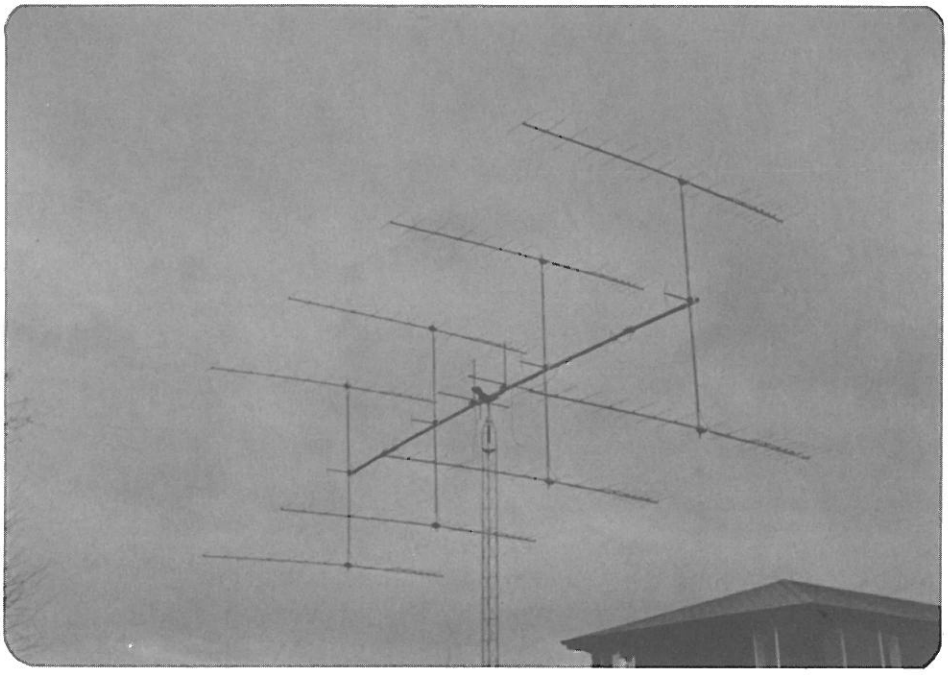
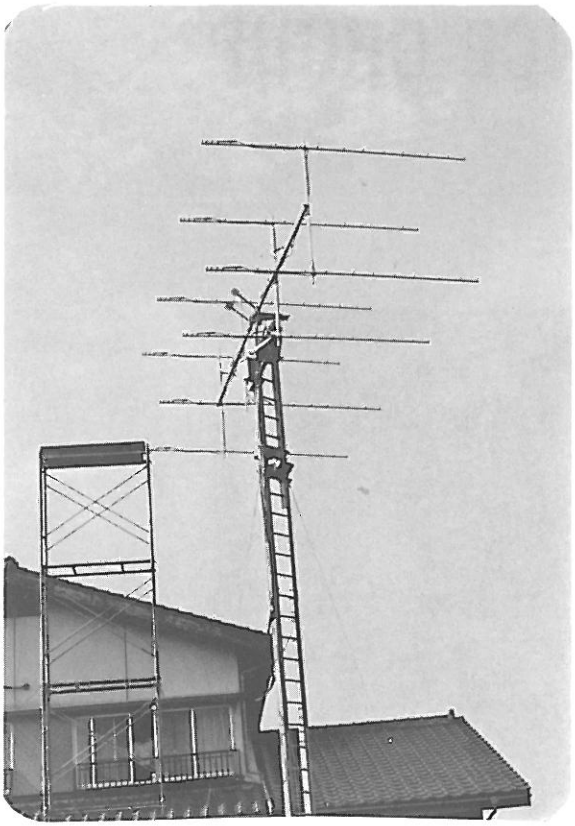
THE MOONBOUNCE GROUP

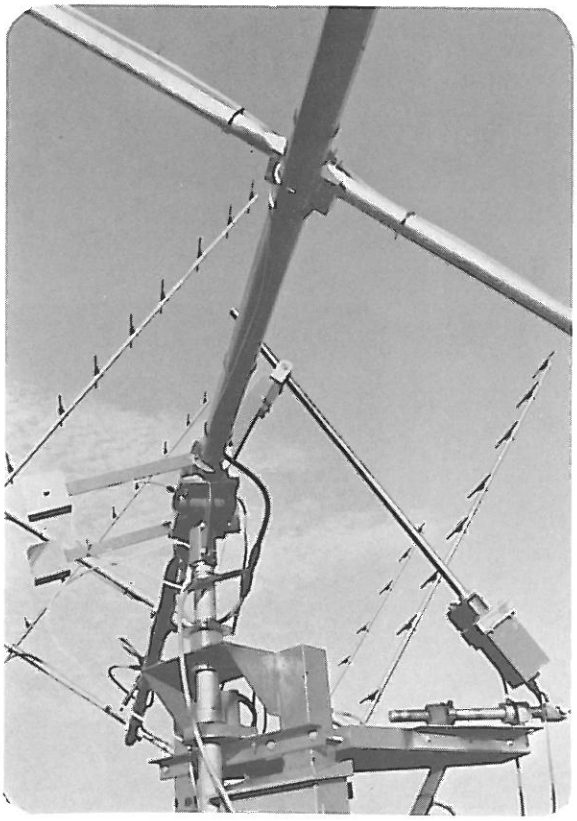
PART 2



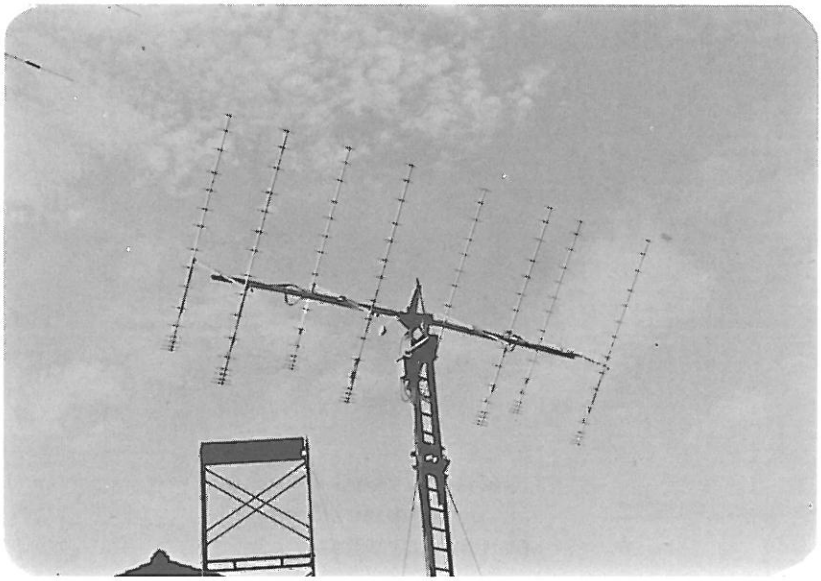
The 144 MHz antenna of W7CNK. The array is made up of 8 16 element KLM log-yagis. The boom is 48' and the vertical stacking distance is 15'. This array has been taken down and will hopefully be reinstalled in the Boston, MA area.

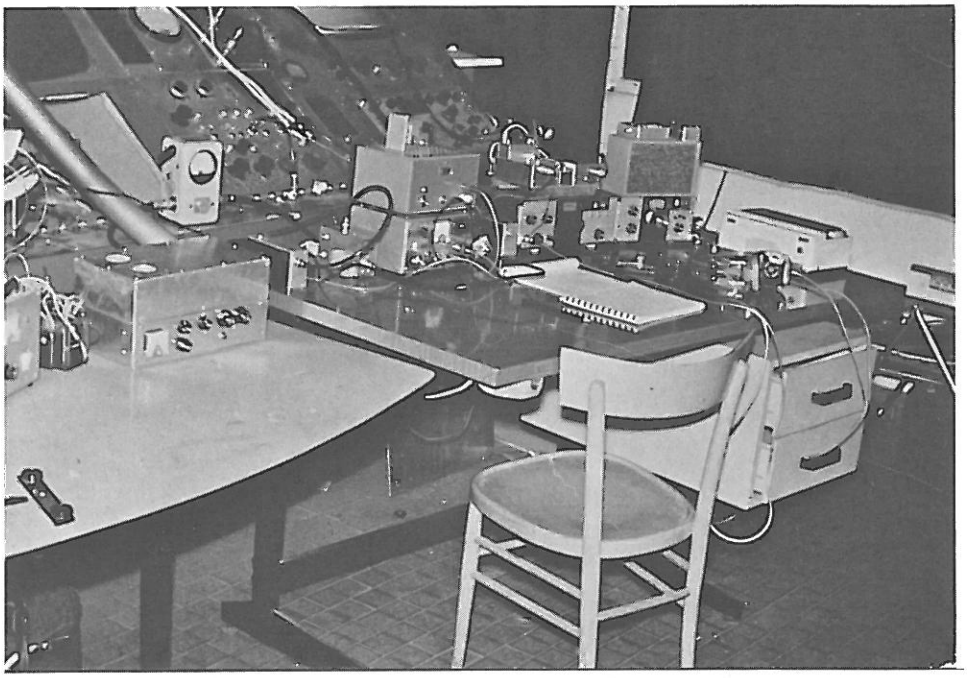
varian, EIMAC division
301 industrial way
san carlos, california 94070



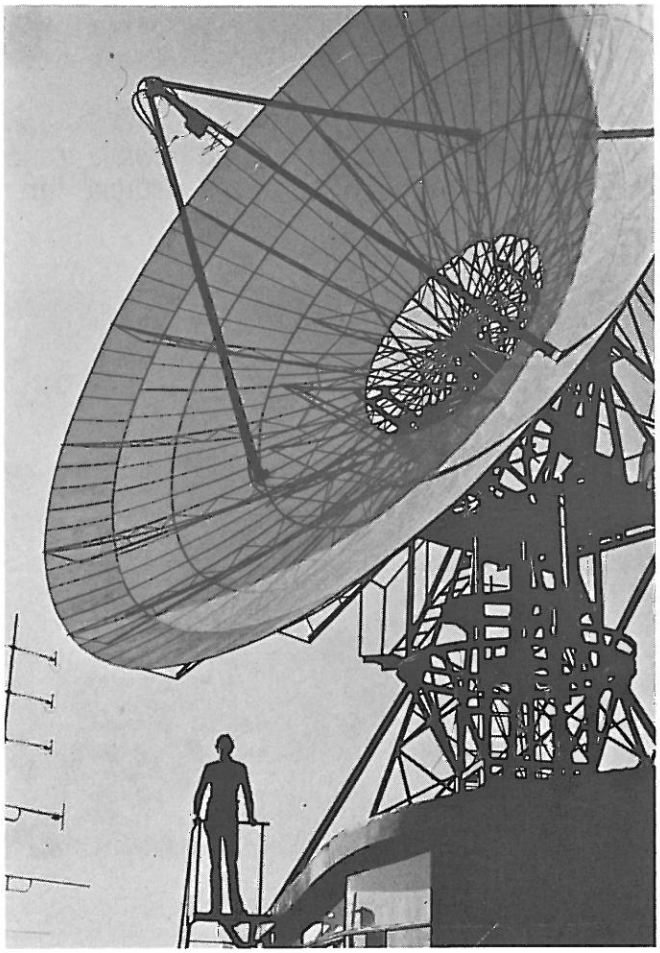


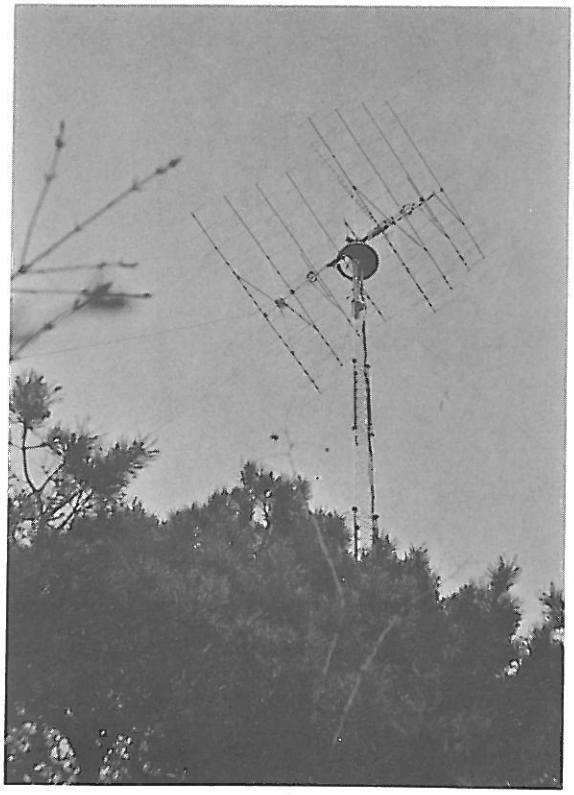
The pictures on this page are of the JA6CZD 432 MHz EME array. Eight of the KLM 16 element log-yagis are used. The elevation system is quite unique. If the array is set-up for the meridian crossing of the moon, the elevation angle is pulled down automatically by driving the azimuth angle only.

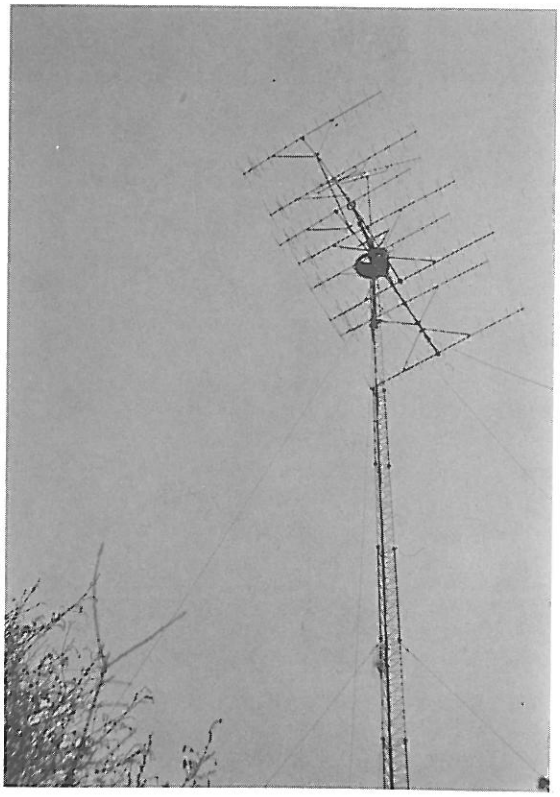




The picture above is of the operating position of the I5MSH 432 MHz EME station. The I5MSH dish pictured below is 11 meters in diameter and has a 0.35 F/D. The dish is fully steerable in azimuth and elevation.

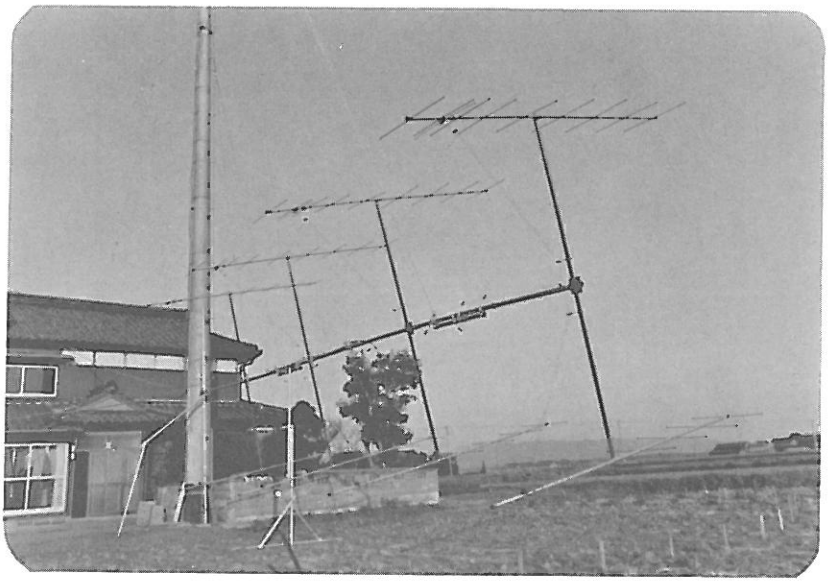


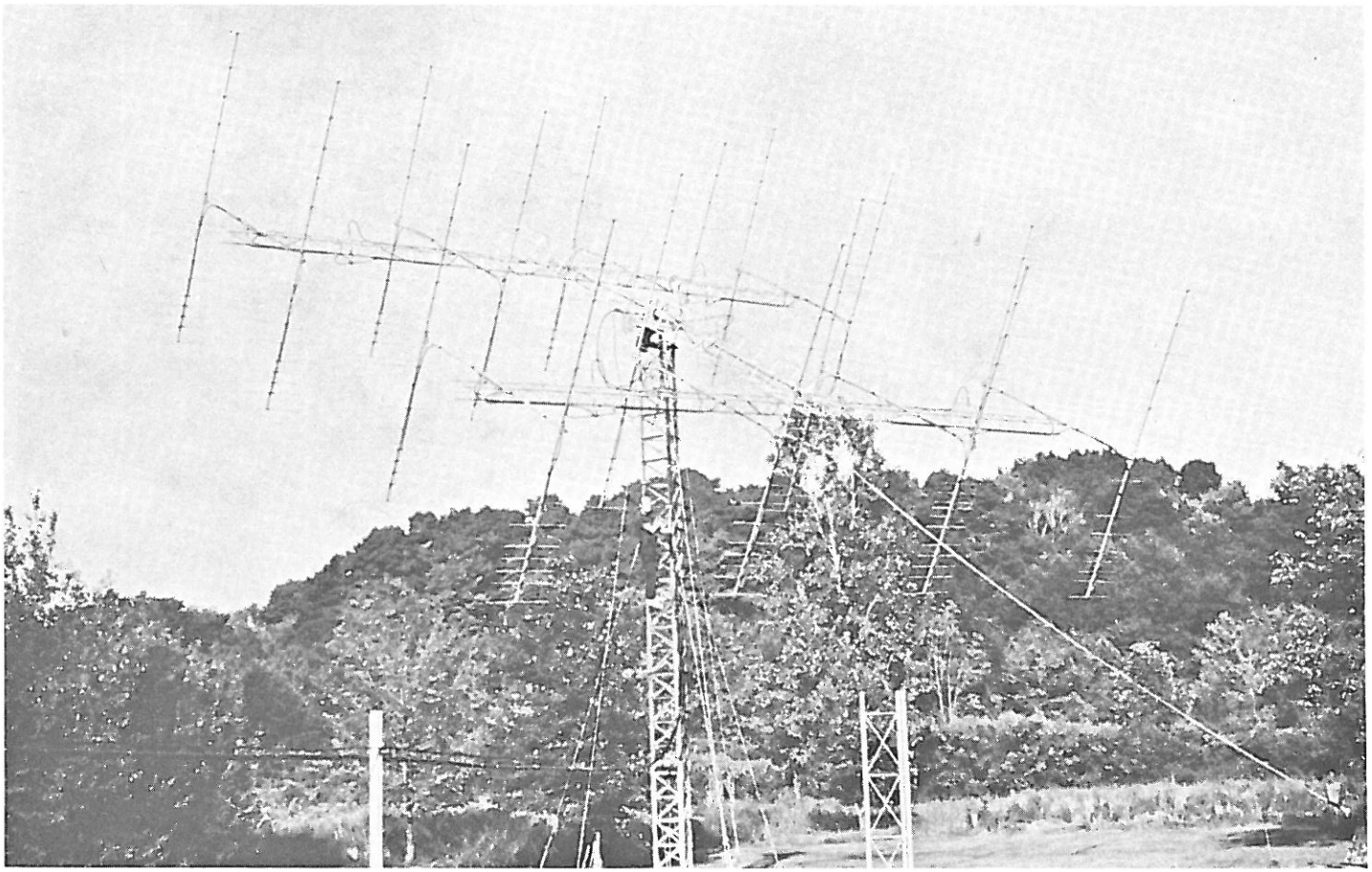




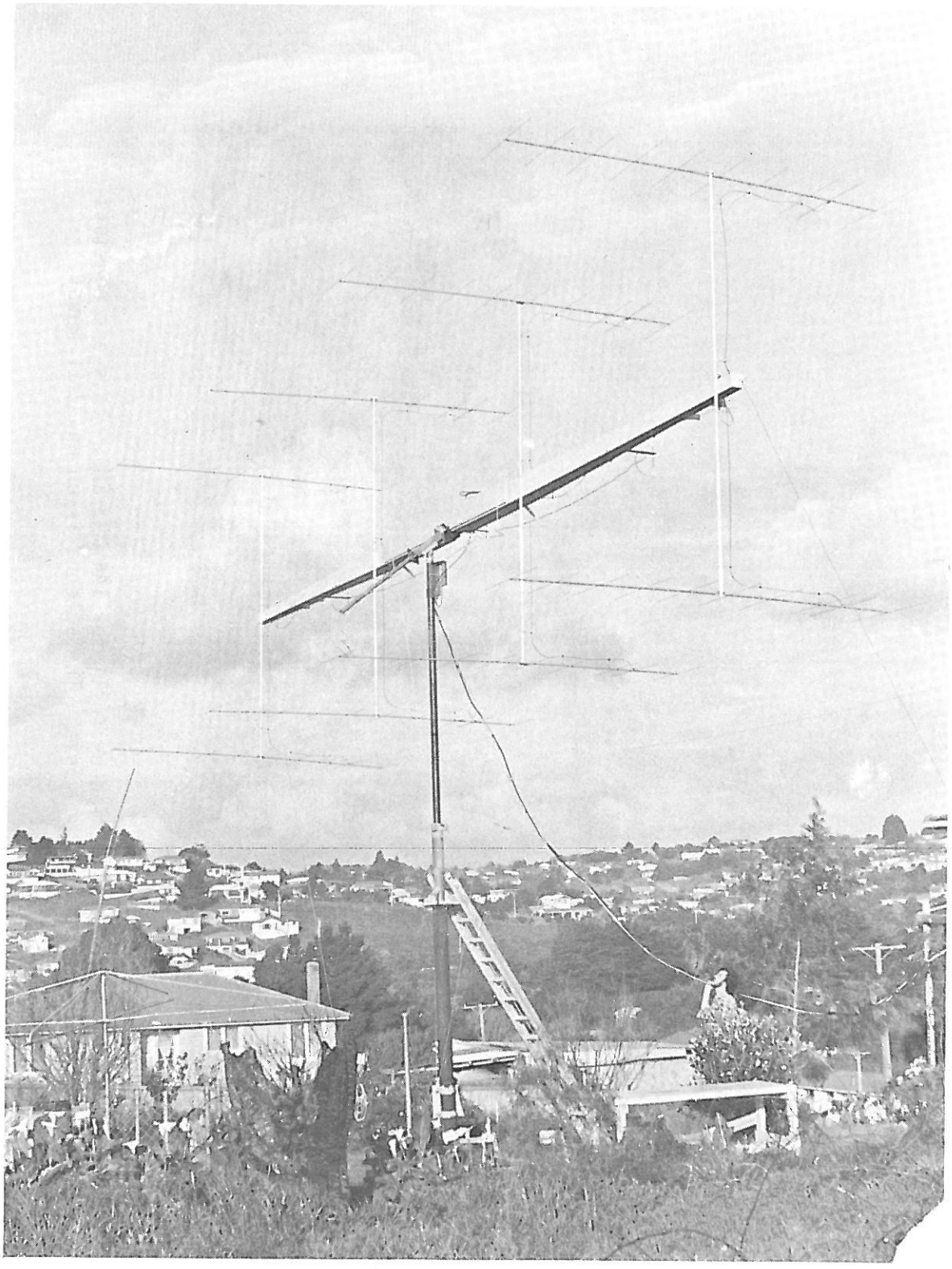
The two pictures above are of the 144 MHz EME array used by DK1FGA. There are eight yagi antennas. Each yagi has twelve directors, a driven element and two reflectors in a plane perpendicular to the boom.

The picture below is of the receiving array of JA6PFX consisting of eight nine-element yagis. The antenna is suspended from a tower and pivoted about one end. Note the wooden stakes in the ground for azimuth readout.

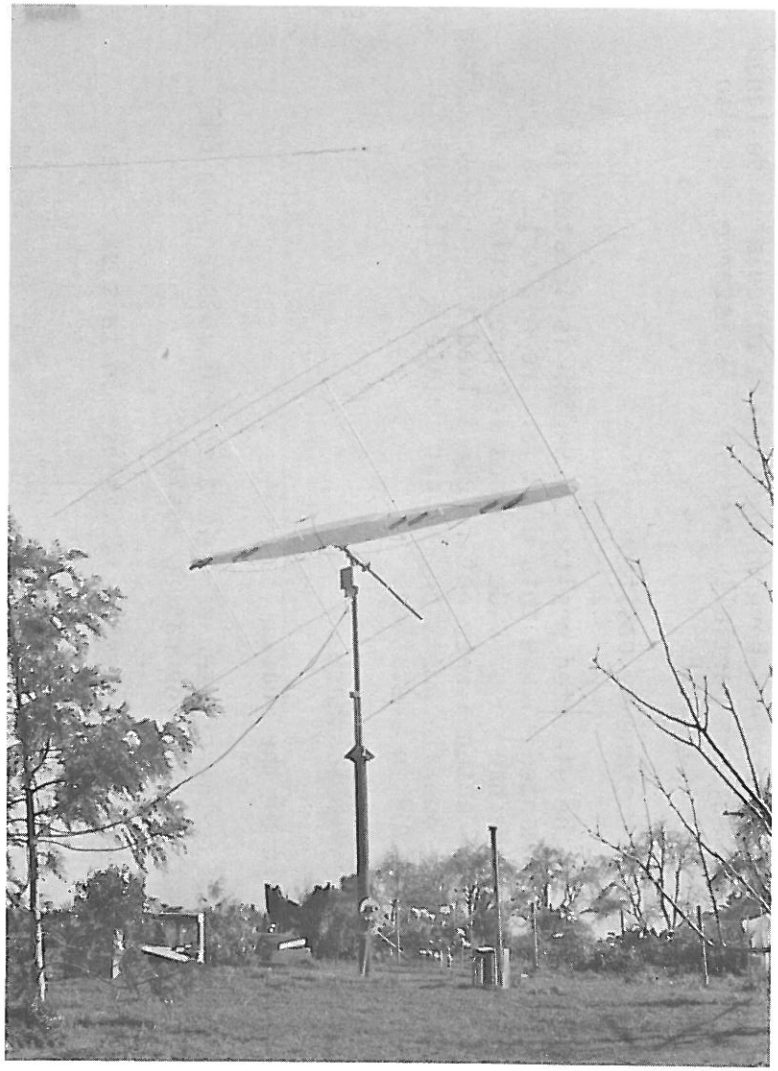




This is one of many arrays tried by K8III for 144 MHz EME. This one consists of 16 fourteen-element KLM log-yagis. The antenna is on an AZ-EL mount.



This is the 144 MHz array used by ZL1BJQ. Everything is home built. The antennas are ten-element yagis. The antenna is on a polar mount.



This is another picture of the ZL1BJQ array.

This is the winch used to raise and lower the homemade telescoping mast. The mechanism was made from an old rotary hoe.

The following series of pictures (number 1 through 15) are of the homemade dish and station of PAØSSB. The dish has a total of forty-eight ribs.

1. One of the ribs can be seen in picture 1. Each rib was made by cutting a 2.5 cm wide strip from a sheet of aluminum 1.5 X 3.0 meters and 3 mm thick to the required parabolic shape. Each rib assembly consists of one of the cut shapes plus a piece of ½" X ½" angle aluminum. Diagonal bracing was provided by shorter lengths of the angle aluminum held in place by aluminum pop-rivets. In the same picture can be seen the 10" diameter aluminum tube which serves as a hub of the completed dish.

2. This picture shows the method used for attaching each rib assembly to the hub using pop-rivets.

3. This is an overall view of the ribs being put in place.

4. A view showing almost all of the ribs in place.

5. The diagonal bracing pattern shows up quite well in this picture.

6. A top view of the dish with most of the ribs in place.

7. A picture of the completed dish.

8. This picture shows the completed dish with 23 cm feed in place. On June 25, 1972, the day this picture was taken, the sun noise measured 10 dB.

9. The details of the 23 cm feed-horn with built-in circulator designed by Dick Turrin, W2IMU, are partially visible. Assistance was also obtained from WA2HVA and G3LTF.

10. The dish is shown in stand-by position.

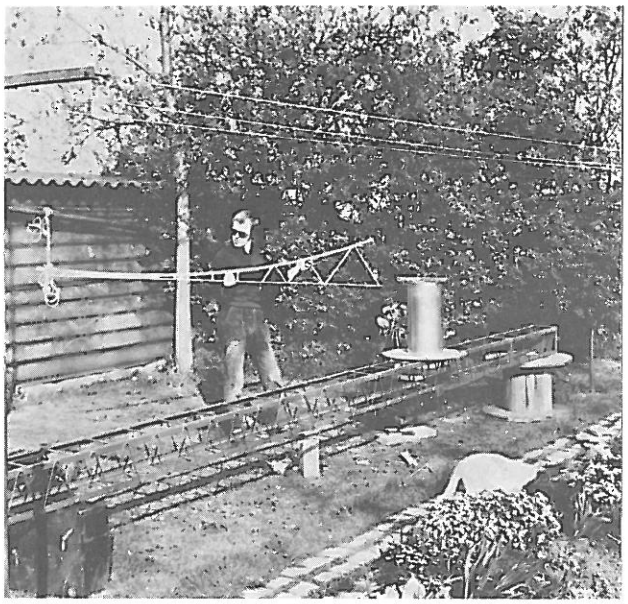
11. The antenna is in the elevated position. PAØSSB is located in a windy country and wanted to use this dish for tropospheric work as well. Therefore, he had to provide a means for protection from the wind. Lowering the antenna when not in use solved the problem. When the dish is in the operate position, it can rotate a full 360^{o} in aximth, and 0^{o} to 90^{o} in elevation.

12. The inside of the PAØSSB shack.

13. Additional picture of the shack.

14. Jan Ottens, PAØSSB, the creater of this dish and outstanding EME station is pictured in the operating position.

15. A little of the AZ-EL drive system is visible in this picture.



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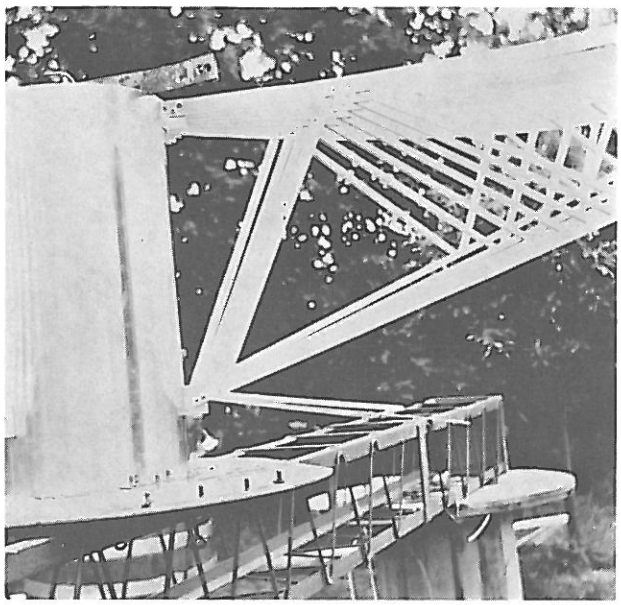

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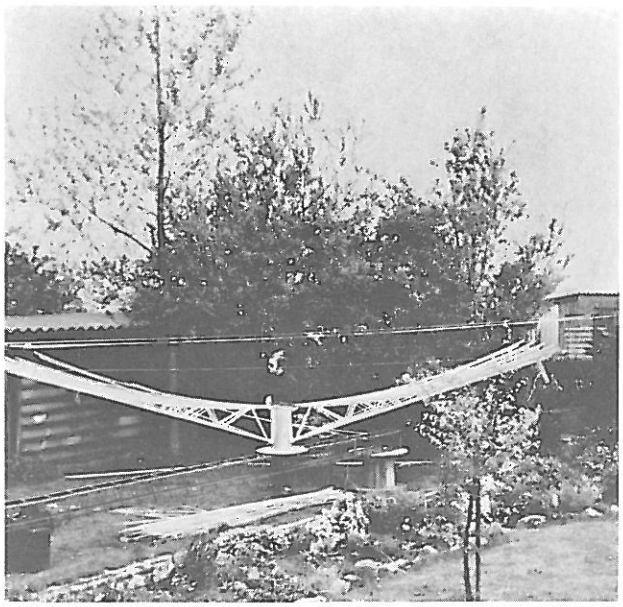

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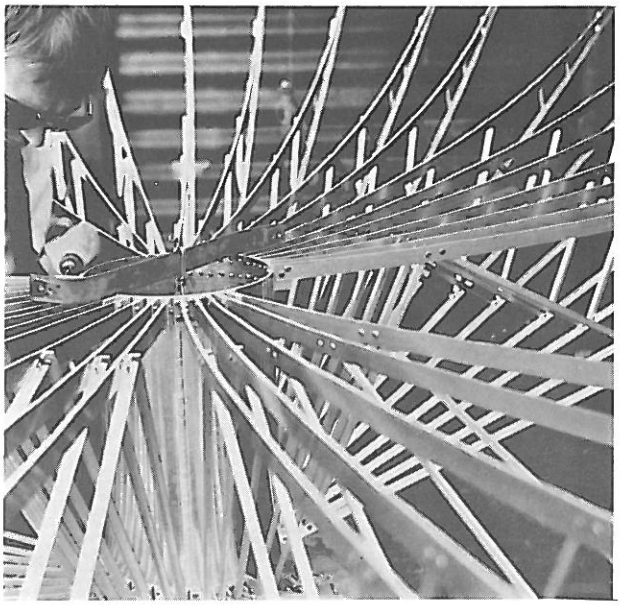

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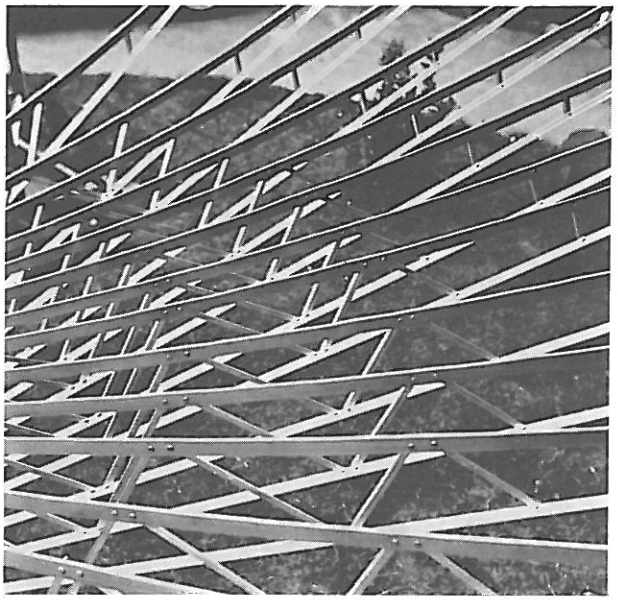

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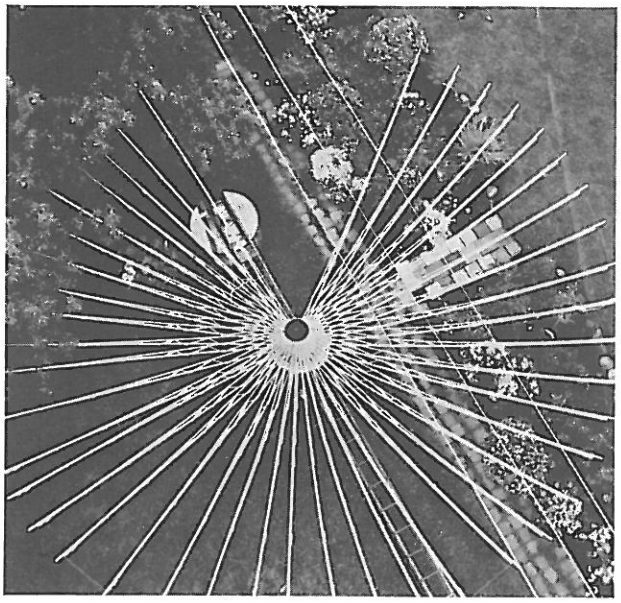

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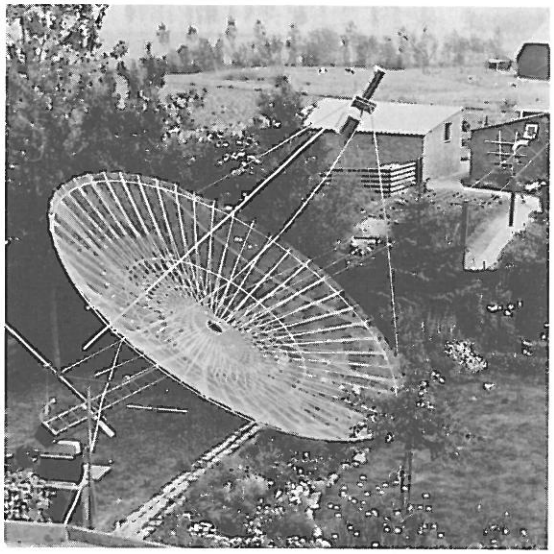

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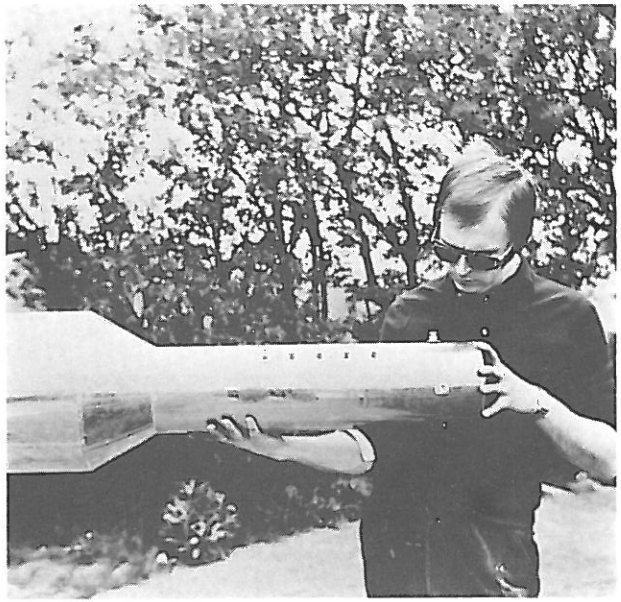

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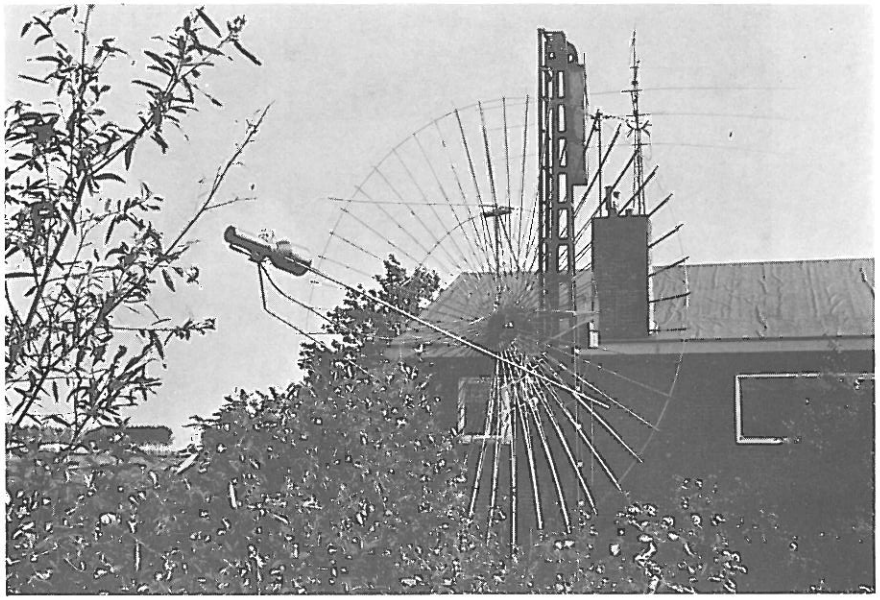

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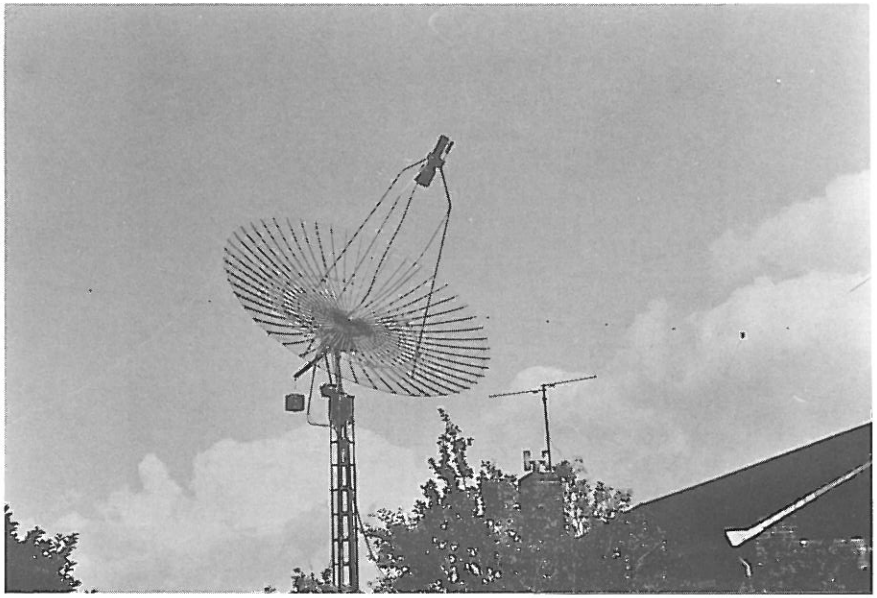

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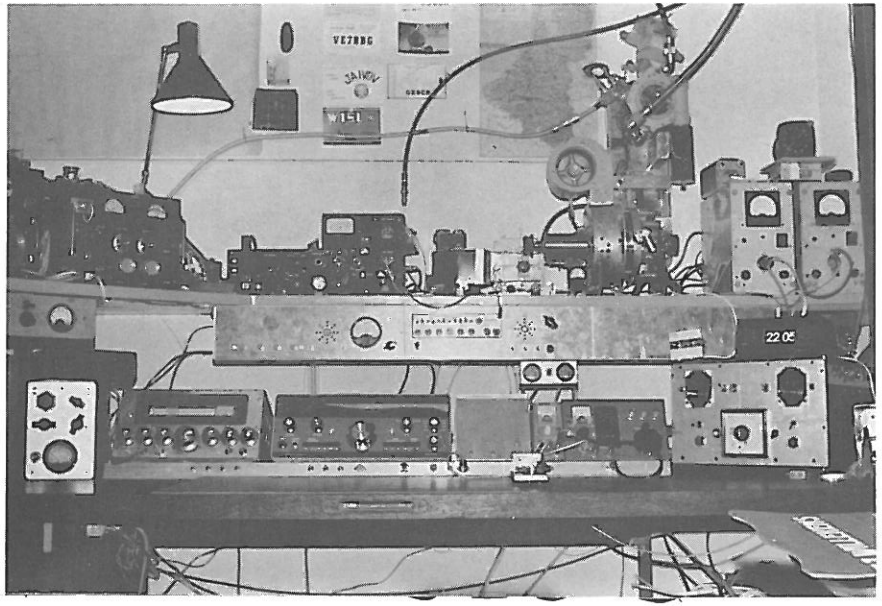

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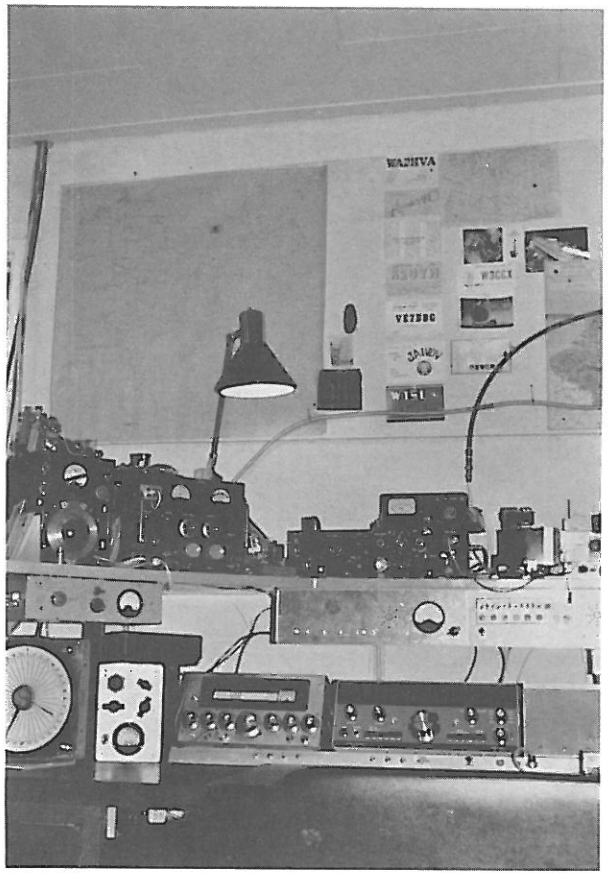

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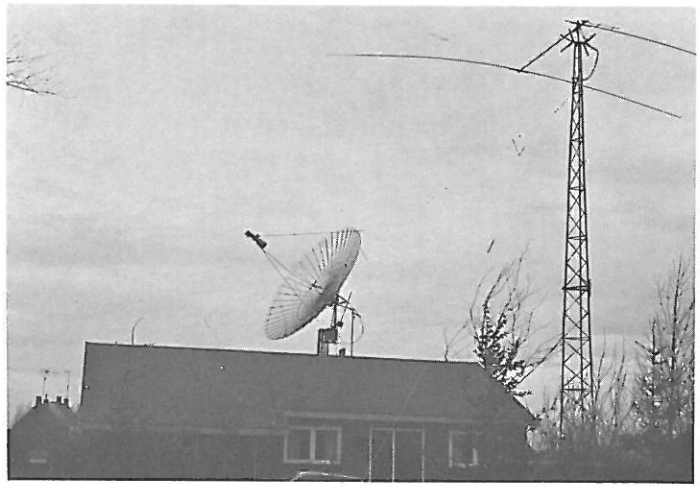

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