- 2. RANGE This band switch selects the frequency range of the Sweep Generator, and the tuning dial selects the center frequency from which the sweep deviates "plus" or "minus". Band "A" covers the range from 38 MC to 108 MC; Band "B", from 174 MC to 216 MC; and Band "C" covers from 30 KC to 38 MC. The "C" Band is used to produce the video sweep. The television Channels are clearly marked by the small numerals as is also the FM Band from 88 MC to 108 MC.
- 3. SWEEP MC Selector switch controls the total width of sweep frequency or band sweep from OFF or ZERO position to 18 megacycles in width. The deviation from center frequency is plus or minus one-half the sweep frequency from center frequency.

# C. MARKER GENERATOR CONTROLS

#### 1. MARKER

This selector switch controls the marker section of the TVG-2.

- a. "Off" position disconnects the plate voltage to the variable and crystal oscillators.
- b. "Variable" position applies power to the variable marker oscillator.
- c. "Crystal" position applies power to the crystal oscillator.
- d. "Calibrate" position applies power to both variable marker and crystal oscillators.

# 2. RANGE (Marker)

This band switch, together with the tuning dial above it, determines the Variable Marker Frequency; that is, the frequency of the "pip" on the sweep curve. Three ranges are provided: 4MC to 8MC; 16MC to 29MC; and 27MC to 54MC. These are fundamental oscillator frequencies and cover all the Television Intermediate frequencies. The small numerals on Bands "A" and "C" indicate the harmonics of the range and cover all the necessary Television and FM alignment frequencies.

#### D. BLANKING - DOUBLE PATTERN

This switch controls the 60 cycle Horizontal Sweep voltage to the oscilloscope. It provides either a blanked voltage to produce a single pattern with a base line or a double image pattern.

### E. PHASE

This control shifts the phase of the Horizontal Sweep voltage to the Oscilloscope. It is adjusted so that the double image pattern coincides.

### F. SIGNAL OUTPUT CONTROLS

- 1. ATTEN RATIO This control provides decade multiplying factors from 1 to 10 K in five steps.
- 2. RF OUTPUT Controls the R.F. and VIDEO output voltage throughout any selected attenuator range.
- 3. MARKEROUTPUT- Controls the output of the Marker Oscillator through any selected attenuator range. The MARKER OUTPUT also controls the amount of signal fed to the Attenuator System from the Crystal Oscillator and Video Modulation or External Marker input connectors as well as the output to the Beat Detector jack.