

KMOA-Moapa, NV Special Operating Conditions

Special Operating Conditions or Restrictions:

#1 The measurements demonstrating compliance with 47CFR73.317 were conducted and the results are attached.

#2 KMOA has not commenced Program Test pending the completion of construction of the new facilities for KFLG-FM (FAC ID 55495). The details of this construction are addressed in the attached exhibit.

#3 KMOA demonstrated in its construction permit application that it did not, in connection with the maximum expected number of users at the site, exceed the radiofrequency electromagnetic field exposure guidelines limits for General Population/Uncontrolled of 200 uW/cm². This evaluation was performed utilizing the Federal Communications Commission Office of Engineering and Technology FM Model Program. The antenna planned and installed for this installation is not an antenna modeled in the FM Model Program. The antenna manufacturer stated that proposed and installed antenna model, Shively 6014-10/4-Horizontal Only 10 bay ½ wavelength spaced, had similar characteristics to the Shively Model 6810, and has confirmed this in the attached letter. The Model 6810 was used for the construction permit application and demonstrated compliance with the radiofrequency electromagnetic field exposure guidelines.

#4 The applicant acknowledges its responsibility to protect all persons from exposure to radiofrequency electromagnetic field exposure in excess of the guidelines currently established, or that may be modified in the future by the Federal Communications Commission; and the applicant agrees, in cooperation with all other users at the site, to reduce power or cease operations as necessary to protect all persons from such exposure.

February 28, 2008

To Whom It May Concern:

The elevation pattern of the Shively 6014 horizontally linearly polarized FM panel antenna has the same or better downward characteristics than our model 6810 antenna referred to as an FCC type 6.



Robert A. Surette
Director Sales Engineering

KMOA-Moapa, NV Equipment Performance Measurements

On February 26, 2008, the following measurements were made on the combined antenna system to be utilized by KMOA-Moapa, NV (FAC-ID 164097) and KADD-Logandale, NV (FAC-ID 72528). These measurements were performed by Sean Edwards of Shively Labs, manufacturer of the combiner and the antenna system utilized by this installation, and were observed, recorded and documented by the undersigned. The measurements were made with the KADD transmitter operating at its currently licensed Transmitter Output Power (TPO) of 8.0 kW and the KMOA transmitter operating at its calculated TPO of 9.1 kW.

The test procedure was to tune, utilizing the Rohde Schwarz Model FSH3 spectrum analyzer with tracking generator (S/N 102776 calibrated on 5/7/2007), two Microwave Filter Company's model 6367 in series to each of the stations carrier frequency. These filters reduced the fundamental to minimize spectrum analyzer overload and the generation of internal intermodulation products within analyzer. The input to the filter series was connected to the forward broadband directional coupler port on the output of the Shively 2640-06 Balanced Combiner through a 20 dB pad. The output of the filter series was connected to the input of the spectrum analyzer. The carrier of both stations, each expected intermod product of the two stations in or near the FM band (2A-B) and all the harmonics through the 10th harmonic were measured by marker on the analyzer and manually recorded. The spectrum was observed in the range of 50 MHz through 200 MHz for unexpected spurious emissions. No unexpected spurious emissions were observed. The expected intermod products and harmonics of the system are tabulated below. Most of the harmonics were in the noise floor of the analyzer.

Conclusion

Based on these measurements, the transmission system utilized by KADD and KMOA is in compliance with 47CFR73.317.

Certification

The measurements detailed herein were made by Sean Edwards of Shively Labs under the undersigned's direct observation and were confirmed, recorded and documented by the undersigned. These measurements are true and accurate to the best of my knowledge and belief.



Steve Campbell, PE (NV-16245)
February 28, 2008

KMOA and KADD Spurious and Harmonic Measurements

Measured Values				Corrections		Normalized Values
Frequency	Level			Notch Filter		
92.5 MHz	-82.6 dBm	2A-B		-5.0 dB	Filter Skirt	-84.3 dBc
93.5 MHz	-12.6 dBm	Frequency A		-19.3 dB		0.0 dBc
94.5 MHz	-12.7 dBm	Frequency B		-20.8 dB		0.0 dBc
95.5 MHz	-83.7 dBm	2B-A		-5.0 dB	Filter Skirt	-86.8 dBc
KADD Harmonics				Coupler Response-6 dB/octave		
2	187.0 MHz	-69.0 dBm		6 dB		-81.7 dBc
3	280.5 MHz	-80.0 dBm	*	10 dB		-96.7 dBc
4	374.0 MHz	-80.0 dBm	*	12 dB		-98.7 dBc
5	467.5 MHz	-80.0 dBm	*	14 dB		-100.7 dBc
6	561.0 MHz	-80.0 dBm	*	16 dB		-102.7 dBc
7	654.5 MHz	-80.0 dBm	*	17 dB		-103.7 dBc
8	748.0 MHz	-80.0 dBm	*	18 dB		-104.7 dBc
9	841.5 MHz	-80.0 dBm	*	19 dB		-105.7 dBc
10	935.0 MHz	-80.0 dBm	*	20 dB		-106.7 dBc
KMOA Harmonics						
2	189.0 MHz	-67.5 dBm		6 dB		-81.6 dBc
3	283.5 MHz	-80.0 dBm	*	10 dB		-98.1 dBc
4	378.0 MHz	-80.0 dBm	*	12 dB		-100.1 dBc
5	472.5 MHz	-80.0 dBm	*	14 dB		-102.1 dBc
6	567.0 MHz	-80.0 dBm	*	16 dB		-104.1 dBc
7	661.5 MHz	-80.0 dBm	*	17 dB		-105.1 dBc
8	756.0 MHz	-80.0 dBm	*	18 dB		-106.1 dBc
9	850.5 MHz	-80.0 dBm	*	19 dB		-107.1 dBc
10	945.0 MHz	-80.0 dBm	*	20 dB		-108.1 dBc

*=In noise floor of test setup