Radiofrequency Field Measurements on the Main Roof of the Conde' Nast Building 4 Times Square, New York

December 12, 2011

Prepared for WBGO-FM

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Summary Conclusions

This evaluation demonstrates that RF fields found on the main roof level of the Conde' Nast Building, 4 Times Square, in New York, resulting from all normal primary broadcasting facilities located at the site, including WBGO-FM, at full operating power at the time of the survey comply with the FCC MPE limits for the general public. The greatest spatial averaged RF field found represented 1.6% (mean plus one standard deviation) of the Public MPE. Generally, RF fields were significantly less in value, typically being, on average, about 0.6% of the MPE. The onsite RF measurements were conducted in the late evening hours of December 12, 2011.

RF Field Instrumentation and Measurement Technique

The measurements were made with a Narda Microwave Model A8742D isotropic, broadband electric field strength probe (SN 02813) connected to a Narda Model 8715 digital meter (SN 13001). The Model A8742D probe is frequency shaped so that all detected fields are weighted according to the frequency variation of the MPE limit such that the meter presents the measured field as a percentage of the FCC MPE limit for occupational exposure. The probe has a capacity of measuring RF fields up to 600% of the FCC occupational MPE limit. The minimum reliable indication of the field is specified as 0.6% of the MPE limit. The meter range was set to 3% of standard as there was no indication to expect anything higher than this value. This allowed for us to be able to measure values below 0.6% of MPE limit.

Prior to the measurements, the meter and probe were zeroed inside the building by placing the probe inside a shielded 'calibration bag' made with conductive fibers that provide approximately 20dB of attenuation of ambient RF fields. The meter was re-zeroed several times before entering onto the main roof to perform the measurements.

The measurement technique that was used consisted of determining the spatial average value of field as a percent of the MPE limit at 32 points distributed about the main roof level. This was accomplished by slowly moving the probe in a vertical line from the standing surface of the roof to head height (approximately six-foot three-inches). Each vertical scan lasted ten to twelve seconds. At each of the 32 measuring points, multiple vertical scans were obtained by standing at different azimuths relative to the measurement point in an effort to minimize the perturbation of the local fields by the body of the observer.

All measurements were conducted and recorded by Andrew Koziol. I was a witness of the measurements and recording of same. Measurements were also witnessed by David Antoine of WBGO-FM. Table 1 shows all measurements that correspond to points on the 4 Times Square Main Roof RF Plan which is attached.

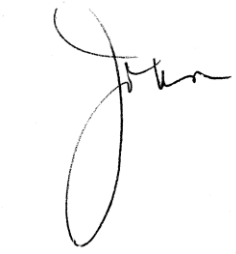
Conclusions

The RF Survey conducted at the Conde' Nast Building on December 12, 2011 with all normal primary broadcast transmitters at the site active in addition to WBGO-FM indicates that the main roof level is compliant with the FCC MPE for the general public by a wide margin. In the worst case, WBGO-FM added 0.6% to the overall RF levels at the main roof level.

The 4TS Site is subject to an extensive RF Safety program that provides numerous exposure control features should individuals need access to on-tower locations or other elevated locations above the main roof level. The RF Safety program is described in a paper presented at the National Association of Broadcasters Engineering Conference.[1]

[1]Monitoring RF Safety At A Multi-User Broadcast/Communications Site, Richard A. Tell and John M. Lyons, 2006 NAB Engineering Conference, Las Vegas, NV.

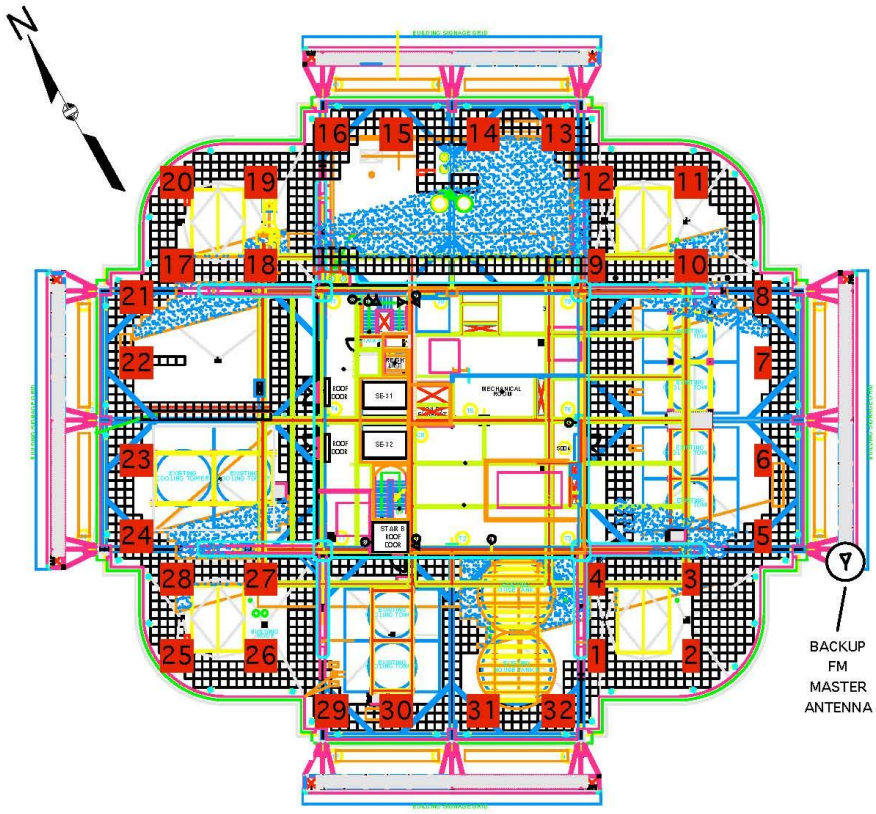
Respectfully submitted,



December 13, 2011

Table 1. RF measurement data for the main roof level at 4 Times Square, December 12, 2011
Direction facing during measurement of spatially averaged RF field

Location	North	East	South	West	Overall Average	Standard Deviation
1	0.6	0.4	0.5	0.4	0.5	0.1
2	0.4	0.3	0.3	0.3	0.3	0.3
3	0.3	0.4	0.3	0.4	0.4	0.1
4	0.3	0.3	0.3	0.4	0.3	0.1
5	0.3	0.2	0.3	0.2	0.3	0.1
6	0.2	0.2	0.2	0.1	0.2	1.0
7	0.2	0.2	0.1	0.1	0.2	0.1
8	0.1	0.3	0.1	0.2	0.2	0.1
9	0.2	0.2	0.3	0.3	0.3	0.1
10	0.3	0.2	0.3	0.2	0.3	0.1
11	0.4	0.4	0.4	0.5	0.4	0.0
12	0.4	0.2	0.4	0.3	0.3	0.1
13	0.5	0.3	0.3	0.9	0.5	0.3
14	1.1	0.5	0.6	0.6	0.7	0.3
15	0.5	0.5	0.5	0.6	0.5	0.0
16	1.6	1.3	0.8	0.7	1.1	0.4
17	0.5	0.6	0.5	0.4	0.5	0.1
18	0.4	0.5	0.5	0.5	0.5	0.1
19	0.5	0.5	0.5	0.5	0.5	0.0
20	0.6	0.6	0.6	0.6	0.6	0.0
21	0.7	0.7	0.6	0.7	0.7	0.0
22	0.6	0.6	0.6	0.6	0.6	0.0
23	0.6	0.6	0.7	0.7	0.7	0.1
24	0.7	0.7	0.7	0.7	0.7	0.0
25	0.7	0.7	0.9	0.8	0.8	0.1
26	0.7	0.8	0.7	0.8	0.8	0.1
27	0.8	0.8	0.7	0.7	0.8	0.1
28	0.8	0.8	0.8	0.8	0.8	0.0
29	0.8	0.8	0.8	0.8	0.8	0.0
30	0.8	0.8	0.9	0.8	0.8	0.0
31	0.8	0.8	0.9	0.8	0.8	0.1
32	0.9	0.7	0.9	0.9	0.9	0.1



4 TIMES SQUARE
MAIN ROOF
RF PLAN

Plan of main roof level at 4 Times Square illustrating approximate locations of measurements of spatially averaged RF fields.