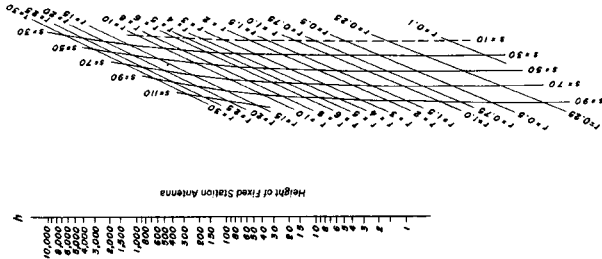


FOR CHANNEL 5

CHART FOR DETERMINING RADIUS FROM FIXED STATION IN 72-76 MHz BAND TO INTERFERENCE CONTOUR ALONG WHICH 10% OF SERVICE FROM ADJACENT TELEVISION STATION WOULD BE DESTROYED

Effective Radiated Power of TV Station 100 kw.
 Television Transmitting Antenna Height 500 ft.



EXPLANATION OF SCALE HEADINGS:

P—effective radiated power of fixed 72-76 MHz station in watts and equal the power output of the transmitter adjusted for transmission line loss and antenna gain. In symbols:

$P = P_{OLG}$
 where: P_{OLG} = output of transmitter in watts

L = transmission line efficiency, %

G = power gain of the antenna with respect to a half wave dipole in the same plane

For a directional antenna use the power in the main lobe.

h—height in feet of the center of the transmitting antenna array of the fixed 72-76 MHz station; the radius of the interference contour is 10% of the distance between the TV station and the TV antenna in the direction of the TV station. (The method for determining this height is explained in detail in the TV Broadcast Rules.)

f—separation in miles between the television station antenna and the 72-76 MHz fixed station antenna.

r—distance in miles from the 72-76 MHz fixed station antenna to the TV antenna, which is the radius of the interference contour. This distance is measured from the 72-76 MHz antenna in the direction of the TV antenna.

f—frequency in MHz of 72-76 MHz fixed stations.
 NOTE: Frequencies included in cross hatched area are not available for assignment.

DIRECTIONS FOR USING THIS CHART:

1. Draw a straight line connecting P and h for the 72-76 MHz fixed station and continue to the Q axis.
2. From the intersection of the P-h line and the Q axis, draw another straight line to f.
3. Where the second line intersects the S_r curves, read the value of r for the appropriate value of f.