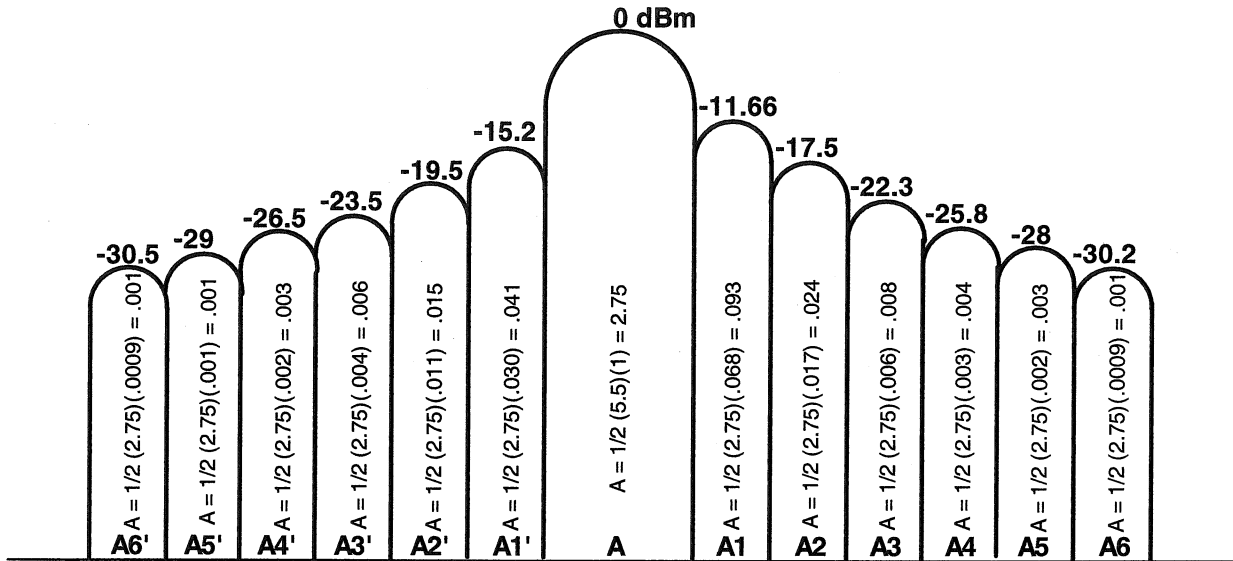


PULSAR OCCUPIED SPECTRUM TESTS

4.0 Occupied Spectrum

The worst case occupied spectrum occurs with the 0.25 microsecond pulse width selection as depicted in Plot #2.



PULSAR OCCUPIED BANDWIDTH, Worst Case

Federal Regulation 2.989,
Occupied Bandwidth for
Pulsar Meteorological Radar

Pulse Width = 0.25 microseconds
PRF = 2000
Frequency = 5550 MHz

Major Lobe Width = 5.5 MHz
Minor Lobe Width = 2.75 MHz

$$\text{Lobe Area} = 1/2 \text{ Lobe Width} \left[\frac{1}{\text{Log}^{-1} \frac{\text{db}}{10}} \right]$$

A6' through A6 = 2.951

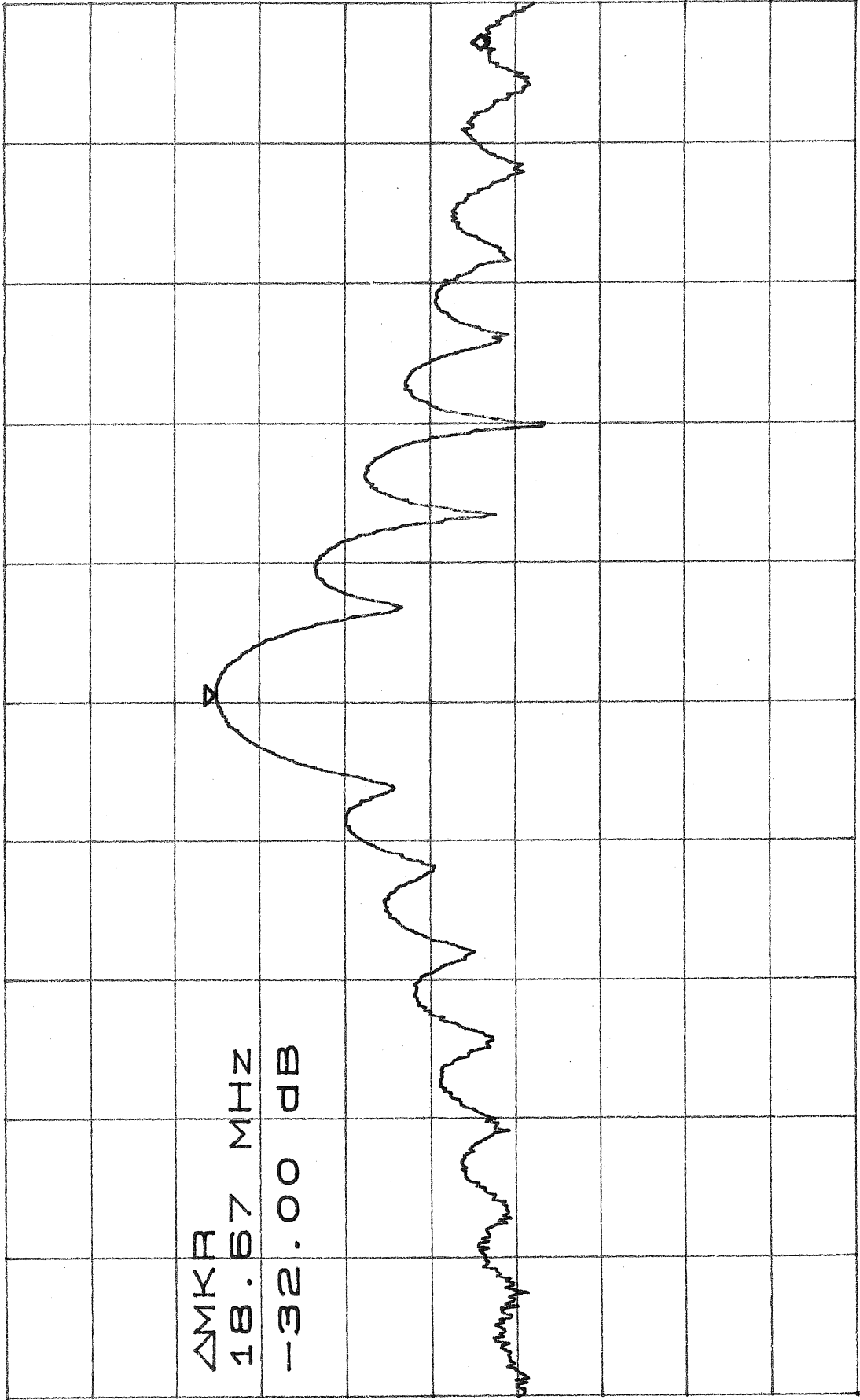
Mean Radiated Power = 2.951 * 0.99 = 2.921

A1' - A2 = 2.908

Occupied Bandwidth = 13.75 MHz

Emission Designator = 13M75PON

ATTEN 10dB ΔMKR -32.00dB
RL -20.0dBm 10dB/ 18.67MHz



ΔMKR
18.67 MHz
-32.00 dB

CENTER 5.55000GHZ SPAN 40.00MHZ
*RBW 10KHZ VBW 10KHZ SWP 1.00sec