Arthur Doak

From: Rodolfo Bonacci
Sent: Thursday, February 04, 2016 8:40 PM
To: Arthur Doak
Subject: Fw: KSTR-FM RF measurements
Attachments: KSTR_RFR_measurements.pdf; KSTR.PDF

Does this work for you?

It's a back logged license

Rudy

Sent from my BlackBerry 10 smartphone on the Verizon Wireless 4G LTE network.

From: Melodie Virtue <MVIRTUE@gsblaw.com>
Sent: Thursday, February 4, 2016 4:14 PM
To: Rodolfo Bonacci
Subject: FW: KSTR-FM RF measurements

Hi Rudy:

I recently left you a voice mail about this. The consulting engineer is away on travel until sometime in March. The local engineer sent me the attached studies. The client said that Larry Will supposedly emailed these to you a year ago, but I can't vouch for that. Is this email sufficient, or do I need to amend the license application formally?

If I need to amend the application, can I just submit it as part of Exhibit 1 instead of Exhibit 30 since I don't want to tamper with the absent engineer's section?

Melodie

From: Vala Berry [mailto:vala@gjradio.com]
Sent: Thursday, February 4, 2016 2:42 PM
To: Melodie Virtue <MVIRTUE@gsblaw.com>
Cc: 'DAVID HINSON' <davehinson@b3studioroad.com>
Subject:

Hi All:

Here are the RFR safety studies done by Bill Frost and Al Stewart.

Vala

V. Vala Berry
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Radio Frequency Field Strength Measurements
KSTR-FM, MBC Grand Broadcasting, Inc.
Re: Permit File Number BXPH-20140506AAR

Radio frequency electromagnetic field strength measurements were performed throughout the building and tower site area on November 20, 2014 while operating at full licensed power to determine if there are any areas that exceed the FCC guidelines for maximum permissible exposure (MPE) to RF fields. Measurements were made with a Narda model 8616 measuring device, serial number 31101 (fig 1).

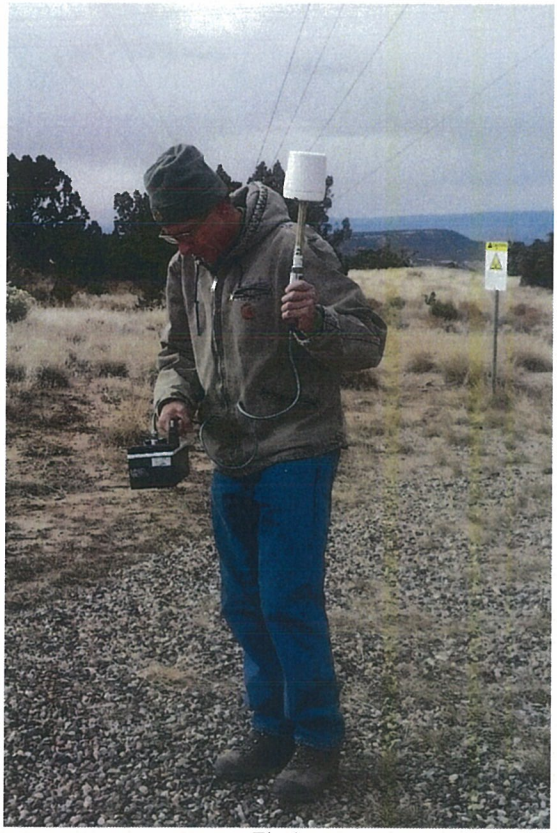

Fig 1
Narda 8616

Fig. 2
Locked gate at site entrance

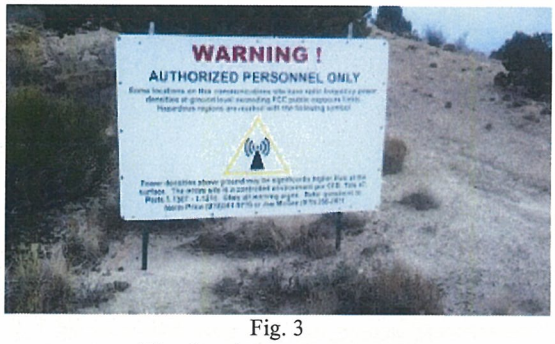

Fig. 3
Warning sign at entrance gate

The electronic site surveyed is located on a mountain top and is bounded on all sides by cliffs and steep rocky terrain. There are no public roads or foot trails near the site. The single access road to the site is secured by a locked gate (fig. 2). Warning signage has been posted at the entrance to the site (fig 3). Access to this electronic site is restricted to site users and there is no access to the general public. Therefore, the MPE for Occupational / Controlled Exposure apply to this area.

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(970) 201-7909

The overall RF field strength throughout the site averaged 20 to 30% of the Occupational / Controlled MPE. In several locations near guy wire anchors, RF field strength levels exceeded the 1000 μW / cm^2 limit for Occupational / Controlled Exposure. These hot spots were no larger than 10 x 10 meters and have additional warning signs posted (fig 4).

Fig. 4
Guy anchor hot spot signage

Fig. 5
Equipment shelter signage

Fig. 6
Tower base signage

No area within the transmitter equipment shelter exceeded the Occupational / Controlled MPE. Nevertheless, warning signs are posted on the building entrance as well as at the base of the towers advising workers of safe working practices and possible RF exposure hazards in the vicinity of antennas on the tower. (fig 5, 6).

Bill Frost
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Datavix LLC
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Grand Junction, CO 81505

RF Radiation Survey
For KSTR Auxiliary Facilities
In Montrose, Colorado
And Black Ridge Electronic Site
Near Grand Junction, Colorado

On October 31st, 2011, RF radiation surveys were conducted by Allen A. Stewart to determine the effect of Auxiliary facilities for KSTR in regards to MPE limits as per FCC Bulletin OET 65.

The instrument used for the RF survey was a Holaday Model HI2200, Serial #00D61196, with a factory matched and calibrated Model C300, FCC Conformal Electronic Field Probe.

With regards to the KSTR Auxiliary facility in Montrose:

- The site was considered to be Uncontrolled or Public for the purpose determining RF limits to human exposure per OET 65. (There is a residence on site)
- KSTR was left on the air during the tests as the site is of sufficient distance from the main transmitter that its signal would not contribute materially to measurements conducted.
- Background studies indicated an intermittent signal generated from another antenna on the site that, while radiating, contributed 23% of the uncontrolled standard at an area in the driveway 15 meters in front of the identified antenna.
- Tests conducted while the KSTR Auxiliary station was radiating indicated no measurable change at any point on the ground on the site. Therefore the Auxiliary facility for KSTR at the Montrose, Colorado site was found to be in compliance with FCC OET Bulletin 65.

With regards to the KSTR Auxiliary facility on Black Ridge near Grand Junction:

- The electronic site is at a remote location behind a fence with appropriate signage and is considered to be a Controlled site, therefore Controlled or Occupational limits were used to determine RF exposure per OET 65.
- KSTR remained on the air during the tests as the site is of sufficient distance from the main transmitter that its signal would not contribute materially to the measurements.
- A study was first conducted in the area where the KSTR Auxiliary facility is located, with the Auxiliary facility not radiating, to determine background levels. The readings were measured as high as 26% of the Occupational standard.
- Tests were then conducted while the KSTR Auxiliary facility was radiating. Test results indicated no measurable change at any point on the ground on the site. Therefore the Auxiliary facility for KSTR at the Black Ridge Site near Grand Junction, Colorado was found to be in compliance with FCC OET Bulletin 65.

Signed: Allen A Stewart Dated: 11/21/2011

Certification: I, Allen A. Stewart, hereby certify that:

- I am Director of RF Engineering for Colorado Public Radio, and was contracted by MBC Grand to perform the measurements contained in this report.
- I have performed many tasks in the field of Radio and Television Engineering since 1971.
- I hold an FCC General Radiotelephone license PG-16-15717.
- I am familiar with the FCC rules and procedures pertaining to MPE measurements.
- I prepared this report and declare it to be true and accurate to the best of my knowledge.