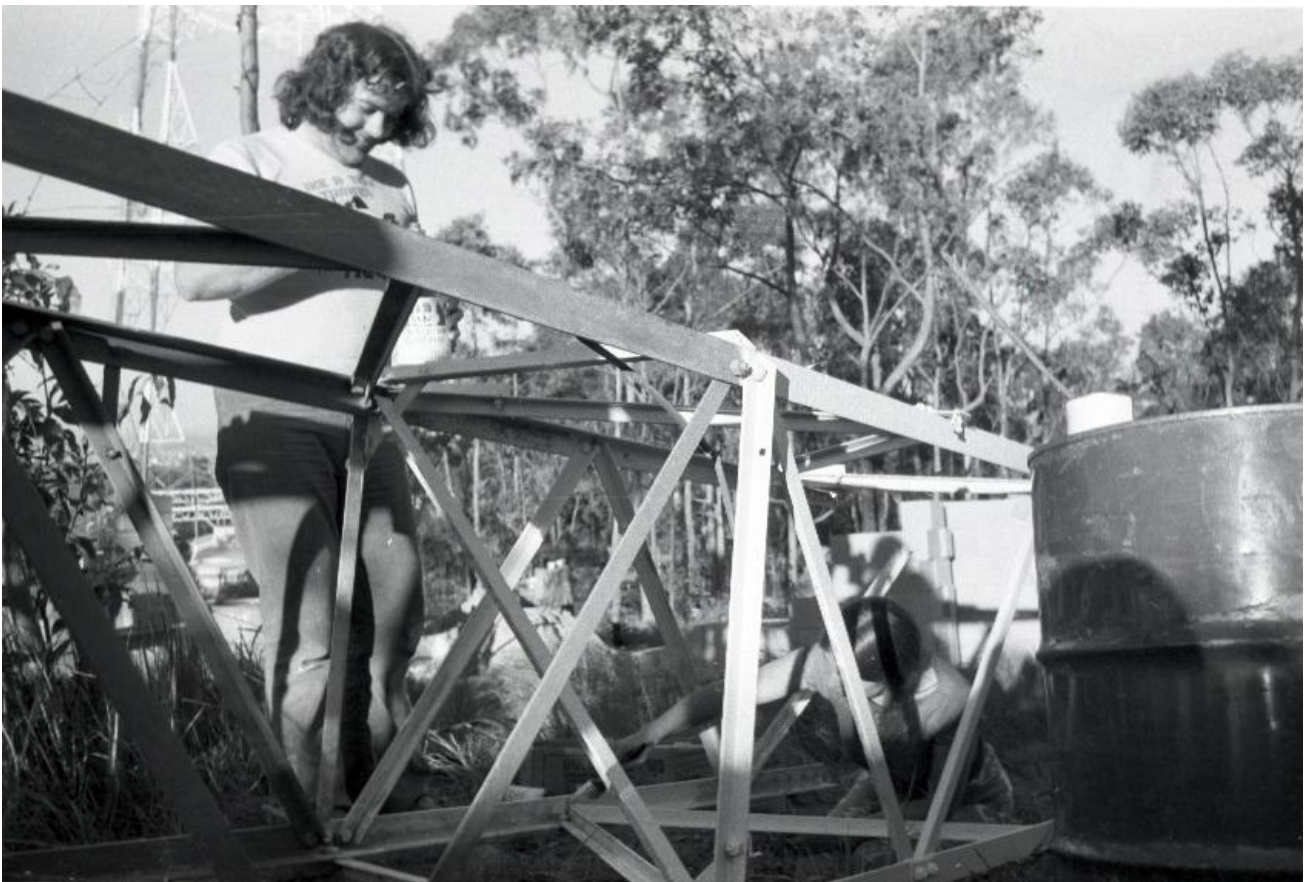
16. Carrying a section of the mast.
(Photograph: © Allan Martin 1977)



17. Moving a section of the mast.
(Photograph: © Allan Martin 1977)



18. Carrying a section of the mast.
(Photograph: © Allan Martin 1977)



19. **John Woods and Georgina Guilfoyle.**
(Photograph: © Allan Martin 1977)



20. Courtesy of Gavin Unsworth.
(Photographer and date unknown)



21. Courtesy of Gavin Unsworth.
(Photographer and date unknown)



22. Courtesy of Gavin Unsworth.
(Photographer and date unknown)



23. Courtesy of Gavin Unsworth.
(Photographer and date unknown)