

Recommended Radio Channel Designators

Revised 2025 (1 Page)

A. Purpose

The purpose of this Manual Part is to describe the railroad channel designations and the format used to display them.

B. General

The U.S. railroad industry VHF band covers the frequency range of 160.215 MHz – 161.565 MHz and is broken into three modulation groups.

1. Wideband – Bandwidth 25 kHz
2. Narrowband – Bandwidth 12.5 kHz
3. Very Narrowband – Bandwidth 6.25 kHz

Refer to AAR Manual of Standards and Recommended Practices, Standard S-9556 AAR Channel Plan for VHF Frequencies from 160.215 MHz to 161.565 MHz.

C. Channel Display

"All Channel Radios" display the selected channel by either two or three sets of digits.

1. Wide band channels have two sets of two digits:

54 54 indicates the radio is transmitting and receiving on the same radio frequency 160.920 MHz (Simplex Wideband).

08 64 indicates the radio is transmitting on 160.230 MHz and receiving on 161.070 MHz (Half-Duplex Wideband).

2. **Narrow and Very Narrow band channels** add an extra digit to describe if the channel is narrow (12.5 kHz), very narrow (6.25 kHz) or a splinter channel:

054 054 indicates the radio is transmitting and receiving on the same frequency 160.920 MHz (Simplex Narrowband).

008 064 indicates the radio is transmitting on 160.230 MHz and receiving on 161.070 MHz (Half-Duplex Narrowband).

147 147 indicates the radio is transmitting and receiving on the same splinter frequency 160.8225 MHz (Simplex Narrowband Splinter).

423 423 indicates the radio is transmitting and receiving on the same frequency 161.085 MHz (Simplex Very Narrowband).