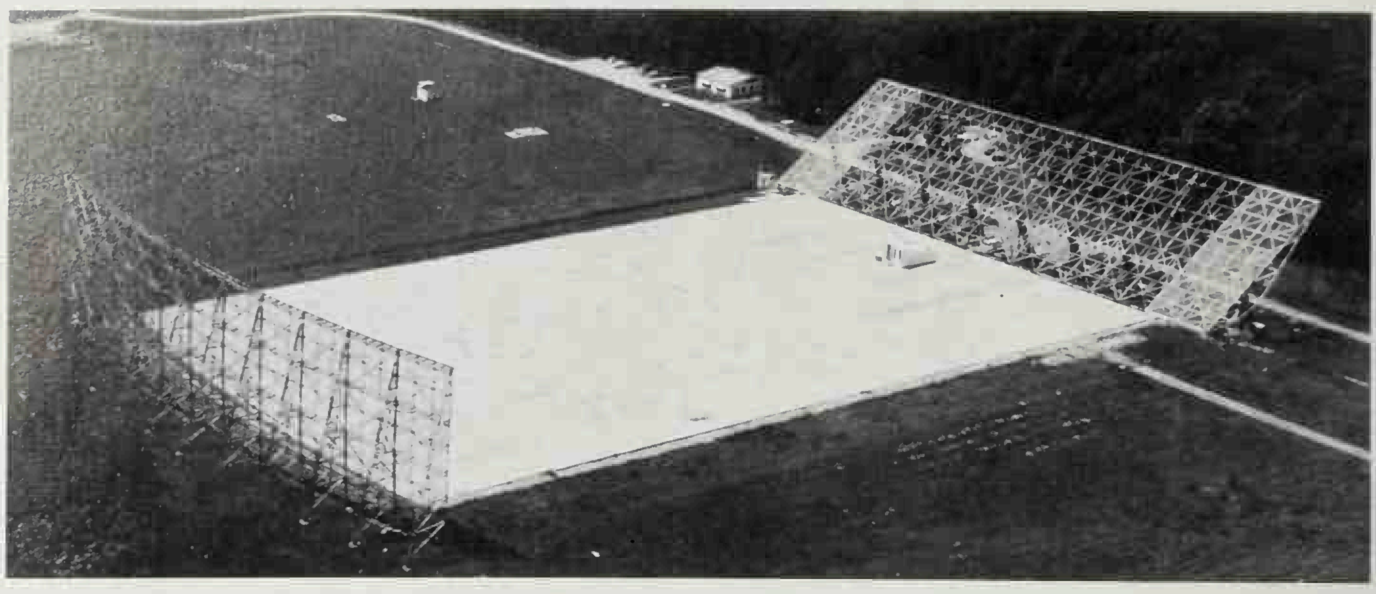
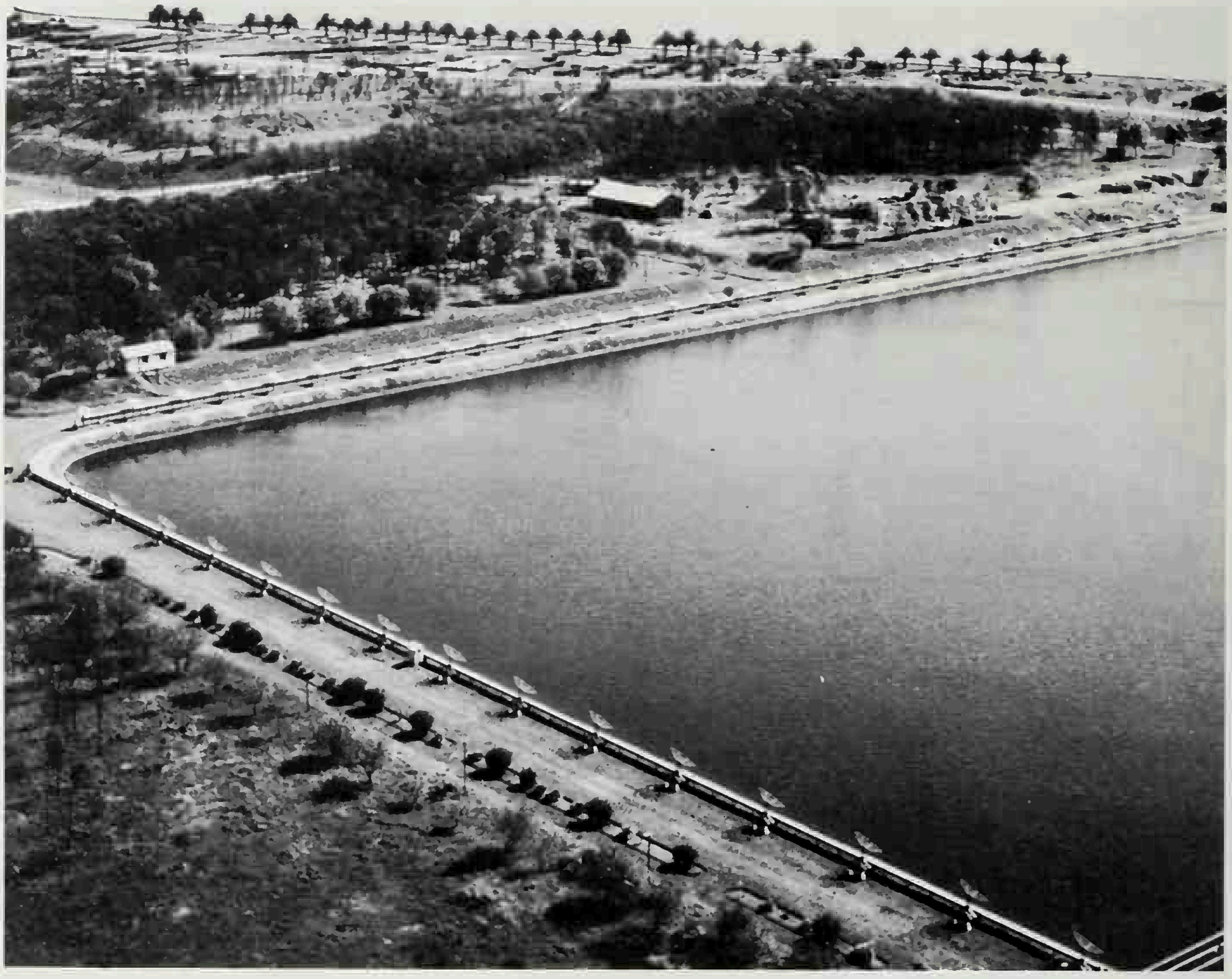


The 110 m × 24 m Kraus radio telescope at Ohio. The longish wavelengths used allow the reflectors to be made of wire mesh stretched across a girder framework.



The two grating interferometer radio telescopes at Potts Hill, Sydney, Australia. These can be used together to make a rotational synthesis instrument.

well-known example – and here the receiving antenna is mounted below the dish, so that the telescope works like a Cassegrain.

Another much less expensive but more unfamiliar form is the **transit radio telescope**. Like the Arecibo dish, this kind of telescope is movable in altitude only, but unlike the Arecibo instrument, it has a long narrow reflector which has a parabolic surface. This reflecting surface is fixed but it is fed by a flat reflector. It is known sometimes as the **Kraus type** radio telescope, since the first instrument of this kind was designed by Kraus and built at Ohio with a parabolic reflector 110 m × 24 m. Other notable examples are at Nançay, France and at the Pulkovo Observatory, Leningrad.

The surface of a dish or other reflecting surface does not have to be made as accurately as one for an optical telescope because radio waves are between 10^4 and some 10^8 times longer than light waves. Whereas one must have optical quality mirrors figured correct to less than 10^{-4} mm, the surface of the parabola for a radio telescope would only need to be correct to a little less than a millimetre for the very shortest radio wavelengths, and with an unevenness amounting to centimetres for many of the wavelengths in common use. Indeed, for any wavelength in the metre range a solid reflecting surface is no longer needed and a wire mesh reflecting surface is perfectly adequate. However, such a large difference in wavelength between optical and