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**EXHIBIT 6 - (Addendum) OCCUPIED BANDWIDTH pursuant to PS Docket No. 13-209 relating to digital transmissions the 800 MHz NPSPAC Public Safety Band**

DMR is a digital modulation format, further described by the ETSI TS 102 361 standard, that uses 4FSK modulation to carry up to two voice and data channels on a single 12.5 kHz RF channel to achieve 6.25e kHz channel efficiency.

Sample plots are provided for DMR Data only (7K60FXD) and DMR Voice and Data (7K60FXE). More details about these emission designators are described in the original filing.

Per this action, the change requested is to add three additional digital TDMA emission designators to be shown on the grant:

**7K60F1D** Frequency modulation; A single channel containing quantized information; Data / Telecommand

**7K60F1E** Frequency modulation; A single channel containing quantized information; Telephony

**7K60F1W** Frequency modulation; A single channel containing quantized information; Combination of Telephony and Data / Telecommand

Since the occupied bandwidth data on file to show compliance for 7K60FXE and 7K60FXD was generated with randomized data, the plot for each of the new designators appears the same spectrally. Therefore there is no additional occupied bandwidth data included with this request.

**Emission Mask H per FCC part 90.210:**

For transmitters that are not equipped with an audio low-pass filter, the power of any emission must be attenuated below the unmodulated carrier output power (P) as follows:

- (1) On any frequency removed from the center of the authorized bandwidth by a displacement frequency ( $f_d$  in kHz) of 4 kHz or less: **Zero dB**
- (2) On any frequency removed from the center of the authorized bandwidth by a displacement frequency ( $f_d$  in kHz) of more than 4 kHz but no more than 8.5 kHz: **At least  $107 * \log_{10}(f_d / 4)$  dB**
- (3) On any frequency removed from the center of the authorized bandwidth by a displacement frequency ( $f_d$  in kHz) of more than 8.5 kHz, but no more than 15 kHz: **At least  $40.5 \log_{10}(f_d / 1.16)$  dB**
- (4) On any frequency removed from the center of the authorized bandwidth by a displacement frequency ( $f_d$  in kHz) of more than 15 kHz, but no more than 25 kHz: **At least  $116 \log_{10}(f_d / 6.1)$  dB**
- (5) On any frequency removed from the center of the authorized bandwidth by more than 25 kHz: **At least 43 plus  $10 \log_{10}(P)$  dB**

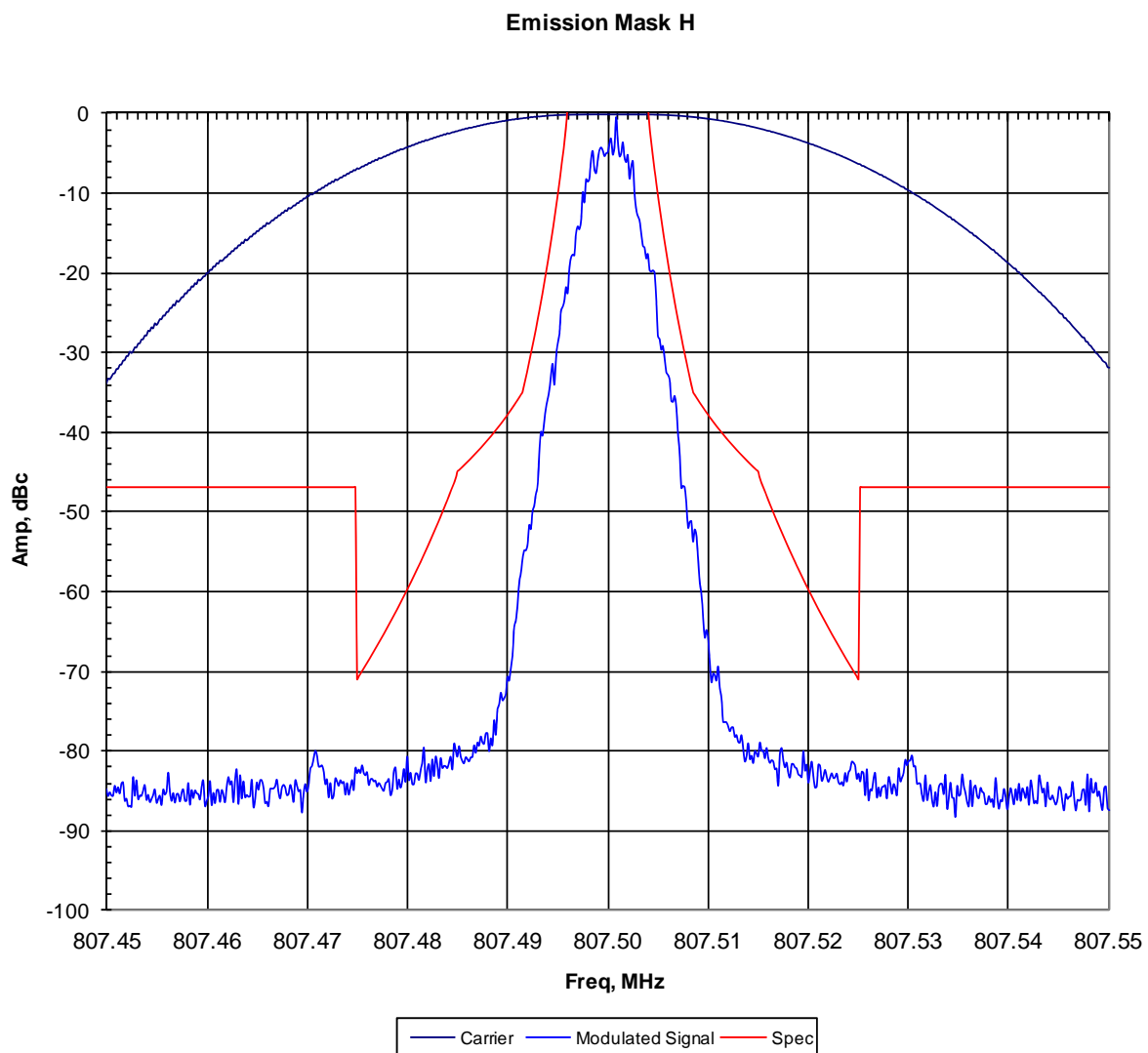
**Power Output**

The referenced transmitter is filed for for 2.5 Watts Maximum Power

**EXHIBIT 6 A - (Addendum) OCCUPIED BANDWIDTH - 807.5 MHz. EMISSION MASK H, Data Only**

CENTER FREQUENCY: 807.5 MHz  
 RESOLUTION BANDWIDTH: 300 Hz  
 VIDEO BANDWIDTH: 1 kHz  
 SPAN: 100 kHz  
 HORIZONTAL SCALE: 10 kHz/div  
 SWEEP TIME: 200 Sec.  
 VERTICAL SCALE: 10 dB/div  
 REFERENCE LEVEL: 0 dB (33.5 dBm = 2.5W)  
 ATTENUATION: 33.5 dB

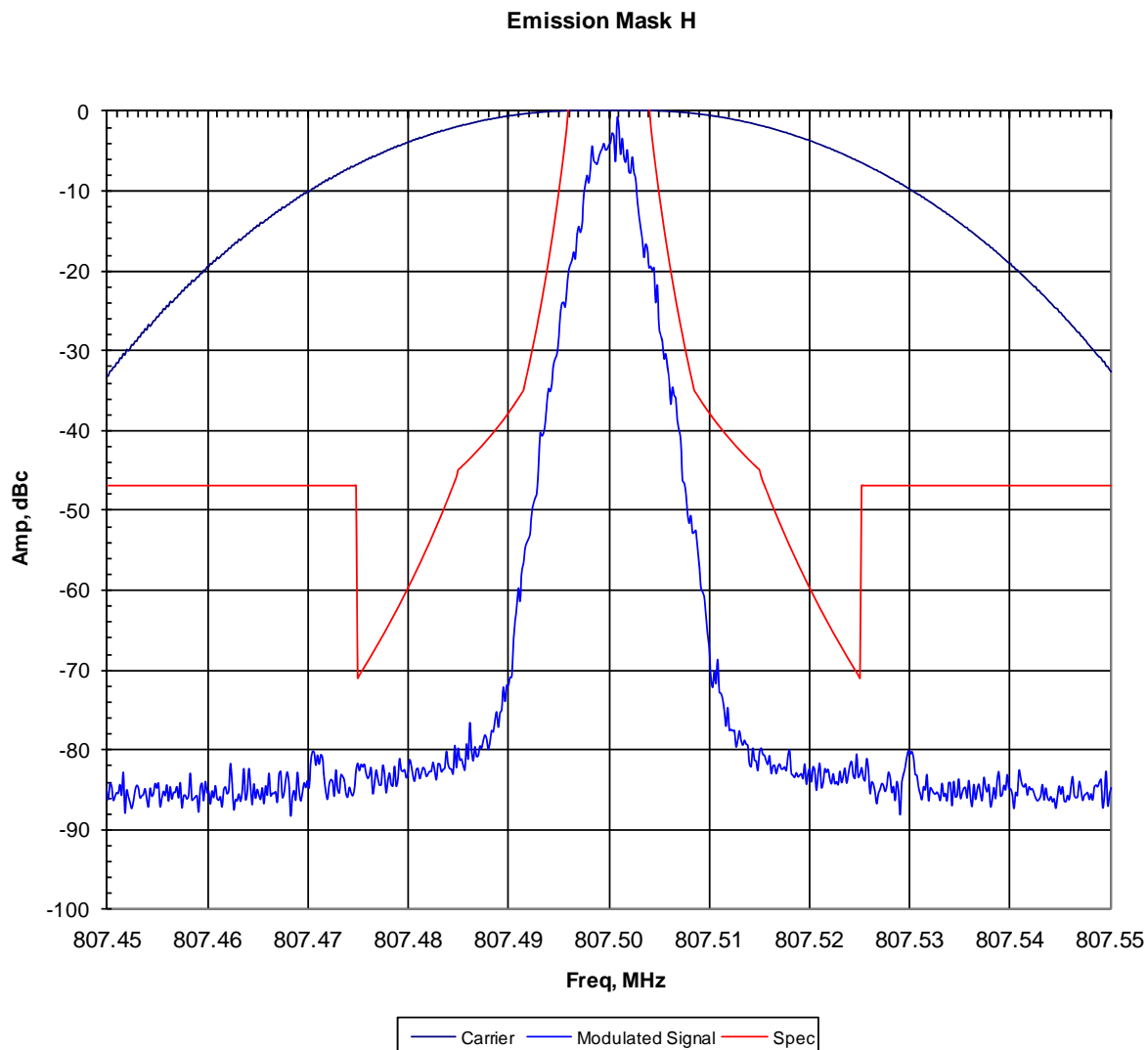
Occupied Bandwidth is measured per TIA603-D: Method 2.2.11 and is pursuant to FCC 2.1049, 90.210



**EXHIBIT 6 B - (Addendum)**
**OCCUPIED BANDWIDTH - 807.5 MHz, EMISSION MASK H, Data and Voice**

CENTER FREQUENCY: 807.5 MHz  
 RESOLUTION BANDWIDTH: 300 Hz  
 VIDEO BANDWIDTH: 1 kHz  
 SPAN: 100 kHz  
 HORIZONTAL SCALE: 10 kHz/div  
 SWEEP TIME: 200 Sec.  
 VERTICAL SCALE: 10 dB/div  
 REFERENCE LEVEL: 0 dB (33.5 dBm = 2.5W)  
 ATTENUATION: 33.5 dB

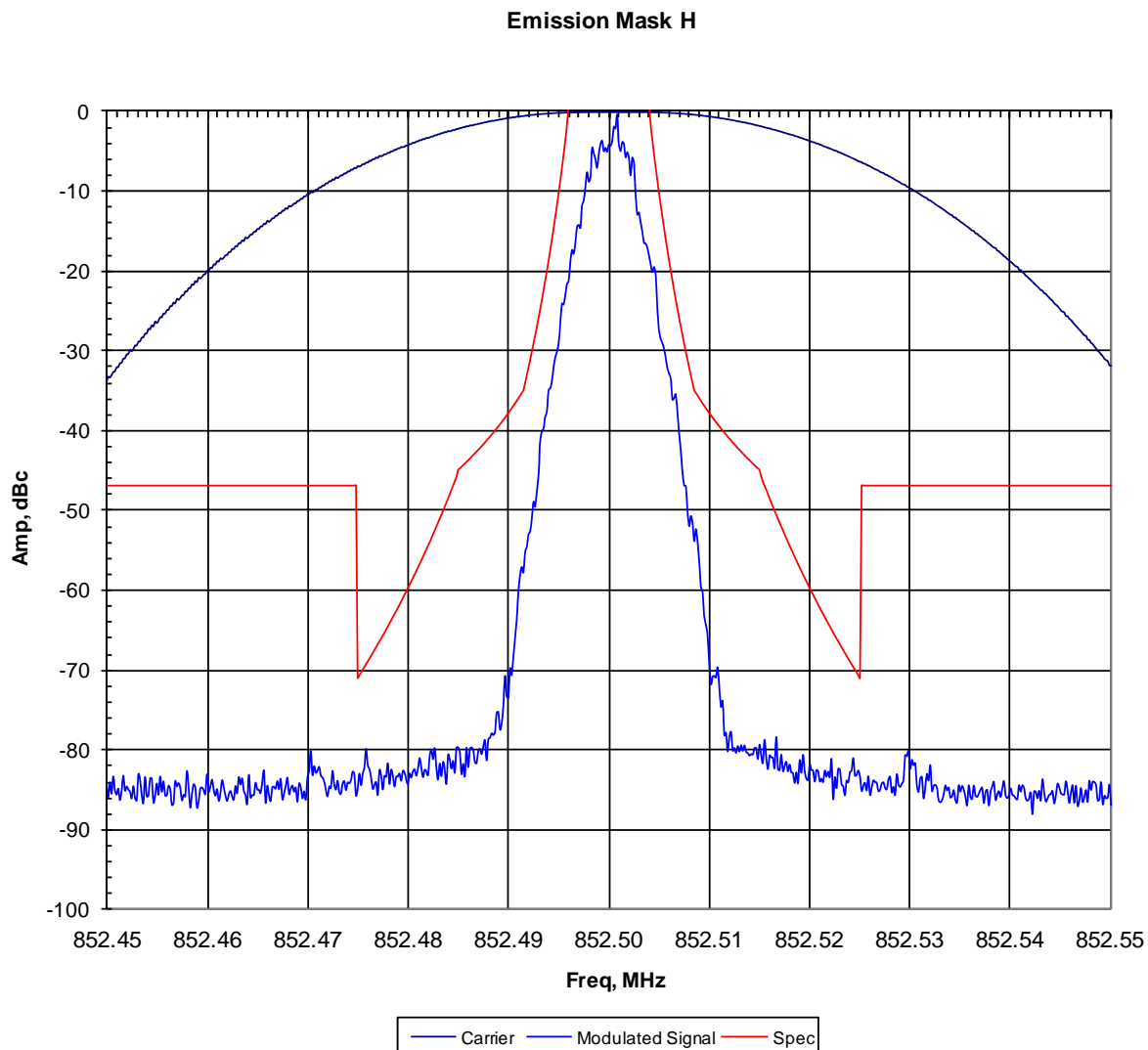
Occupied Bandwidth is measured per TIA603-D: Method 2.2.11 and is pursuant to FCC 2.1049, 90.210



**EXHIBIT 6 C - (Addendum)**
**OCCUPIED BANDWIDTH - 852.5 MHz, EMISSION MASK H, Data Only**

CENTER FREQUENCY: 852.5 MHz  
 RESOLUTION BANDWIDTH: 300 Hz  
 VIDEO BANDWIDTH: 1 kHz  
 SPAN: 100 kHz  
 HORIZONTAL SCALE: 10 kHz/div  
 SWEEP TIME: 200 Sec.  
 VERTICAL SCALE: 10 dB/div  
 REFERENCE LEVEL: 0 dB (33.5 dBm = 2.5W)  
 ATTENUATION: 33.5dB

Occupied Bandwidth is measured per TIA603-D: Method 2.2.11 and is pursuant to FCC 2.1049, 90.210



**EXHIBIT 6 D - (Addendum)**
**OCCUPIED BANDWIDTH - 852.5 MHz, EMISSION MASK H, Data and Voice**

CENTER FREQUENCY: 852.5 MHz  
 RESOLUTION BANDWIDTH: 300 Hz  
 VIDEO BANDWIDTH: 1 kHz  
 SPAN: 100 kHz  
 HORIZONTAL SCALE: 10 kHz/div  
 SWEEP TIME: 200 Sec.  
 VERTICAL SCALE: 10 dB/div  
 REFERENCE LEVEL: 0 dB (33.5 dBm = 2.5W)  
 ATTENUATION: 33.5 dB

Occupied Bandwidth is measured per TIA603-D: Method 2.2.11 and is pursuant to FCC 2.1049, 90.210

