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IDENTIFICATION LABEL

LOCATION

- See the Attached Photograph or Sketch
- Back Of Radio
- Back Of Radio under Belt Clip

TYPE

- The label is a polyester film laminate with a pressure sensitive adhesive backing. The adhesive is a permanent type acrylic with a minimum peel strength of 32 oz/inch.

MARKINGS (TEXT)

- See the Attached Photograph and Exhibit 3-5 for the actual location of the FCC label on the device.
- Label Attached Below.
- See Attached Drawing.



GENERAL INFORMATION

## I. Production Plans -- Pursuant 2.1033 (c)

Quantity production is planned.

## II. Application References -- Pursuant 2.1061

Reference is made to the following Motorola "Application References"

1. Mobile Products and their application.
2. Mobile Products Transmitter Modulations Methods.
3. Plantation, Florida Antenna Range.

## III. Data Submittal Procedure:

Data is supplied in accordance with Part 2, Sub-part J of the Commissions' rules.

Necessary Bandwidth Computation for 17K7D7D and 8K10F1E Emission Designators

The FCC Rule & Regulations Part 2, §2.202(b) defines *Necessary Bandwidth* as the minimum value of the occupied bandwidth sufficient to ensure that transmission of information at the rate and with the quality required for the system employed. §2.202(c) lists four methods of determining the necessary bandwidth, including the use of formulas in §2.202(g), and measurement in cases where the other methods of §2.202(c) do not apply. It is felt that while these formulas apply well to voice and many older digital modulation systems, the formulas do not apply to the high performance digital modulation employed in the system submitted for Certification because of difficulties determining representative values for the factors K and M. We have, therefore, used the measurement criteria of §2.202(c) (4).

The value cited, 17K7 and 8K10, is the bandwidth that contains 99% of the total transmitted power. The 99% value was chosen because §2.202(b) defines *Necessary Bandwidth* as the minimum value of the occupied bandwidth. In turn, §2.202(a) defines *Occupied Bandwidth* as the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5% of the total mean power radiated by a given emission, i.e., contains 99% of the total transmitted power.

## IV. Applicable References:

- Reference Certification FCC ID: ABZ89FC5810 and ABZ89FC5812
- TIA-102.CAAA Digital C4FM/CQPSK Transceiver Measurement Methods
- TIA/EIA-102.CAAB Land Mobile Radio Transceiver Recommendations, Project 25 – Digital Radio Technology, C4FM/ CQPSK Modulation
- EIA/TIA-603A Land Mobile FM or PM Communications Equipment Measurement and Performance Standards
- FCC Federal Regulations Part 47 Sec. 2.1033 – 2.1055
- FCC Federal Regulations Part 90 Sec.90.210, 90.539 and 90.543