Purpose of this Project:
to develop an experimental low power (1 watt into the dish)
FM-CW weather radar to operate in the already prescribed band.

Bandwidth requirements are given by the equation:

f=((Delta_Voltage)/(.5Ts))*KVco*(2*R/c)

Ts=sweep period=10 Hertz
KVco=4.08 Mhz/volt
Maximum Range=22 Statute miles
Delta_voltage=2.0 peak to peak
f=desired audio passband= 0 to 20 Khz

the aforementioned parameters yield a required bandwidth
of about 8 Mhz. We have increased this by 25% to allow
for a guard bandwidth.