

Minor Change to WPUT(FM) at North Salem, New York

Facility ID 175564 ♦ Channel 211 (90.1 mHz.) ♦ June 8, 2020

TECHNICAL STATEMENT

Section 73.509 Allocation Study

Figures 1 and 2 depict the applicable service and interfering contours of all pertinent stations. (Key: same colors may not overlap.)

Where 40 dBu F(50,10) interfering contours from co-channels WGSK, WRXC, and WMFU most closely approach the proposed 60 dBu F(50,50) service contour, HAAT and distances to pertinent contours were determined in 1 degree increments.

HAAT along each radial was determined using the NOAA Globe Terrain Data option in the Commission's online HAAT Calculator. The distances to pertinent contours were then determined by employing the Commission's online FM and TV Propagation Curves program, as shown in Figure 5. All HAAT determinations over 360 degree circles are provided for each station in separate exhibits to the application. No prohibited overlap is created, but the population served within the 60 dBu contour will nearly double from 13,352 to 24,130. WPUT is now the only radio station operating in Putnam County, NY.

TV Channel 6 Protection

There are two full power TV or Class A LPTV stations on Channel 6 within 196 km. of WPUT. These are WRGB at Schenectady, NY, and WNYZ-LP at New York, NY. The proposed WPUT interfering contour on Channel 211 as determined from Section 73.599 Figure 1 is 47 dBu + 20.3 dB, or 67.3 dBu F(50,10).

As shown in Figure 3, the interfering contour from the proposed facility falls well outside the 47 dBu service contour of both of these TV Channel 6 facilities.

Environmental Considerations

The applicant proposes to employ its licensed antenna rotated 5 degrees clockwise. Therefore, this proposal will have no environmental impact other than RFR exposure.

With the facility operating with 440 Watts ERP, RFR field strength measurements were conducted on the premises of the antenna site and inside the building where the antenna is located. As stated in the letter in Figure 4 attached to License Application File No. BLED-20120628AAJ, at no point did RFR exceed 4.74% of the General Population Limit. The maximum RFR produced by the proposed facility will be greater by $\text{SQRT}(1000/440) = 1.508$ times, a maximum of 7.15% of the General Population Limit.

The applicant will reduce power or cease operation as to protect persons having access to the site, pole, or antenna from RFR exposure in excess of FCC guidelines.

Figure 1 – Allocation Study

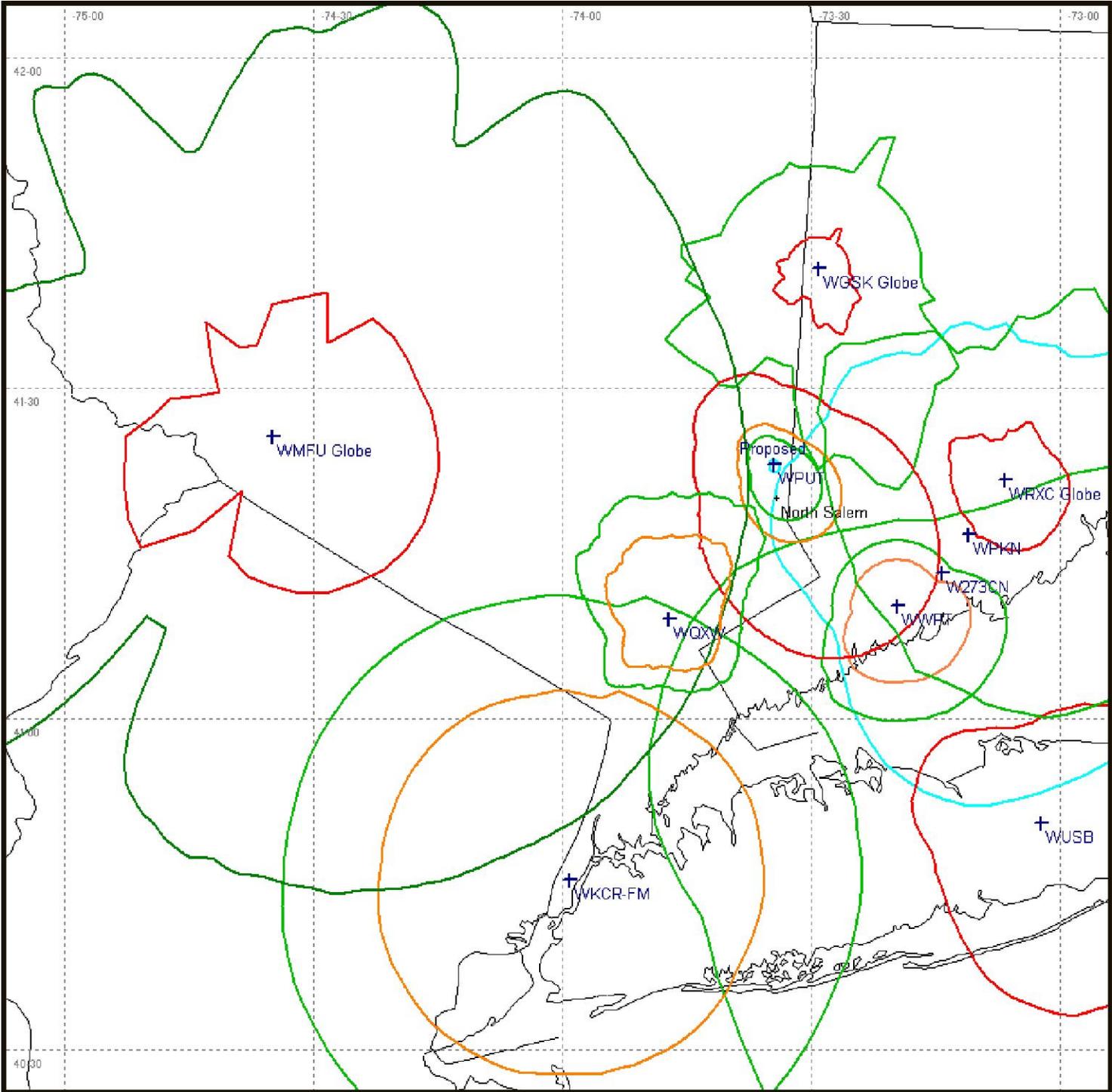


Figure 2 – Closeup Allocation Study

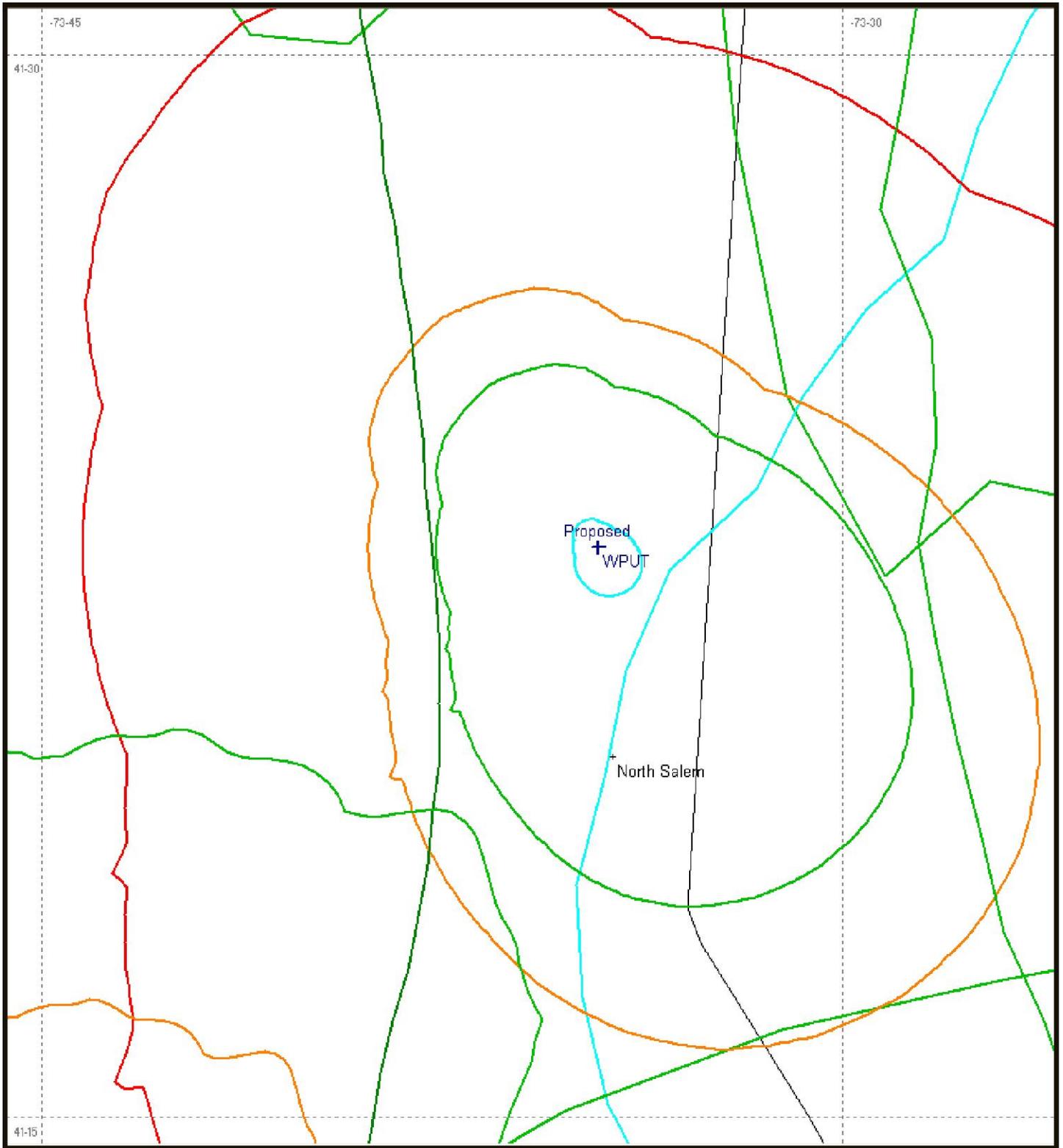


Figure 3 – TV Channel 6 Study

**Proposed 67.3 dBu Interfering Contour
does not cross any TV Channel 6 47 dBu Service Contour**

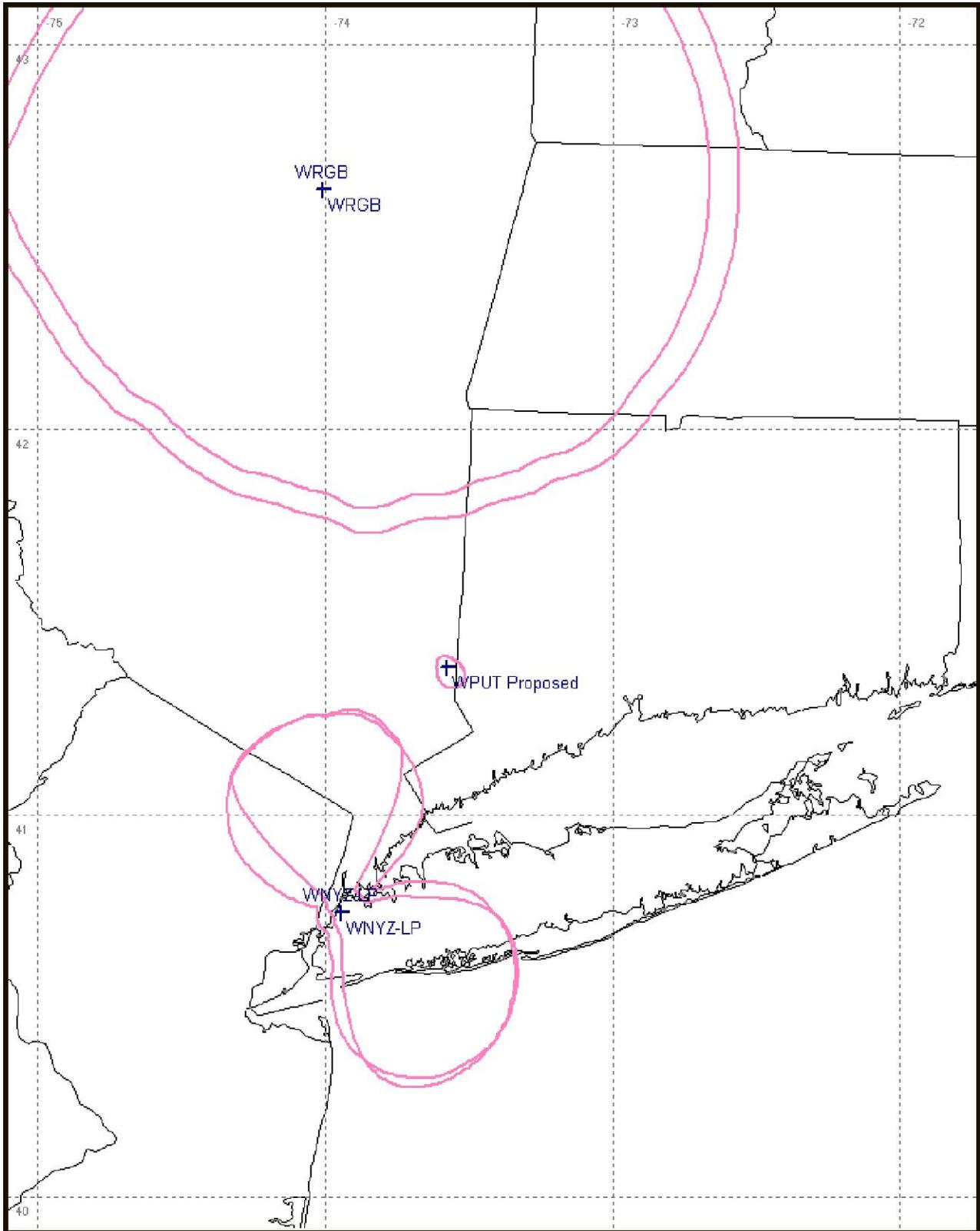


Figure 4 – RFR Study

As stated in the letter below from License Application File No BLED-20120628AAJ, with the licensed facility operating at 440 Watts ERP, at no point did RFR exceed 4.74% of the General Population Limit. The maximum RFR produced by the proposed facility at 1.0 kW can be expected to be greater by a factor of $\sqrt{1000/440}$ or 1.508, resulting in RFR exposure of 7.15% of the Limit.



June 28, 2012

Dennis Jackson
Quaboag Hills Public Radio
WJZZ Radio
16 Walker Avenue
Westfield, MA 01085-1751

Dear Dennis,

On June 21, 2012, in accordance with condition 8 of the underlying construction permit, Proper Radiofrequency Electromagnetic (RF) Field Strength Measurements were made on the premises of the transmitter site and inside the building where the antenna is located in order to determine whether any areas exceeded FCC Guidelines for human exposure to RF Fields. The equipment utilized consisted of a NARDA 8718B serial number 2008 with General Population Probe Model A8742D serial number 02207.

The WJZZ transmit antenna is mounted on the roof of a three story home. The highest reading of 4.74% of the General Population Limit was found within the first floor bedroom of the residence. This was the highest measurement of the campaign. Elsewhere on the first, second and third levels of the home, the reading averaged no more than 2%. On the grounds outside of the home, one location in the main lobe of the antenna read 3.2% of the General Population Limit. The remainder of the grounds read no higher than 2% and averaged 0.5%.

I hereby conclude that the entire residence and premises are well below the FCC Limits for General Population. It is therefore believed that WJZZ is in compliance with the requirement contained within Condition 8 of the Construction Permit.

Sincerely,

A handwritten signature in black ink, appearing to read "Charles (Bud) Williamson".

Charles (Bud) Williamson
President

Figure 5 – Summary of Pertinent HAAT and Distance-To-Contour Calculations

HAAT along each radial was determined using the NOAA Globe Terrain Data option in the Commission’s online HAAT Calculator.

Distances to pertinent contours were then determined by employing the Commission’s online FM and TV Propagation Curves program.

WPUT Globe Data To The West				WPUT Globe Data To The East			
Azimuth	HAAT (m)	ERP (Watts)	Dist to 60 dBu F(50,50) (km)	Azimuth	HAAT (m)	ERP (Watts)	Dist to 60 dBu F(50,50) (km)
220	33.9	97.339	5.914	85	<30	174.725	6.479
221	33.1	93.029	5.787	86	<30	182.326	6.549
222	31.4	88.808	5.583	87	<30	191.848	6.635
223	<30	84.677	5.404	88	<30	201.600	6.719
224	<30	80.656	5.338	89	<30	211.602	6.801
225	<30	76.725	5.270	90	<30	221.844	6.881
226	<30	73.445	5.210	91	<30	232.326	6.959
227	<30	70.224	5.150	92	<30	243.049	7.038
228	<30	67.604	5.098	93	<30	254.021	7.118
229	30.5	64.513	5.075	94	<30	265.223	7.197
230	30.9	62.002	5.054	95	<30	276.675	7.273
231	31.4	59.052	5.028				
232	32.2	56.641	5.036				
233	32.7	53.821	5.007				
234	32.0	51.530	4.899				
235	<30	48.840	4.679				
WGSK Globe Data							
Azimuth	HAAT (m)	ERP (Watts)	Dist to 40 dBu F(50,10) (km)	Azimuth	HAAT (m)	ERP (Watts)	Dist to 40 dBu F(50,10) (km)
236	<30	46.659	4.621	180	106.70	77.0	33.728
237	<30	44.949	4.574	181	102.00	77.0	32.887
238	<30	43.269	4.525	182	97.20	77.0	31.975
239	<30	41.618	4.480	183	92.00	77.0	30.968
240	<30	39.998	4.438	184	86.30	77.0	29.868
241	<30	38.808	4.406	185	78.40	77.0	28.354
242	<30	37.247	4.362				
243	<30	35.717	4.318				
244	<30	34.227	4.272				
245	<30	32.757	4.226				
246	<30	31.686	4.190				
247	<30	31.686	4.190				
248	<30	31.686	4.190				
249	<30	31.686	4.190				
250	<30	31.686	4.190				
WRXC Globe Data							
Azimuth	HAAT (m)	ERP (Watts)	Dist to 40 dBu F(50,10) (km)	Azimuth	HAAT (m)	ERP (Watts)	Dist to 40 dBu F(50,10) (km)
251	<30	31.686	4.190	267	105.00	45	28.978
252	<30	31.686	4.190	268	106.70	45	29.228
253	<30	31.686	4.190	269	108.40	45	29.471
254	<30	31.686	4.190	270	110.20	45	29.727
255	<30	31.686	4.190	271	110.20	45	29.727
256	<30	31.686	4.190	272	110.10	45	29.713
257	<30	31.686	4.190				
258	<30	31.686	4.190				
259	<30	31.686	4.190				
260	<30	31.686	4.190				
261	<30	31.686	4.190				
262	<30	31.686	4.190				
263	<30	31.686	4.190				
264	<30	31.686	4.190				
265	<30	31.686	4.190				
WMFU Globe Data							
Azimuth	HAAT (m)	ERP (Watts)	Dist to 40 dBu FF(50,10) (km)	Azimuth	HAAT (m)	ERP (Watts)	Dist to 40 dBu FF(50,10) (km)
266	<30	31.686	4.190	90	221.5	1100	79.340
267	<30	31.686	4.190	91	223.5	1100	79.567
268	<30	31.686	4.190	92	225.3	1100	79.770
269	<30	31.686	4.190	93	226.7	1100	79.927
270	<30	31.686	4.190	94	227.5	1100	80.016
271	<30	31.686	4.190	95	229.4	1100	80.226
272	<30	31.686	4.190	96	231.0	1100	80.401
273	<30	31.686	4.190				
274	<30	31.686	4.190				
275	<30	31.686	4.190				
276	<30	31.686	4.190				
277	<30	31.686	4.190				
278	<30	31.686	4.190				
279	<30	31.686	4.190				
280	<30	31.686	4.190				