SPURIOUS EMISSION MEASUREMENTS
Monterey Licenses, LLC
Gulfport, MS

Spurious and harmonic measurements were conducted to document that the combined operation of WUJM and WXYK into a common antenna system complies with the spurious emission limitations specified in Section 73.317 of the FCC Rules. Since the WUJM/WXYK antenna is mounted on Tower #8 of the directional antenna system of WROA(AM) - Gulfport, Mississippi, these measurements also included spurious products potentially generated by the various combinations of the AM and FM signals. The spurious measurements were conducted by Brian Warmus using a Potomac Instruments FIM-71 field strength meter and its associated ANT-71 dipole antenna. The elements for this dipole antenna were adjusted to the length specified in the manufacturer's instruction manual for each frequency which was measured. The meter reading for each frequency was then multiplied by the antenna correction factor specified for that frequency in this instruction manual to determine the measured signal strength (in mV/m) for each frequency.

These measurements were conducted with WUJM and WXYK both operating into this combined antenna with their authorized facilities and WROA operating with its daytime directional facilities, and were conducted at a distance of 0.26 kilometers from the tower which supports the WUJM/WXYK antenna. Table 10.0 details the results of these measurements. As shown in this table, these measurements found no observable or measurable harmonics or intermodulation products resulting from the combined operation of WUJM and WXYK into this antenna that were in excess of the suppression requirements outlined in Section 73.317 of the FCC Rules. It should be noted that al-

though spurious measurements were conducted in the entire spectrum from 45 MHz through 225 MHz, this table only shows the measurable spurious products in this frequency range. Spurious products not shown in this table were either too low in magnitude to be measured or were totally obscured by the fundamental signals of other broadcast stations. Based on this information, it is obvious that the combined operation of WUJM and WXYK into this antenna system complies with the suppression requirements outlined in Section 73.317 of the FCC Rules.

TABLE 10.0

WUJM SPURIOUS AND
HARMONIC MEASUREMENTS
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Frequency (MHz)	Spurious Product	Field Strength (mV/m)	Suppression (dB)	Required Suppression (dB)
65.50	Intermodulation Product	0.0075	99.5	79.3
68.28	Intermodulation Product	0.0033	106.6	79.3
75.90	Intermodulation Product	0.0062	101.2	79.3
86.30	Intermodulation Product	0.019	91.4	79.3
91.14	Intermodulation Product	0.022	90.2	79.3
96.70	WUJM Fundamental	708	---	---
104.32	Intermodulation Product	0.023	89.8	79.3
107.10	WXYK Fundamental	472	---	---
108.49	Intermodulation Product	0.012	95.4	79.3
109.88	Intermodulation Product	0.0095	97.4	79.3
111.27	Intermodulation Product	0.027	88.4	79.3
112.66	Intermodulation Product	0.0082	98.7	79.3
117.50	Intermodulation Product	0.039	85.2	79.3
118.89	Intermodulation Product	0.0083	98.6	79.3
192.01	Intermodulation Product	0.0047	103.6	79.3
193.40	WUJM Second Harmonic	0.0048	103.4	79.3
201.02	Intermodulation Product	0.0078	99.2	79.3
202.41	Intermodulation Product	0.011	96.2	79.3
203.80	Intermodulation Product	0.014	94.1	79.3
212.81	Intermodulation Product	0.019	91.4	79.3
214.20	WXYK Second Harmonic	0.022	86.6	77.5
215.59	Intermodulation Product	0.036	85.9	79.3

TABLE 10.0 (cont'd)

Notes:

1 - Spurious measurements were conducted across the entire spectrum from 45 MHz through 225 MHz. Spurious products generated by the combined operation of WROA(AM), WUJM, and WXYK not shown in this table were either so low in magnitude that they either could not be measured or were totally obscured by the fundamental signals of other stations.

2 - The suppression of all measurable spurious products except the WXYK second harmonic are referenced to the WUJM fundamental signal. The WXYK second harmonic suppression is referenced to the WXYK fundamental signal.