

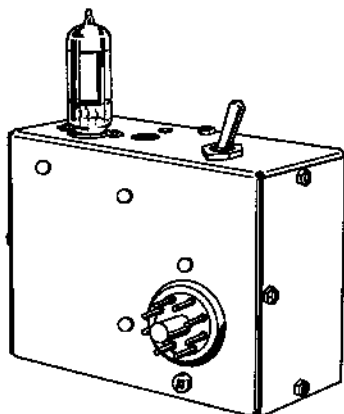


**Figure A-1. NC109 with NTS-1 Loud Speaker**

## SECTION A ACCESSORIES

### A.1 NTS-1 LOUDSPEAKER

The National NTS-1 (figure A-1) is an accessory loudspeaker assembly. Style, finish and electrical properties of the NTS-1 make it a perfect match for your NC109.



**Figure A-2. XCU-109 Crystal Calibrator**

### A.2 XCU-109 CRYSTAL CALIBRATOR

The National XCU-109 (figure A-2) is a crystal calibrator unit specifically designed for use with the NC109 receiver. An electron-coupled crystal oscillator is used to provide marker frequencies at one megacycle intervals. The oscillator is activated by the toggle switch located on the top of the XCU-109.

### A.3 NFM-83-50 ADAPTOR

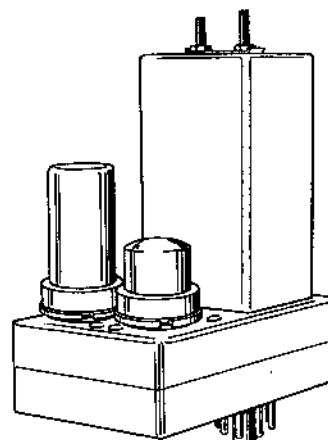
Your NC109 is adaptable for narrow band FM operation when used with the NFM-83-50 adaptor. (figure A-3) Operating instructions given in paragraph 3.2 of

this manual are applicable to NFM operation except that the AM position of the MODE switch is recommended when scanning for FM signals.

An FM signal is recognized by the presence of an audio null in the center of its carrier. Once an FM signal is located, set the MODE switch to its ACC position and tune for maximum response.

#### NOTE

The pass band of the NFM-83-50 is sufficiently wide to accommodate any narrow band FM signal if the transmitter is held within recommended deviation limits. If excessive peak deviation occurs at the transmitter, distortion will result in the receiver when the adaptor is in use even though the signal appears undistorted when using AM slope detection.



**Figure A-3. NFM-83-50 Adaptor**