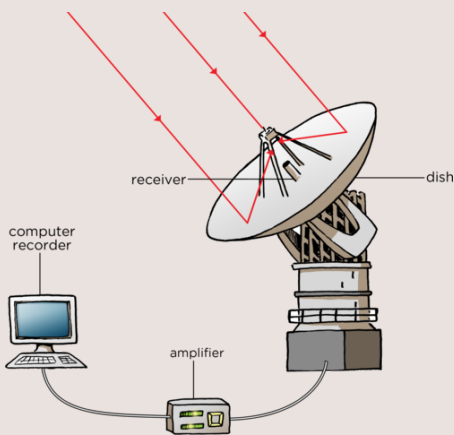


# Parabolic Reflector Antenna

Özlem Kahraman

Babaeski Şehit Ersan  
Yenici Anadolu Lisesi



The parabolic reflector or dish antenna is the form of antenna which finds many uses in domestic satellite television reception, terrestrial microwave data links, general satellite communications and many more. If a Parabolic Reflector antenna is used for transmitting a signal, the signal from the feed, comes out of a dipole or a horn antenna, to focus the wave on to the parabola. It means that, the waves come out of the focal point and strike the Paraboloidal reflector. This wave now gets reflected as collimated wave front, to get transmitted. The same antenna is used as a receiver. When the electromagnetic wave hits the shape of the parabola, the wave gets reflected onto the feed point. The dipole or the horn antenna, which acts as the receiver antenna at its feed, receives this signal, to convert it into electric signal and forwards it to the receiver circuitry. Radio telescope is an astronomical instrument consisting of a radio receiver and an antenna system that is used to detect radio-frequency radiation emitted by extraterrestrial sources.

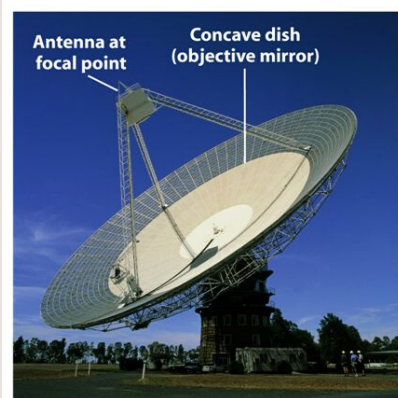
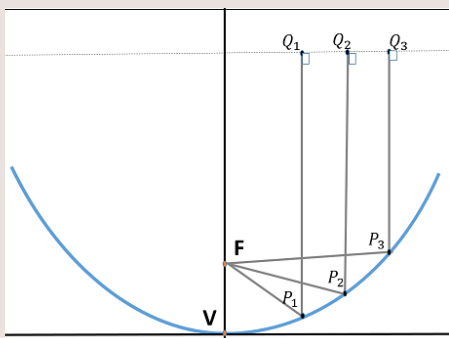


Figure 6-22  
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Parkes telescope  
Australia, 64m