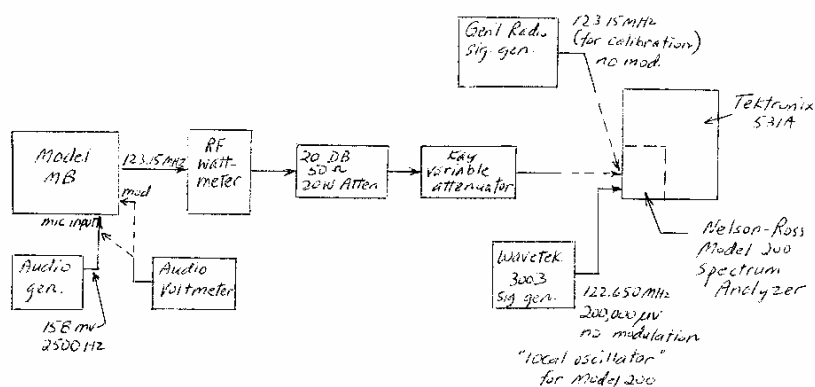


3. Occupied Bandwidth--part 2.989

Equipment: RF Wattmeter, Bird Model 43 with 25 watt
100-250 Mhz element
Coaxial Power Attenuator, Bird Model 8320,
50 ohms, 20 dB, 20 watts
Coaxial attenuator, variable, Kay Model 30-0
50 ohms, 0-101 dB
Spectrum Analyzer, Nelson-Ross Model 200
Oscilloscope, Tektronix Model 531A
Signal Generator, Wavetek Model 3003
Signal Generator, General Radio Model 1021-P3B
Audio generator, Eico Model 377
Audio voltmeter, Simpson Model 715

Set-up Diagram:



Procedure:

- Connect equipment as shown above. Note: the Nelson-Ross Model 200 narrowband spectrum analyzer requires a "local oscillator injection" ± 500 KHz from signal frequency.
- Tune up transmitter section of Model MB, per method 1 in technical description
- Set audio generator frequency to 2500 Hz. Increase amplitude until modulator output voltage is 4.4 v. rms, which gives 50% modulation. Note generator voltage.
- Further increase audio generator voltage by 16 dB, or 6.3 times.