

Exhibit 12

Non-Interference Compliance

Channel: 255

Reference to: FCC File Number: BLFT-20090909 (W255CF, Unity, NH)
Facility id 148946) This Application proposes a site modification to Cornish, NH.

Description of Exhibit 12 Contents

This exhibit will show that the proposed facility complies with contour overlap interference protection provisions in 47 CFR 74.1204

Specifically we will show compliance with 47 CFR 74.1204 (d), which states:

“an application otherwise precluded by the section will be accepted if it can be demonstrated that no actual interference will occur due to interfering terrain, lack of population, or such other factors as may be applicable.”

Page 3, Exhibit 12(a), is a table showing the second and third adjacent channel stations which the instant application must protect, and the actual field strengths of those stations at the proposed translator site. The field strengths were determined with ComStudy 2.2.

The applicant certifies that should any actual interference occur, operation of the translator will be suspended in accordance with 47 CFR 74.1203.

Page 4, Exhibit 12(b), displays the F(50/50) 60 dbu of the proposed channel 255 modified transmitter site, overlapping the F(50/50) 60 dbu of the original W255CF Licensed Facilities, thus compliance with CFR, 74.1233(a) (2).
Please note that the Primary Station is (WGLY-FM), Channel 218, Bolton, VT. Via W216CB.

Page 5, Exhibit 12 (c), is a Table showing the distance to the F (50,50) 60 dbu contour of the Proposed 98.9 Translator, prepared using ComStudy 2.2. *(Also note the HAAT column of this Exhibit for reference.) Also a Table showing distance to 34 dBu Contour.

Page 6, Exhibit 12(d), is a Topographical map of the area around the proposed channel 255 translator site. There are no major roads, highways, buildings, or residences anywhere within the 101.2 dBu Interfering Contour, which extends 193 meters. The nearest Residence to this Green Mountain Site is 692 meters Distant.

Since the proposed channel 255 translator is about 179 kilometers from the Canadian Border, the applicant certifies that the 50/10, 34 dbu contour does not extend beyond 60 kilometers in any direction, in compliance with CFR 47, Sec. 74.1235 (d)3, which states that “the distance to the 34 dbu interfering contour may not exceed 60 kilometers in any

direction”, and hence is in compliance with 47 CFR 74.1204(h). (see page 7, Exhibit 12(e), and page 5a, Exhibit 12(c) Cont.

Explanation of ComStudy Frequency Finder Results:

The Interference analysis for the instant application was performed using data taken directly from the FCC’s FM database, which looks for prohibited overlap with contours of adjacent stations, and prohibited proximity to stations 53 or 54 channels from the proposed translator station (IF) using 3 arc second terrain data and the FCC’s contour algorithms. See results of analysis in Table on Page 8, Exhibit 12(f). (ComStudy uses the FCC’s FM Database, thus the results included the proposed translator. This line was deleted from the Table to save confusion)

The proposed channel 255 Translator can operate with an effective radiated power of 10-watts at 6-meters AGL. According to 47 CFR, 74.1204(a), the desired to undesired ratio between 2nd/3rd adjacent stations is 40 dbu, making the proposed translator’s interfering contour 101.2 dbu F(50/10) See Contour Study, page 9, Exhibit 12(g). Based on the FCC’s “Free Space” equation, the F(50/10) 101.2 dbu interfering contour extends 193 meters. (see page 10, Exhibit 12(h) FCC Propagation Curves Calculation.)

The nearest Residence is 692 meters distant, thus the proposed ch. 255 Translator has adequate cylindrical clearance. As shown in attached Exhibit 12 (d) from a USGS topographical map of the area, there are no residences within this contour. This application meets the requirements of Section 74.1204(d) with respect to “other factors” insuring no actual interference to WFRD, and there is a lack of population within the proposed area of interference, and therefore this application is in full compliance with 47 CFR 74.1204.)

The proposed operation of Ch. 255, FM Translator, is exempt from routine evaluation with respect to radiofrequency radiation under Section 1.1307(b) of the Commission’s Rules, because the effective radiated power does not exceed 100 Watts. The Applicant will operate the proposed FM Translator at reduced power, or temporarily cease operation, as may be required to protect all workers from exposure to hazardous levels of radiofrequency radiation.

**Table of 2nd & 3rd Adjacent Protected Stations
Signal Strength at Proposed Translator Transmitter site**

<u>Call Sign</u>	<u>State</u>	<u>City</u>	<u>Freq.</u>	<u>Channel</u>	<u>ERP-Watts</u>	<u>Class</u>	<u>Status</u>	<u>Distance, Km</u>	<u>Signal Strength at Prop. Site</u>
WFRD	NH	Hanover	99.3	257	6,000	A	LIC.	29.1	61.2

Minimum F(50/50) Protected Contour of Adjacent Station
within Proposed Translator's standard F(50/10) Interfering Contour: **61.2**

*Note: The F(50/50) signal strength of all relevant 2nd and 3rd adjacent stations have been examined, and are listed in the above table. The last column shows the station's signal level at the proposed translator's tower site, as determined by ComStudy 2.2. The minimum F(50/50) contour within the proposed translator's standard F(50/10) contour was used to calculate the proposed translator's interfering contour, assuring minimum undesired-to-desired ratio of 40 db for all relevant adjacent stations, as required in 47 CFR, 74.1204(a).

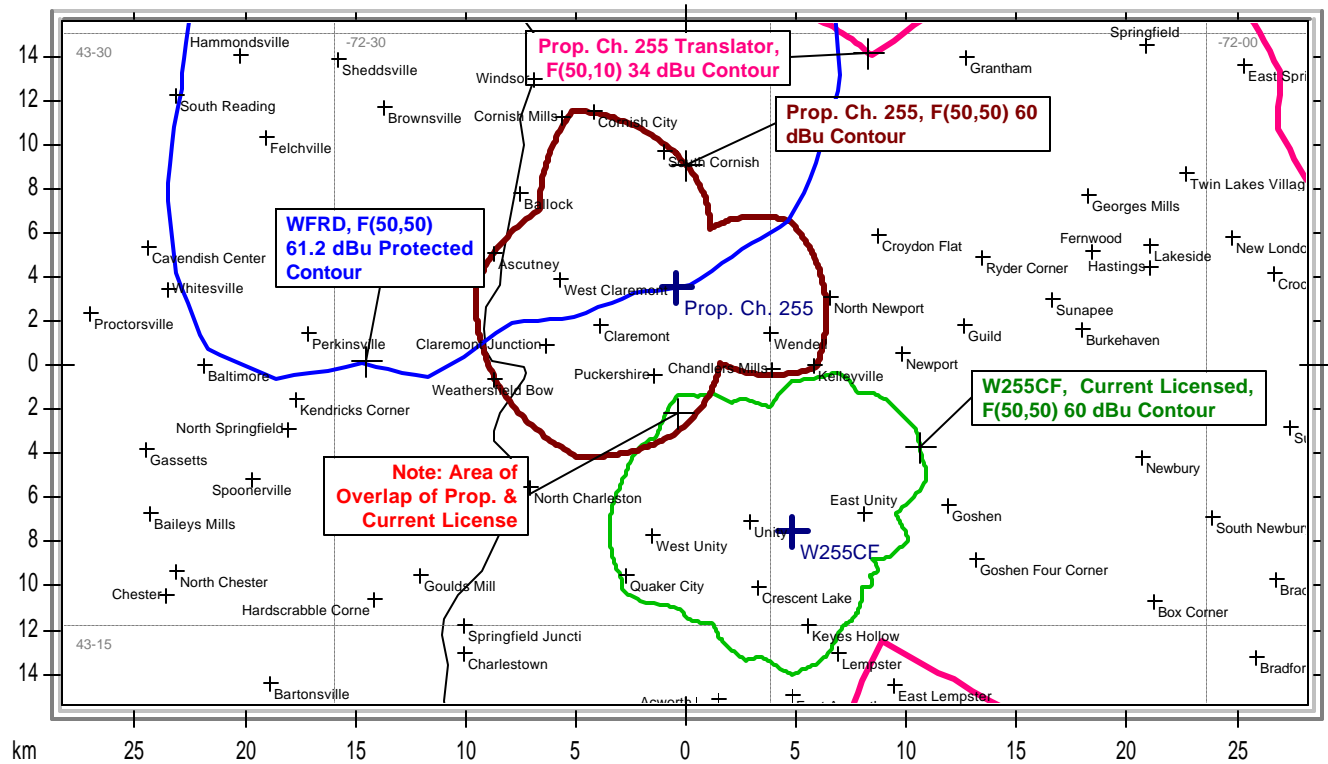
Thus, the proposed channel 255 calculated F(50/10) interfering contour will be 101.2 dbu.

Prop. Ch. 255 Translator

Cornish, New Hampshire

10 Watts ERP @ 6 Meters AGL

Ch. 255 Xlator is Fully Spaced, except to WFRD, 99.3, Hanover, NH



Note: 60 dBu Overlap as required with current Licensed Facilities

State Borders Lat/Lon Grid

Ch. 255, Cornish, NH
Distance to 60 dBu Contour

Site: Prop. Ch. 255
Coordinates 43-23-34.3 N, 72-18-13.8 W
Freq: 98.90000 MHz
ERP: 10.00 W

<u>Bearing</u>	<u>ERP W</u>	<u>HAAT</u>	<u>DH</u>	<u>Distance</u>	<u>Lat</u>	<u>Lon</u>
0	10	114	250	6.25	43.449094	-72.3038
30	10	-100	340	6.15	43.448159	-72.3025
60	10	110	280	6.05	43.447208	-72.3012
90	10	140	180	5.94	43.446242	-72.3
120	10	167	370	5.84	43.44526	-72.2988
150	10	50	150	5.74	43.444266	-72.2976
180	10	139	300	5.63	43.443258	-72.2965
210	10	245	280	5.53	43.442238	-72.2955
240	10	260	310	5.43	43.441207	-72.2945
270	10	252	530	5.33	43.440166	-72.2935
300	10	156	540	5.22	43.439116	-72.2926
330	10	266	410	5.12	43.438057	-72.2917

Ch. 255, Cornish, NH
Distance to 34 dBu Contour

Site: Prop. Ch. 255
Coordinat 43-23-34.3 N, 72-18-13.8 W
Freq: 98.90000 MHz
ERP: 10.00 W

<u>Bearing</u>	<u>ERP W</u>	<u>HAAT</u>	<u>DH</u>	<u>Distance</u>	<u>Lat</u>	<u>Lon</u>
0	10	114	250	29.32	43.656533	-72.3038
5	10	138	190	29.92	43.661915	-72.2973
10	10	124	190	30.52	43.667221	-72.2906
15	10	82	200	31.12	43.672427	-72.2836
20	10	36	160	31.73	43.677547	-72.2763
25	10	-38	250	32.33	43.682566	-72.2688
30	10	-100	340	31.98	43.678964	-72.2623
35	10	-116	400	31.64	43.675278	-72.2559
40	10	4	230	31.29	43.671518	-72.2497
45	10	54	310	30.94	43.667689	-72.2437
50	10	89	190	30.59	43.663793	-72.2378
55	10	98	260	29.4	43.652418	-72.2341
60	10	110	280	28.21	43.641026	-72.2309
65	10	115	310	27.02	43.629637	-72.2283
70	10	117	270	25.83	43.61826	-72.2262
75	10	110	190	24.64	43.606905	-72.2246
80	10	116	190	22.83	43.590223	-72.2257
85	10	130	170	21.02	43.573637	-72.2275
90	10	140	180	19.21	43.557164	-72.2302
95	10	149	340	17.4	43.540816	-72.2335
100	10	170	220	15.59	43.524609	-72.2377
105	10	173	220	15.31	43.521366	-72.2358
110	10	172	250	15.02	43.518116	-72.234
115	10	170	430	14.74	43.514861	-72.2324
120	10	167	370	14.45	43.511604	-72.2309
125	10	170	280	14.17	43.508347	-72.2296
130	10	153	350	14.17	43.507387	-72.2268
135	10	121	340	14.17	43.506393	-72.2241
140	10	98	280	14.17	43.505364	-72.2213
145	10	68	200	14.17	43.504301	-72.2186
150	10	50	150	14.17	43.503203	-72.216
155	10	56	130	14.17	43.502072	-72.2133
160	10	68	140	14.17	43.500908	-72.2107
165	10	70	130	14.17	43.499711	-72.2081
170	10	96	120	14.17	43.498481	-72.2056
175	10	118	200	14.17	43.497219	-72.2031
180	10	139	300	14.17	43.495925	-72.2006
185	10	206	180	14.17	43.494599	-72.1981
190	10	223	170	14.17	43.493243	-72.1957
195	10	179	280	14.17	43.491856	-72.1933
200	10	170	210	14.17	43.490439	-72.1909

205	10	192	200	15.34	43.496951	-72.179
210	10	245	280	16.52	43.503188	-72.1668
215	10	308	330	17.69	43.509144	-72.1542
220	10	294	290	18.87	43.51481	-72.1413
225	10	281	310	20.04	43.520181	-72.1281
230	10	281	420	21.18	43.525015	-72.1149
235	10	272	410	22.31	43.529555	-72.1014
240	10	260	310	23.45	43.53379	-72.0876
245	10	254	230	24.59	43.537715	-72.0736
250	10	246	340	25.72	43.541324	-72.0593
255	10	238	390	26	43.539729	-72.0532
260	10	248	510	26.27	43.538028	-72.047
265	10	246	460	26.54	43.536215	-72.0409
270	10	252	530	26.81	43.53429	-72.0347
275	10	258	380	27.08	43.532252	-72.0286
280	10	262	280	27.42	43.530442	-72.0218
285	10	238	320	27.76	43.528506	-72.015
290	10	155	440	28.1	43.526433	-72.0082
295	10	124	460	28.45	43.524234	-72.0014
300	10	156	540	28.79	43.521902	-71.9946
305	10	244	400	28.92	43.518532	-71.9901
310	10	257	440	29.05	43.515092	-71.9857
315	10	216	370	29.18	43.511578	-71.9813
320	10	259	430	29.32	43.50799	-71.9771
325	10	270	340	29.45	43.50433	-71.9729
330	10	266	410	29.5	43.5003	-71.9697
335	10	232	330	29.55	43.496224	-71.9665
340	10	208	190	29.6	43.492101	-71.9635
345	10	186	180	29.65	43.487933	-71.9606
350	10	180	330	29.71	43.483724	-71.9578
355	10	160	330	29.52	43.478789	-71.9578

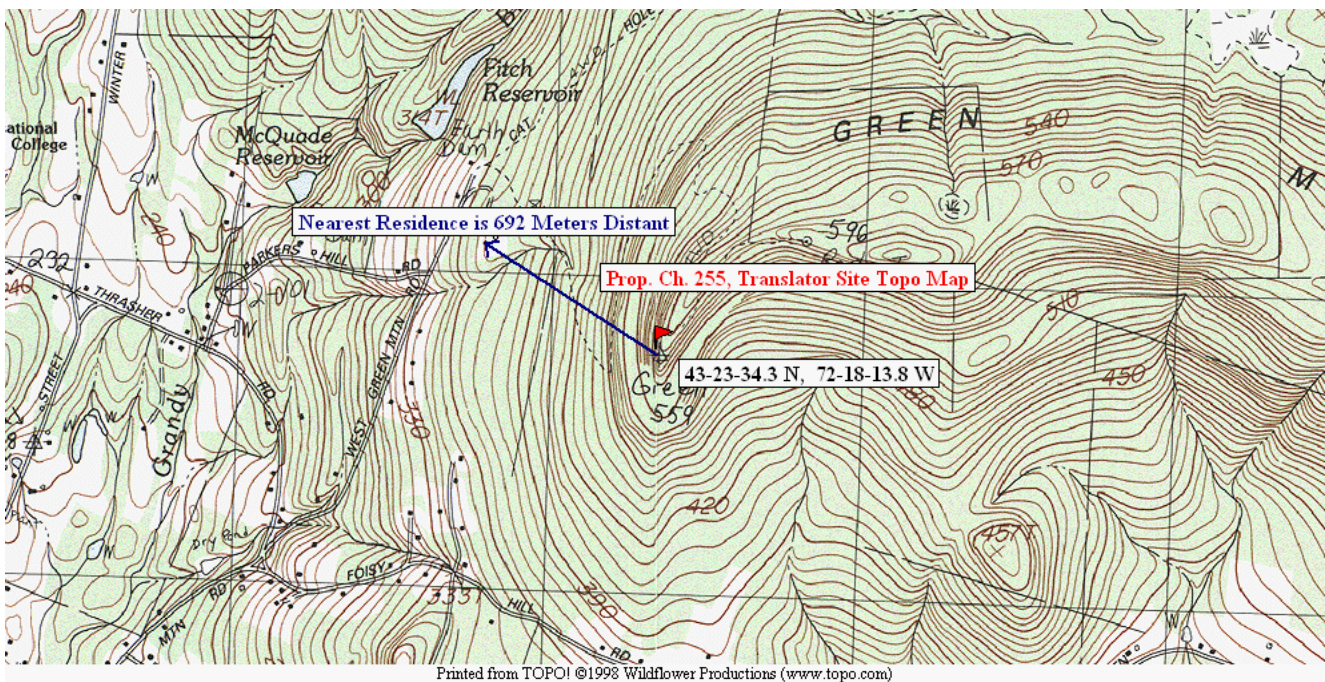
Prop. Ch. 255, Cornish, FM Translator, Site Topo Map

43-23-34.3 N, 72-18-13.8 W

Green Mountain

Nearest Residence is 692 meters Distant.

F-(50,10) 101.2 Interfering Contour extends 193 meters.

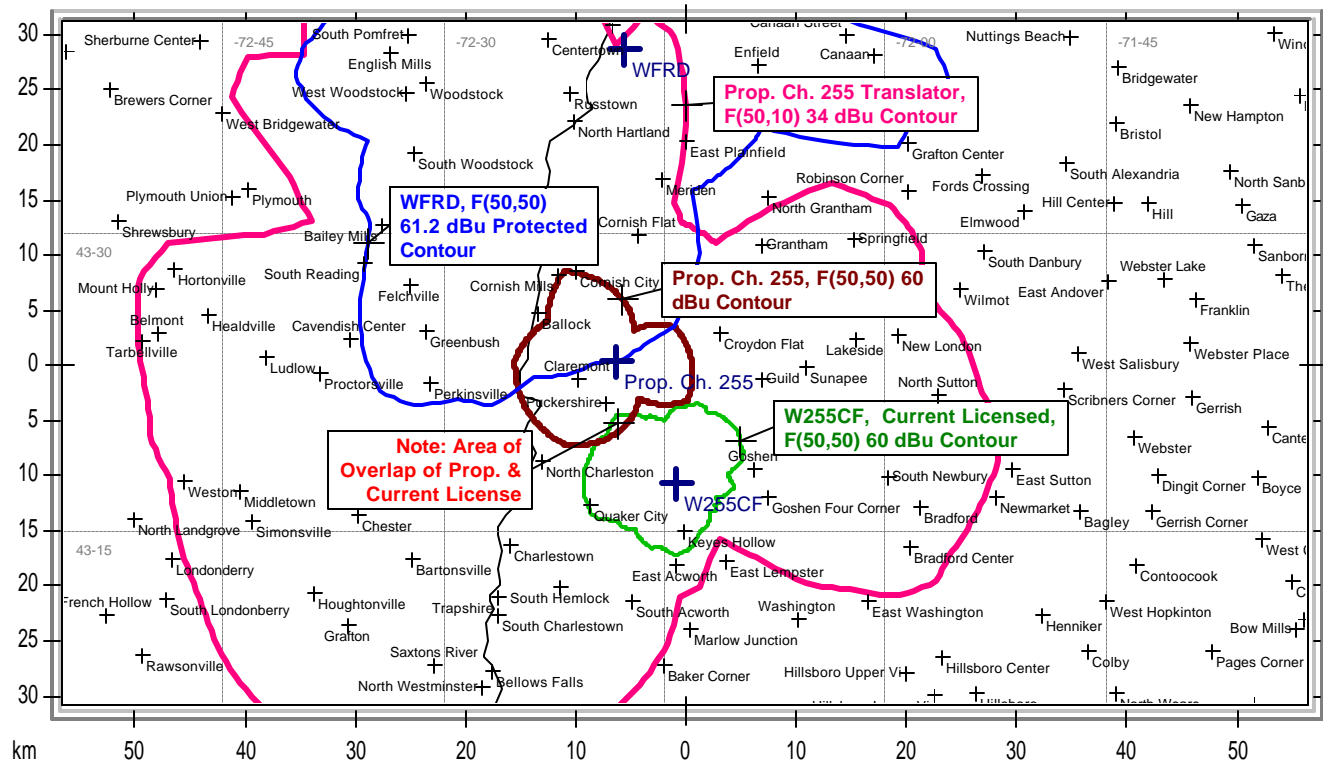


Prop. Ch. 255 Translator

Cornish, New Hampshire

10 Watts ERP @ 6 Meters AGL

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Note: 60 dBu Overlap as required with current Licensed Facilities

State Borders Lat/Lon Grid

Prop. Ch. 255 Translator, Cornish, NH
Frequency Separation Study (Table)

43-23-34.3 N, 72-18-13.8 W
10 Watts ERP @ 6 Meters AGL

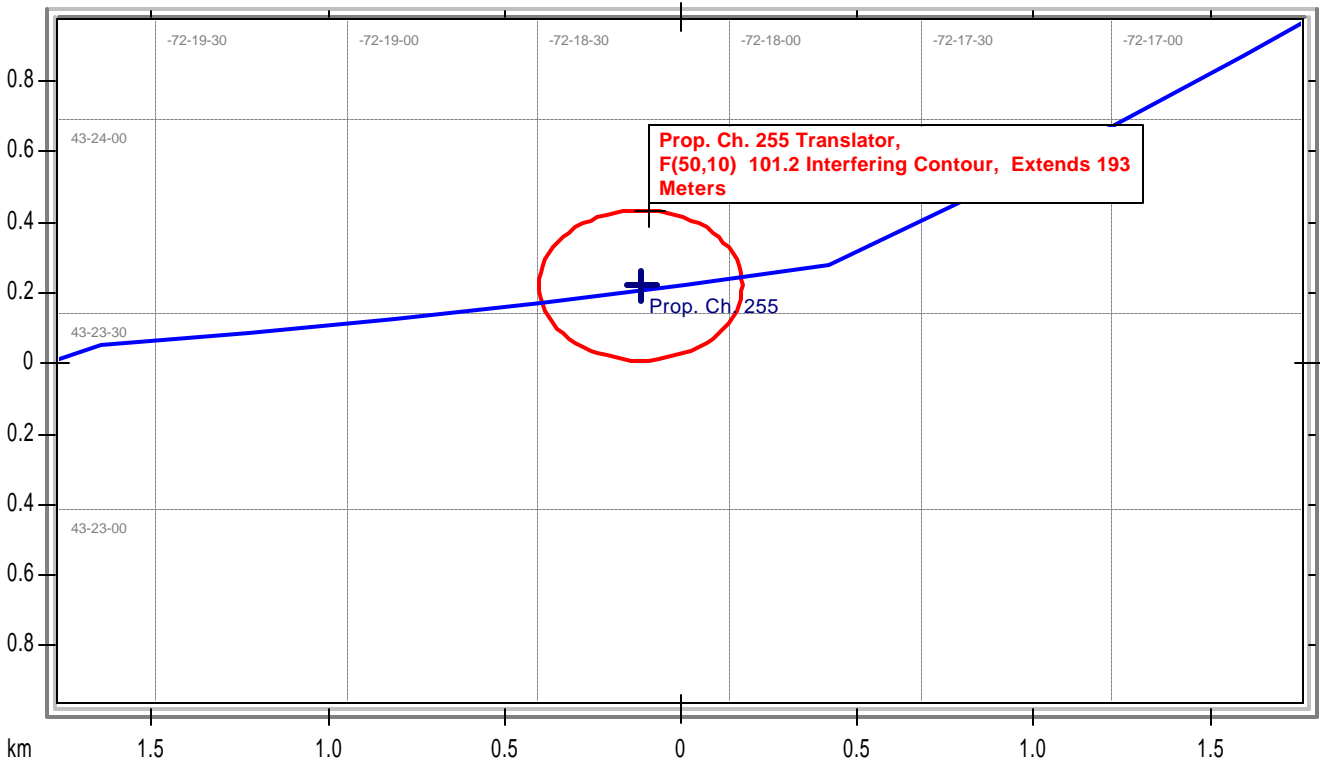
Callsign	State	City	Freq	Channel	ERP_w	Class	Status	Distance	Sep	Clr
	MA	ADAMS	98.9	255	0	A	APP	109.47	0	27.41 dB
880126NN	NH	WINCHES	98.7	254	0	A	USE	69.31	0	31.73 dB
W256BJ	NH	KEENE	99.1	256	250	D	LIC	51.36	0	22.48 dB
WBYY	NH	SOMERSV	98.7	254	6000	A	LIC	115.72	0	35.32 dB
WBZ-FM	MA	BOSTON	98.5	253	6000	B	APP	149.42	0	34.70 dB
WBZ-FM	MA	BOSTON	98.5	253	9000	B	LIC	149.42	0	29.31 dB
WCKM-FM	NY	LAKE GE	98.5	253	370	A	LIC	118.02	0	36.51 dB
WCLZ	ME	NORTH Y	98.9	255	48000	B	LIC	195.47	0	30.74 dB
WCRB	MA	LOWELL	99.5	258	27000	B	LIC	120.77	0	22.15 dB
WCRB	MA	LOWELL	99.5	258	27000	B	LIC	120.77	0	22.15 dB
WCRB	MA	LOWELL	99.5	258	37000	B	LIC	120.77	0	21.71 dB
WEVJ	NH	JACKSON	99.5	258	4700	A	LIC	126.11	0	35.88 dB
WFRD	NH	HANOVEF	99.3	257	0	A	USE	29.01	0	28.06 dB
WFRD	NH	HANOVER	99.3	257	6000	A	LIC	29.01	0	-1.41 dB
WHAI	MA	GREENFIE	98.3	252	2000	A	LIC	95.47	0	33.10 dB
WINQ	NH	WINCHES	98.7	254	2150	A	LIC	53.04	0	4.75 dB
WKGT-LP	MA	NORTH AI	98.9	255	100	LP100	LIC	102.4	24	23.58 dB
WLNH-FM	NH	LACONIA	98.3	252	15500	C3	LIC	68.93	0	27.09 dB
WLZX	MA	NORTHAM	99.3	257	4300	A	LIC	117.19	0	37.03 dB
WLZX	MA	NORTHAM	99.3	257	5800	A	LIC	117.19	0	34.85 dB
WNCH	VT	NORWICH	88.1	201	1600	B	LIC	13	15	-2 N/A
WNNH	NH	HENNIKEF	99.1	256	0	A	USE	45.4	0	24.55 dB
WNNH	NH	HENNIKEF	99.1	256	2800	A	LIC	53.75	0	11.28 dB
WNYN-FM	NH	WHITEFIE	99.1	256	460	A	LIC	115.96	0	37.33 dB
WOKO	VT	BURLINGT	98.9	255	0	C1	USE	137.73	0	34.30 dB
WOKO	VT	BURLINGT	98.9	255	100000	C1	LIC	137.73	0	23.36 dB
WORC-FM	MA	WEBSTEF	98.9	255	1870	A	LIC	152.87	0	36.48 dB
WPLM-FM	MA	PLYMOUT	99.1	256	50000	B	LIC	205.76	0	33.91 dB
WPLR	CT	NEW HAV	99.1	256	15000	B	LIC	225.24	0	38.83 dB
WPLR	CT	NEW HAV	99.1	256	16000	B	LIC	225.24	0	38.89 dB
WPLR	CT	NEW HAV	99.1	256	16000	B	LIC	225.21	0	38.88 dB
WRVE	NY	SCHENEC	99.5	258	4000	B	LIC	161.49	0	34.04 dB
WRVE	NY	SCHENEC	99.5	258	5800	B	LIC	161.51	0	31.95 dB
WRVE	NY	SCHENEC	99.5	258	14500	B	LIC	161.49	0	27.99 dB
WTTT	NH	BRETTON	98.7	254	40	A	APP	126.39	0	39.16 dB

Prop. Ch. 255 Translator

Cornish, New Hampshire

10 Watts ERP @ 6 Meters AGL

Ch. 255 Xlator is Fully Spaced, except to WFRD, 99.3, Hanover, NH



Note: 60 dBu Overlap as required with current Licensed Facilities

State Borders Lat/Lon Grid



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FM and TV Propagations Curves Calculations

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Results -- FM and TV Propagation Curves Calculations

Free Space equation used, not curves

Results of Calculation

Distance to Contour = 0.193 km

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For input data from Pages 1 and 2:

ERP entered = 0.010 kW

HAAT entered = 164.70 meters

Field Strength entered = 101.200 dBu

Find the Distance to the Contour, Given a Field Strength

F(50,10) curves for interfering contours

FM and NTSC analog TV Channels 2 through 6

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