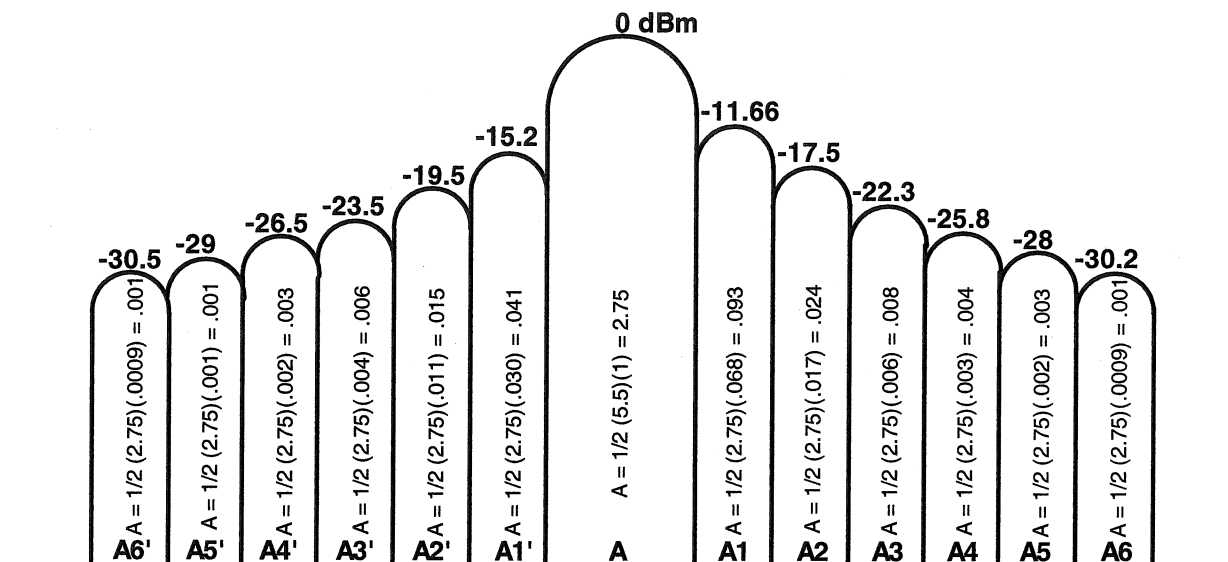


PULSAR OCCUPIED SPECTRUM TESTS

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

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

A6' through A6 = 2.951

Mean Radiated Power = $2.951 * 0.99 = 2.921$

A1' - A2 = 2.908

Occupied Bandwidth = 13.75 MHz

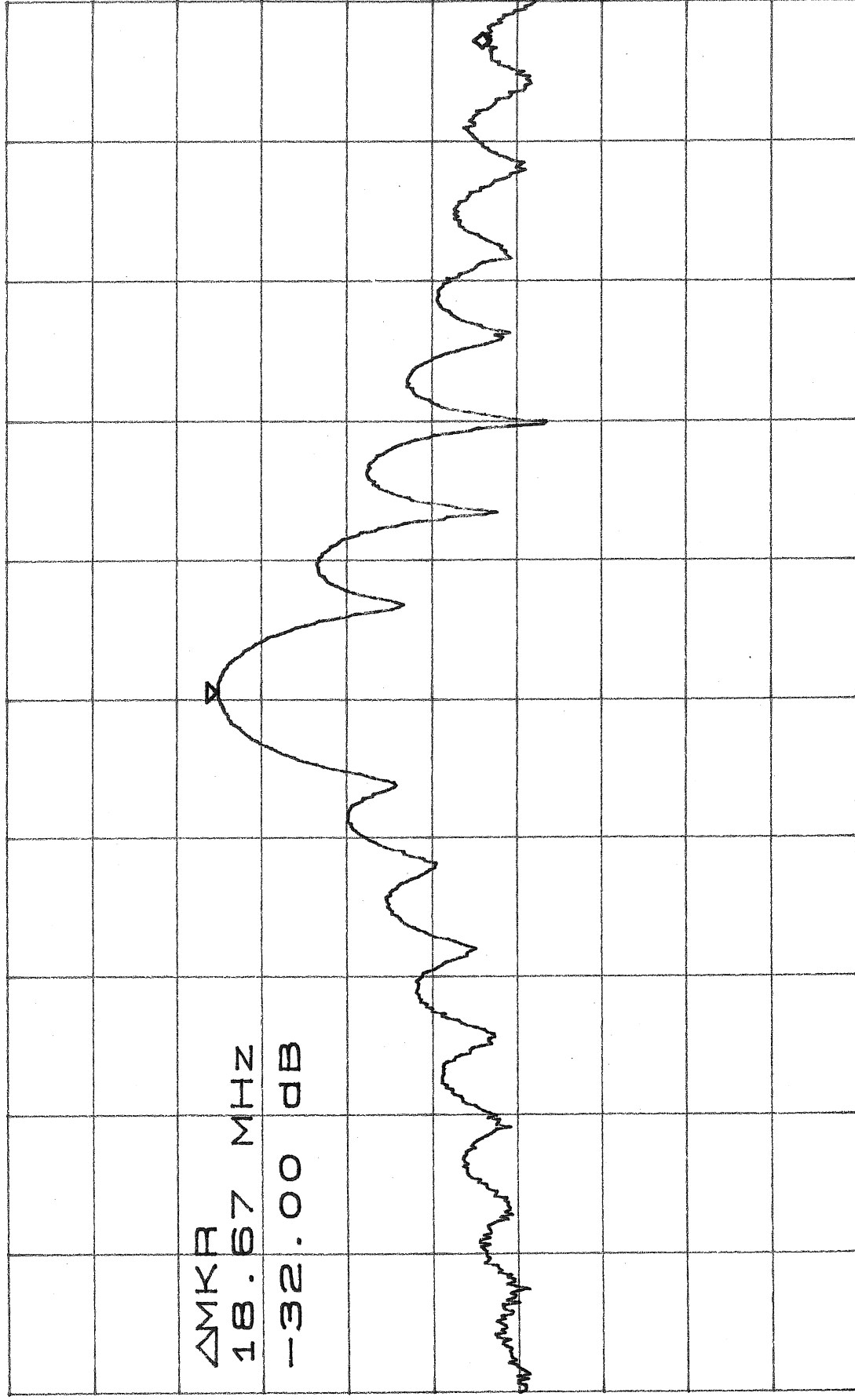
Emission Designator = 13M75PON

ATTEN 10dB

ΔMKR -32.00dB

RL -20.0dBm

10dB/ 18.67MHz



D

CENTER 5.55000GHZ

SPAN 40.00MHz

*RBW 10kHz

VBW 10kHz

SWP 1.00sec

Plot 2

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