

MONTROSE BROADCASTING CORPORATION

FM Broadcast Translator W227AB
Endicott, NY
Ch. 234FT (94.7 MHz.)
0.25 kW, DA, 0m AAT

ENGINEERING STATEMENT

This report along with supporting engineering figures and appendices, is presented on behalf of Montrose Broadcasting Corporation, licensee of FM Broadcast Translator W227AB, Endicott, NY (Facility ID No. 43660), a translator which provides fill-in service for Montrose Broadcasting's licensed station WPGL-FM, Channel 243B (96.5 MHz.), Montrose, PA. By this application, Montrose Broadcasting seeks a Minor Change construction permit which would reassign W227AB from Channel 227FT (93.3 MHz.) to Channel 234FT (94.7 MHz.), raise Effective Radiated Power from 41 watts to 250 watts (0.25 kW.) and substitute a composite directional antenna for the nondirectional antenna currently in use. For the reasons to be stated, this application qualifies as a minor change.

TENDERABILITY OF THIS APPLICATION:

Montrose Broadcasting Corp. has operated fill-in FM translator W227AB, Endicott, NY on Channel 227FT from the same site for nearly two decades, most recently under license BLFT-20040903ABE. Subsequent to the grant of the most recent license, the Commission authorized a newly-created Noncommercial Educational FM allotment on Channel 227A (93.3 MHz.) at Susquehanna, PA. On August 5, 2011, the Commission granted The Broome County Urban League, Inc. construction permit BNPED-20100226AFC (Facility ID No. 185048) for WJOB-FM, the noncommercial educational facility to operate on Ch. 227A at Susquehanna, PA. Due to the proximity of translator W227AB's site and interfering contour to the protected contour of co-channel WJOB-FM (per its authorized CP), it is expected that W227AB will be required to terminate its secondary service prior to the implementation of the WJOB-FM CP. Accordingly, Montrose Broadcasting Corp. must request an alternate channel for translator W227AB at Endicott, NY so as to preserve its needed fill-in service.

Section 74.1233 of the Commission's Rules customarily restricts an FM translator "Minor Change" frequency reassignment to the first, second or third adjacent channels, or the intermediate frequency (I.F.)-related channels to that of the translator's operation. As such, a reassignment from Channel 227FT to 234FT would not normally qualify for minor change processing. However, based on conversations between Montrose Broadcasting Corporation's counsel and Commission staff, Montrose Broadcasting Corp. respectfully seeks a waiver of Section 74.1233 processing rules due to the unique circumstances affecting translator W227AB.

APPENDIX A, Pages 1 through 9, attached, provides a Preclusion Study of all pertinent alternative channels which would qualify under the Minor Change provisions of Section 74.1233 affecting FM translator W227AB at Endicott, NY. As shown, all six adjacent channels (Channels 224FT, 225FT, 226FT, 228FT, 229FT and 230FT), plus the two I.F.-related channels (Channels 280FT and 281FT) are precluded at the W227AB site by existing licensed facilities. Furthermore, the Preclusion Study maps indicate no reasonable site relocation or facility modification could be undertaken on those channels to preserve the translator's operation at Endicott. Thus, the only feasible alternative is to propose modification to a channel outside the six adjacent or two I.F.-related channels customarily accorded Minor Change status.

A thorough review of the FM spectrum by this office reveals that Channel 234FT (94.7 MHz.) constitutes the only viable alternative channel for FM translator W227AB's continued operation at Endicott. And due to the allocation constraints on Channel 234FT, a directional antenna is proposed to be substituted for the nondirectional antenna utilized under the current license.

ALLOCATION CONSIDERATIONS:

A complete review of all authorized FM broadcast, Low Power FM and secondary FM translator facilities impacting Channel 234FT (94.7 MHz.) at Endicott, NY has identified the following stations as warranting study to insure compliance with the contour protection requirements of Section 74.1204 of the Rules:

Ch. 231	(94.1 MHz.):	(none)	---	---	---
Ch. 232L1	(94.3 MHz.):	WLRF-LP	Binghamton, NY	0.002 kW @	182m AAT
Ch. 233B	(94.5 MHz.):	WYYY	Syracuse, NY	100.0 kW @	198m AAT
Ch. 234A	(94.7 MHz.):	WIYN	Deposit, NY	0.77 kW @	196m AAT
Ch. 234B1	(" "):	WMTT	Tioga, PA	12.0 kW @	147m AAT
Ch. 235	(94.9 MHz.):	(none)	---	---	---
Ch. 236FT	(95.1 MHz.):	W236AP	Binghamton, NY	0.099 kW @	-86.5m AAT
Ch. 237	(95.3 MHz.):	(none)	---	---	---
Ch. 287	(105.3 MHz.):	(none)	---	---	---
Ch. 288	(105.5 MHz.):	(none)	---	---	---

Except for licensed Low-Power FM station WLRF-LP, Binghamton, NY, ERP and HAAT specifications for all of the co-channel and adjacent channel stations are those currently available from the Commission's FM database. Corrected terrain calculations for WLRF-LP will be explained below.

FIGURE 1 of this application provides a Vertical Plan Sketch of the Proposed Modified W227AB Translator Antenna. No Change is proposed in the site location, or in the height or nature of the antenna supporting structure. This structure, as existing and licensed, consists of a 10.7 meter (35 foot) AGL wooden pole with metal mast mounted atop. Total structure height remains 12.2 meters (40 feet) AGL or 374.9 meters (1230 feet) AMSL.

As noted on this sketch, the application proposes a directional composite antenna placed at the top of this structure. The composite antenna is comprised of two (2) Kathrein Scala CA2-FM/CM/RM two-element, circularly-polarized FM antennas, one mounted at 173°T azimuth, the second at 270.5° azimuth, thereby providing a horizontal separation in bearing of 97.5 degrees.

FIGURE 2 provides a full-size portion of the Endicott, NY USGS 7½-min. topo map on which is designated the (continued) location of the modified W227AB translator site.

FIGURE 3 provides a computer printout of the proposed directional composite antenna pattern rotated to the specified azimuth(s) of this proposal. The individual relative field strengths for each of the two elements in this composite antenna are based on the stated (or for intermediate azimuths, interpolated) specifications from the manufacturer.

FIGURES 4A & 4B constitute first a complete FM allocation map for the proposed modified W227AB on Channel 234FT at Endicott, NY; and then a detailed allocation map for the same proposal. As shown, the proposed

F(50,10) allocation contours pertinent to other authorized facilities in this study do not cross the corresponding protected F(50,50) contours of subject stations. Nor does any other FM translator in this study contribute an interfering contour which would cross the protected 60dBu; F(50,50) contour of the proposed modified W227AB.

CORRECTION OF HAAT DATA: WLRF-LP:

As earlier referenced, this application's allocation study utilizes corrected antenna Height Above Average Terrain calculations for licensed Low Power FM station WLRF-LP, Binghamton, NY. An explanation follows.

The Commission's license for WLRF-LP. File No. BLL-20061102ACC (Facility ID No. 132127) lists the following Non-Directional antenna specifications for WLRF-LP:

Effective Radiated Power:	2 watts
Height of Radiation Center Above Ground:	23 meters
Height of Radiation Center Above Mean Sea Level:	575 meters
Height of Radiation Center Above Average Terrain:	224 meters

Antenna Registration data for this site (per Registration 1006942) confirms a ground level elevation of 551.7 meters (rounded to 552 meters) AMSL. Therefore, a 23 meters AGL antenna would place its Radiation Center at 575 meters. These figures are not in dispute. But the Commission's calculation of an Antenna HAAT of 224 meters remains a question. And an error is suspected.

APPENDIX B, Pages 1 & 2 provide first a computer-generated calculation of antenna HAAT and protected 60dBu F(50,50) contours for WLRF-LP at its licensed site, and then a copy of the Commission's ASR Registration for the WLRF-LP supporting structure. The computer program's elevation data is based on the elevation data for the site and a 23 meter AGL antenna, per the WLRF-LP license. As shown, this program calculates a corrected WLRF-LP antenna HAAT of 182.05 meters. This corrected HAAT data and the contours produced with an ERP of two (2) watts were utilized in the allocation study to generate the maps in Figures 4A and 4B.

SERVICE CONTOUR CONSIDERATIONS:

Under the eligibility standards of Section 74.1232 of the Rules, the 54dBu F(50,50) service contour of the proposed modified W227AB, Endicott, NY must be wholly contained within the 54dBu F(50,50) protected contour of its primary Class B station, WPEL-FM, Montrose, PA, the station for which it provides fill-in service. WPEL-FM is a non-profit, non-commercial station which utilizes a commercial FM allotment. The Allocation Maps, FIGURES 4A & 4B, provide a depiction of the WPEL-FM calculated 60dBu F(50,50) and 54dBu F(50,50) contours along with the pertinent allocation contours for the proposed modified W227AB. Though the translator's proposed 54dBu F(50,50) contour is not shown on this map, the much larger 48dBu F(50,10) and 40dBu F(50,10) contours are depicted. And both of these contours are wholly contained within the 54dBu F(50,50) contour of WPEL-FM. Therefore, compliance with the standards of Section 74.1232 is demonstrated.

As it addresses Section 74.1232(b) of the Rules concerning the licensing of multiple FM translators which may, "serve substantially the same area," this applicant takes note that it holds the license for FM translator W292DL,

Binghamton, NY which also provides WPEL-FM fill-in service on Channel 292FT (106.3 MHz.) per license BLFT-20070424AAU (Facility ID No. 43661). The sites for W227AB and W292DL are separated by 16.5 kilometers (10.3 miles).

FIGURE 5 provides a computer-generated coverage map on which are depicted the 60dBu F(50,50) protected contours of the licensed W292DL, Binghamton, NY and the proposed Modified W227AB advanced in this application. Since, as shown, the 60dBu contours for neither facility or proposal cross each other, it is concluded that neither translator serves "substantially the same area" as the other.

FIGURE 6 provides a computer-generated coverage map showing this proposal's 60dBu F(50,50) and 54dBu F(50,50) service contours. As shown, this proposal covers 100 per cent of the (shaded) village of Endicott, NY.

ENVIRONMENTAL CONSIDERATIONS:

As per the site sketch in FIGURE 1, this proposal would situate two (2) Kathrein Scala CA2-CP/RM directional FM antennas at the top of a 12.2 meter (40 foot) existing pole and metal mast. Utilizing a 12-meter AGL elevation and proposed Effective Radiated Power of 250 watts (0.25 kW), ground-level power density calculations have been estimated from available information on file for similar antennas.

Table 1(B), Appendix A of OET Bulletin 65 (August 1997) lists the permissible Power Density Limits for the General Population/Uncontrolled Exposure at 0.2 mW/cm² for this frequency range.

Calculations of Ground Level Power Density for the proposed antennas, elevation and ERP of the proposed modified W227AB, Endicott, NY estimate the Ground Level Power Density at only 0.038 mW/cm², a figure that stands at only 19 per cent of the 0.2 mW/cm² limit.

The proposed (and licensed) W227AB antenna supporting structure is located in a secured area not accessible to the general public.

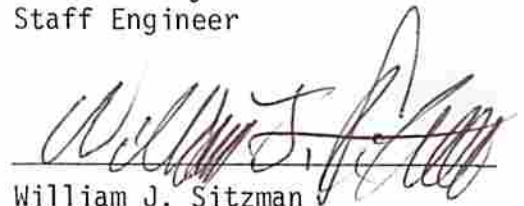
This applicant further certifies that should maintenance be performed on the proposed antennas, it will either extinguish transmitter power or reduce it to such a level as to assure compliance with radiofrequency guidelines established by the Commission.

Given that no change is proposed in the antenna structure or its height, this proposal is excluded from other aspects of environmental processing under Section 1.1306 of the Rules.

January 26, 2012



Robert A. Lynch
Staff Engineer



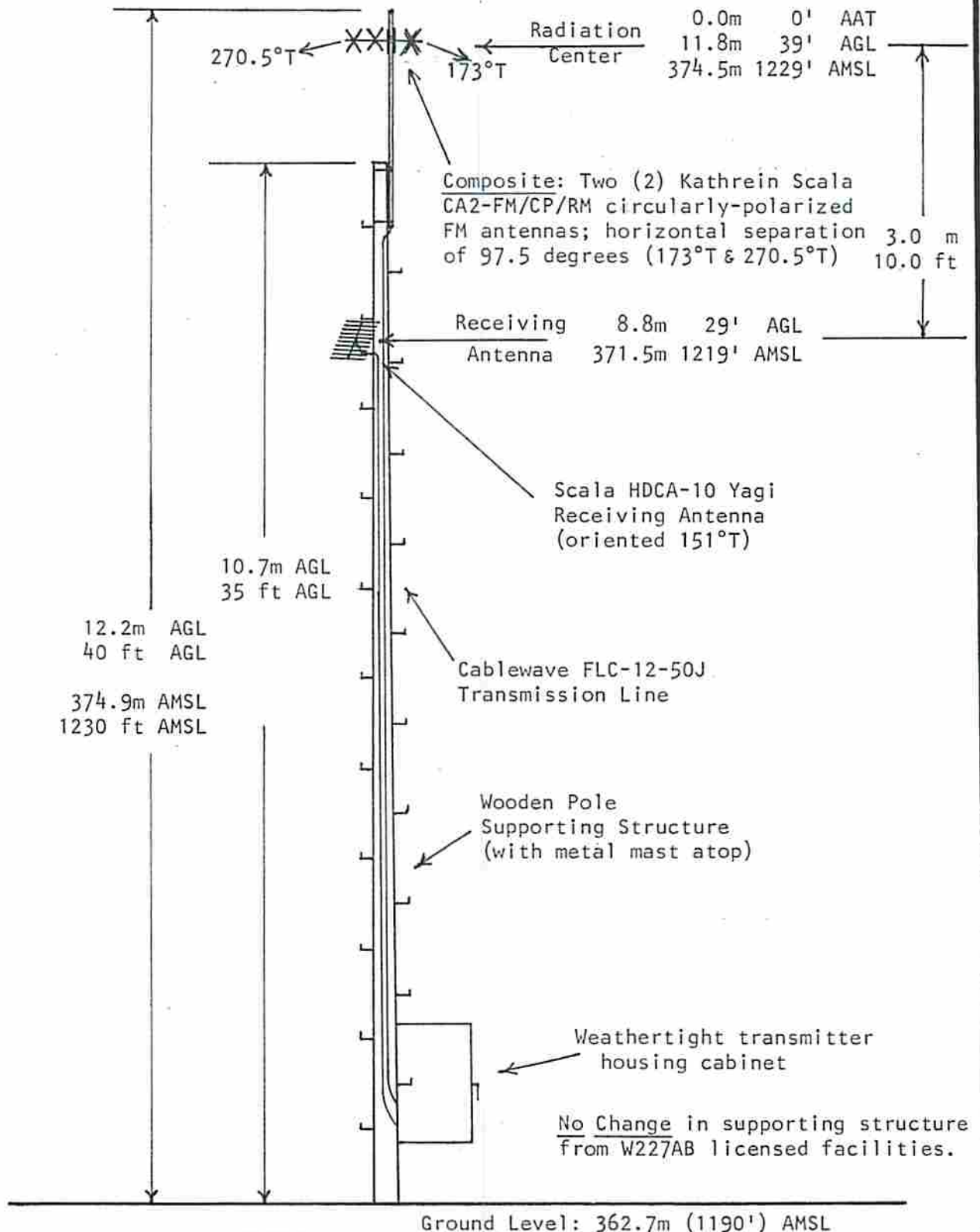
William J. Sitzman
Consulting Radio Engineer

FIGURE 1

W227AB Lic. Translator Site:

N 42° 06' 55"

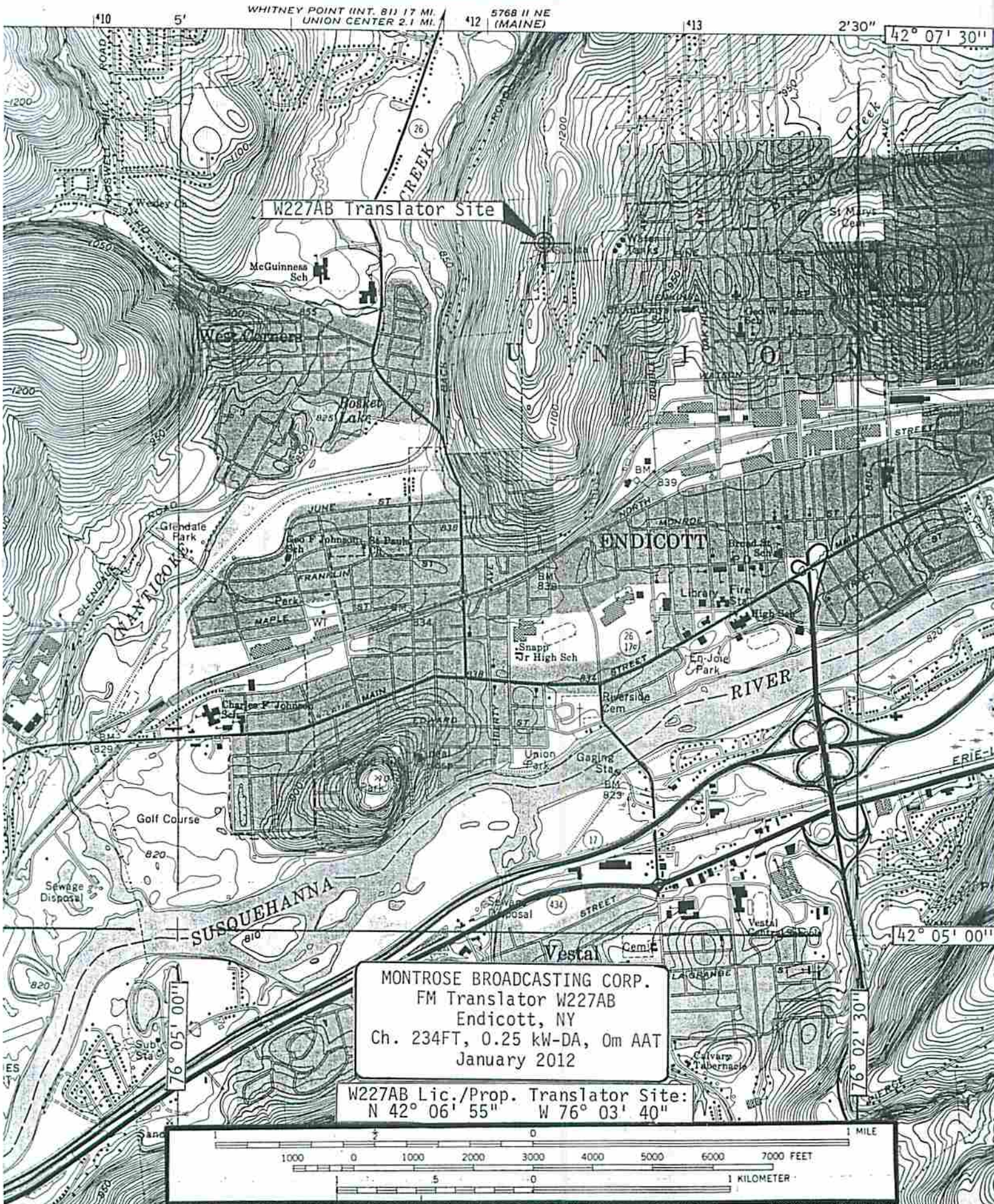
W 76° 03' 40"

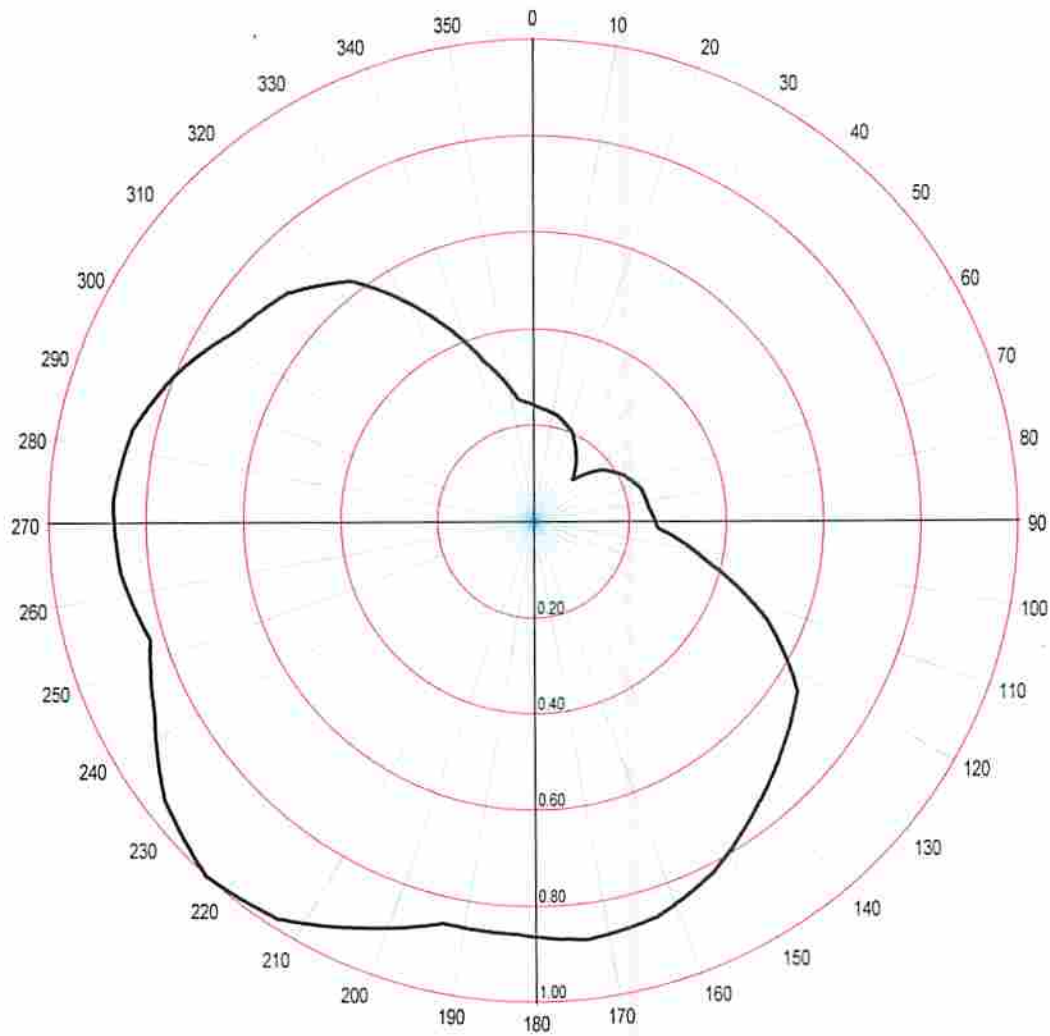


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FM Translator W227AB
Endicott, NY
Ch. 234FT, 0.25 kW-DA, 0m AAT
January 2012

ENDICOTT QUADRANGLE
NEW YORK
7.5 MINUTE SERIES (TOPOGRAPHIC)
SE/4 ENDICOTT 15' QUADRANGLE

FIGURE 2





Azim	Rel.FS	ERP [W]	dBk	Azim	Rel.FS	ERP [W]	dBk	Azim	Rel.FS	ERP [W]	dBk	Azim	Rel.FS	ERP [W]	dBk
0.0	0.243	14.762	-18.308	90.0	0.252	15.876	-17.993	180.0	0.863	186.192	-7.300	270.0	0.866	187.489	-7.270
5.0	0.235	13.806	-18.599	95.0	0.280	19.600	-17.077	185.0	0.857	183.612	-7.361	275.0	0.865	187.056	-7.280
10.0	0.229	13.110	-18.824	100.0	0.335	28.056	-15.520	190.0	0.855	182.756	-7.381	280.0	0.855	182.756	-7.381
15.0	0.221	12.210	-19.133	105.0	0.399	39.800	-14.001	195.0	0.867	187.922	-7.260	285.0	0.839	175.980	-7.545
20.0	0.209	10.920	-19.618	110.0	0.476	56.644	-12.468	200.0	0.897	201.152	-6.965	290.0	0.813	165.242	-7.819
25.0	0.195	9.506	-20.220	115.0	0.548	75.076	-11.245	205.0	0.928	215.296	-6.670	295.0	0.784	153.664	-8.134
30.0	0.175	7.656	-21.160	120.0	0.610	93.025	-10.314	210.0	0.961	230.880	-6.366	300.0	0.751	141.000	-8.508
35.0	0.154	5.929	-22.270	125.0	0.658	108.241	-9.656	215.0	0.984	242.064	-6.161	305.0	0.725	131.406	-8.814
40.0	0.131	4.290	-23.675	130.0	0.683	116.622	-9.332	220.0	0.994	247.009	-6.073	310.0	0.707	124.962	-9.032
45.0	0.130	4.225	-23.742	135.0	0.710	126.025	-8.995	225.0	0.991	245.520	-6.099	315.0	0.682	116.281	-9.345
50.0	0.160	6.400	-21.938	140.0	0.737	135.792	-8.671	230.0	0.969	234.740	-6.294	320.0	0.647	104.652	-9.803
55.0	0.184	8.464	-20.724	145.0	0.766	146.689	-8.336	235.0	0.941	221.370	-6.549	325.0	0.598	89.401	-10.487
60.0	0.200	10.000	-20.000	150.0	0.797	158.802	-7.991	240.0	0.903	203.852	-6.907	330.0	0.528	69.696	-11.568
65.0	0.214	11.449	-19.412	155.0	0.824	169.744	-7.702	245.0	0.869	188.790	-7.240	335.0	0.458	52.441	-12.803
70.0	0.226	12.769	-18.938	160.0	0.846	178.929	-7.473	250.0	0.844	178.084	-7.494	340.0	0.390	38.025	-14.199
75.0	0.234	13.689	-18.636	165.0	0.863	186.192	-7.300	255.0	0.835	174.306	-7.587	345.0	0.330	27.225	-15.650
80.0	0.238	14.161	-18.489	170.0	0.870	189.225	-7.230	260.0	0.850	180.625	-7.432	350.0	0.283	20.022	-16.985
85.0	0.244	14.884	-18.273	175.0	0.871	189.660	-7.220	265.0	0.861	185.330	-7.321	355.0	0.252	15.876	-17.993

W227AB Proposed CH234FT Allocation Map

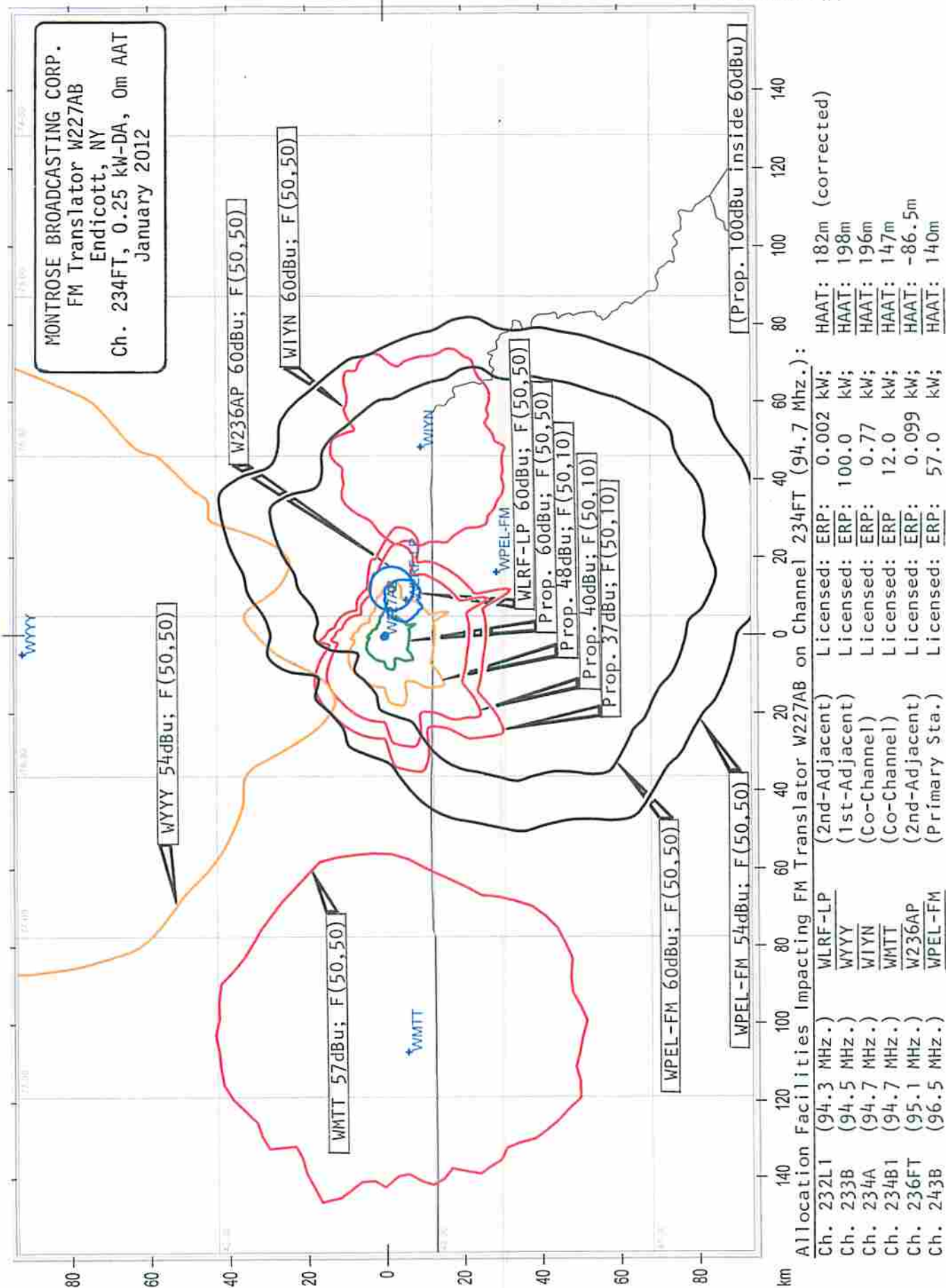


FIGURE 4B

W227AB Proposed CH234FT Detailed Allocation Map

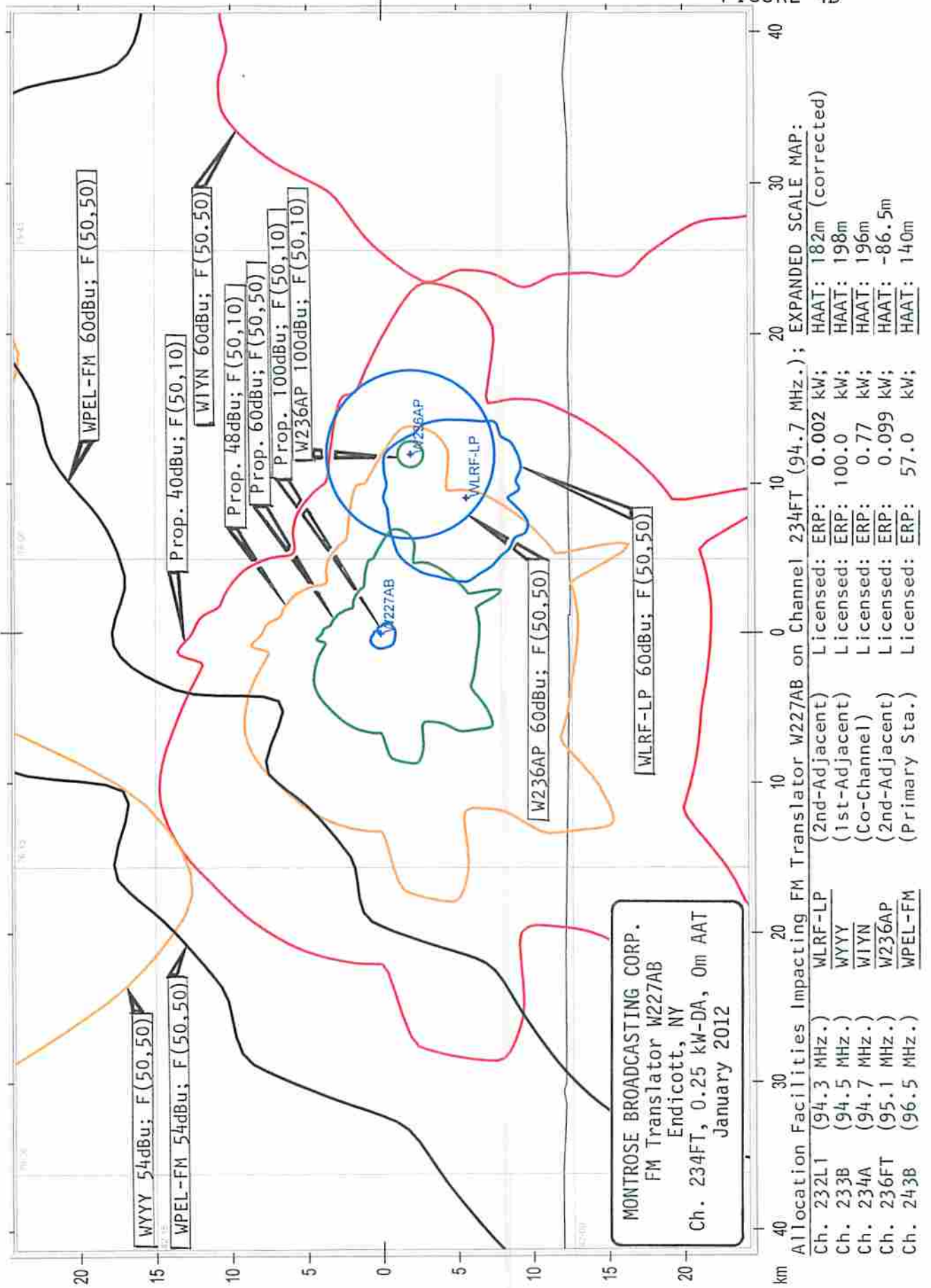
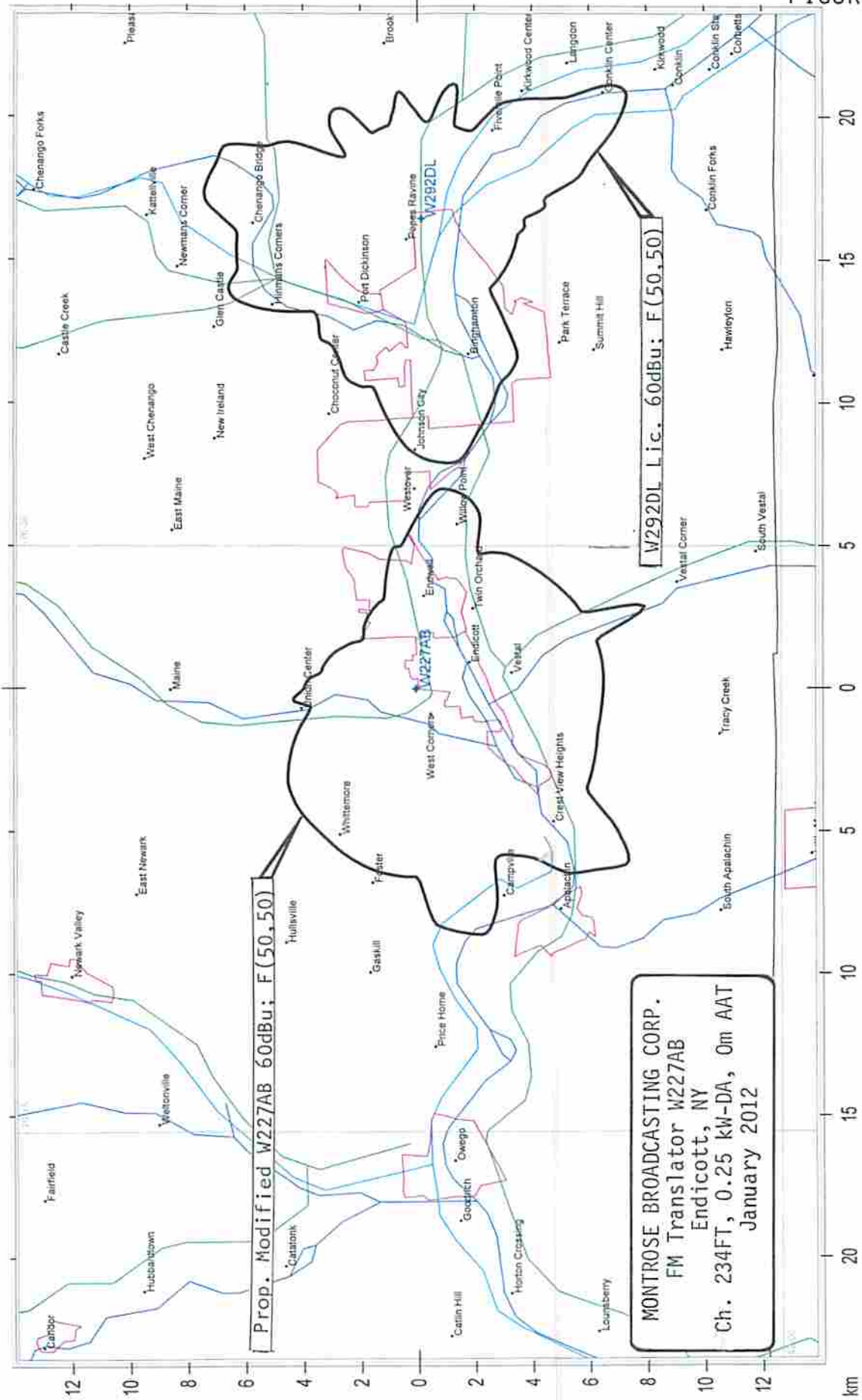


FIGURE 5

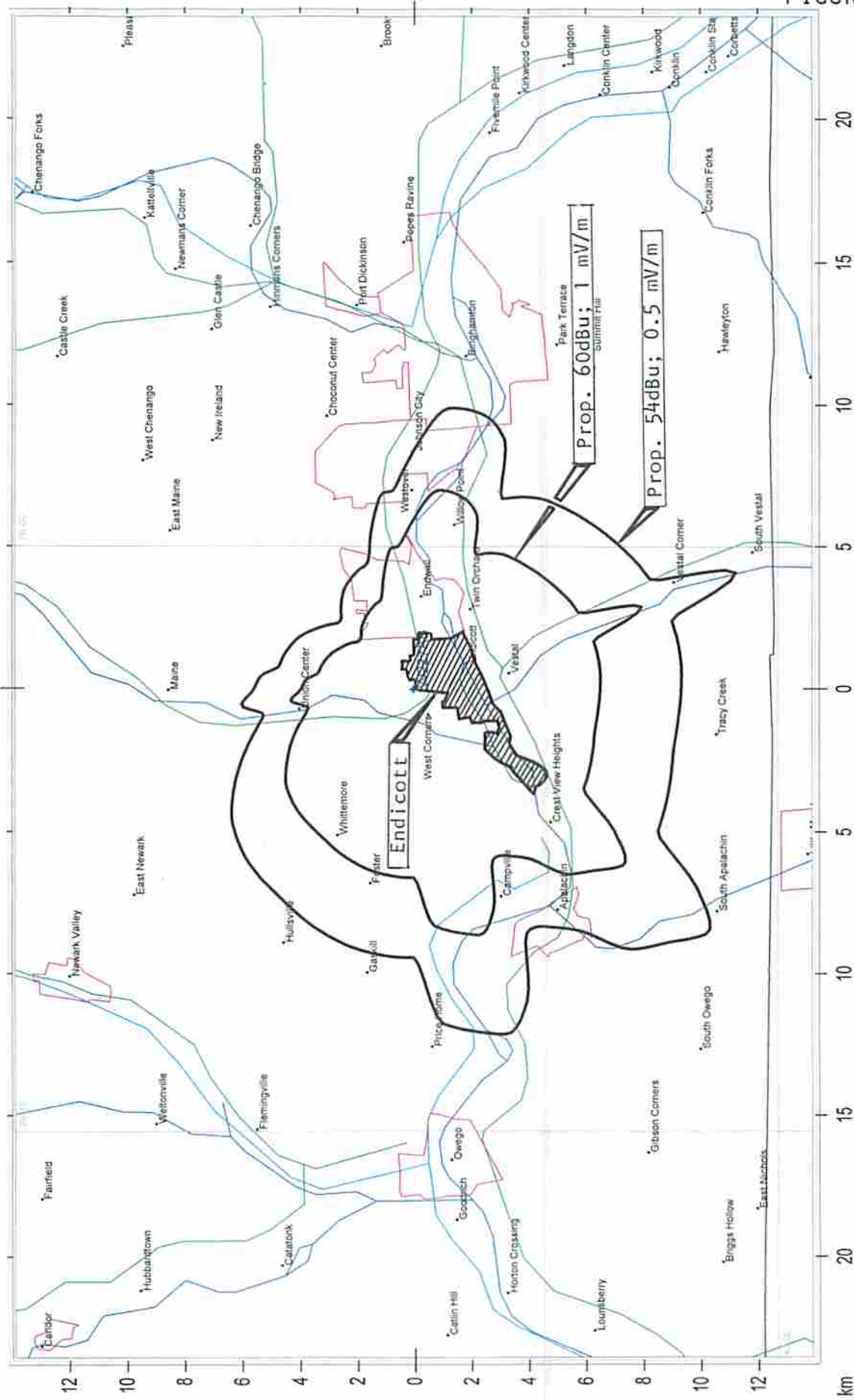
W227AB Proposed CH234FT & W292DL 60dBu Contours



As shown, the 60dBu F(50,50) contour of the proposed modified FM translator W227AB, Endicott, NY (on Channel 234FT) does not cross or intersect the 60dBu F(50,50) contour of the commonly-owned and commonly-programmed FM translator W292DL, Binghamton, NY, also licensed to provide fill-in service for WPEL-FM.

FIGURE 6

W227AB Proposed CH234FT 60dBu & 54 dBu Contours



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FM Translator W227AB

Endicott, NY

Ch. 234FT, 0.25 kW-DA, 0m AAT

January 2012

MONTROSE BROADCASTING CORPORATION
 FM Broadcast Translator W227AB
 (Fill-In for WPEL-FM)
 Endicott, NY
 Channel 234FT (94.7 MHz.)
 0.25 kW, DA, 0m AAT

APPENDIX A

PRECLUSION STUDY

The attached engineering exhibits, APPENDIX A FIGURES 2 through 9. are presented as part of the instant application by Montrose Broadcasting Corporation to request a minor change in its licensed facilities for fill-in FM broadcast translator W227AB, Endicott, NY. The proposed minor change would reassign W227AB from Channel 227 (93.3 MHz.) to Channel 234 (94.7 MHz.) with Effective Radiated Power of 0.25 kW (250 watts) at zero (0) meters above average terrain. A new directional composite antenna is specified.

The requested modification is necessitated by the Commission's grant of construction permit BNPED-20100226AFC (Facility ID # 185048) for FM station WJOB-FM assigned to the newly-created Noncommercial Educational allocation on Channel 227A (93.3 MHz.) at Susquehanna, PA. Due to the proximity of the WJOB-FM CP 60dBu protected contour, translator W227AB must vacate Channel 227FT at Endicott, NY and secure an alternate channel.

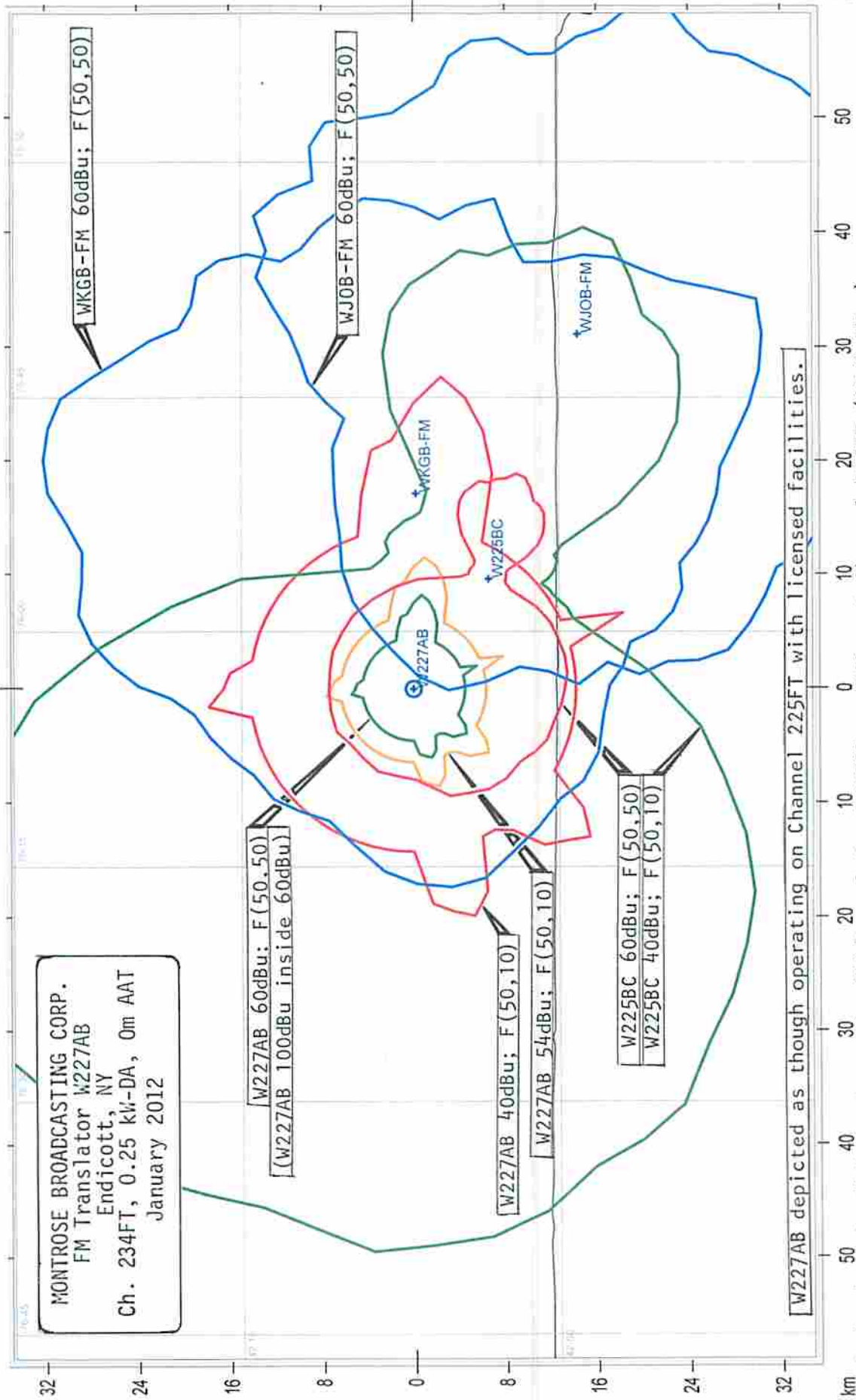
Montrose Broadcasting Corporation, the translator's licensee, seeks Channel 234FT (94.7 MHz.) as the only available channel on the FM spectrum at Endicott, NY which meets the allocation requirements of Section 74.1204 of the Commission's Rules. As such, the licensee cannot migrate to any of the lower-three, upper-three, or I.F.-Related channels as is normally specified as constituting a minor change under Section 74.1233(a) of the Rules. The purpose of this Preclusion Study is to demonstrate that none of the adjacent or I.F.-Related channels can be utilized as alternatives to Channel 227FT.

The following figures provide channel-by-channel analysis of allocation constraints affecting each of the pertinent frequencies. These Preclusion Map figures are identified as follows:

APPENDIX A Page 2:	Channel 224FT (92.7 MHz.)	(3rd-Adjacent Channel)
APPENDIX A Page 3:	Channel 225FT (92.9 MHz.)	(2nd-Adjacent Channel)
APPENDIX A Page 4:	Channel 226FT (93.1 MHz.)	(1st-Adjacent Channel)
APPENDIX A Page 5:	Channel 228FT (93.5 MHz.)	(1st-Adjacent Channel)
APPENDIX A Page 6:	Channel 229FT (93.7 MHz.)	(2nd-Adjacent Channel)
APPENDIX A Page 7:	Channel 230FT (93.9 MHz.)	(3rd-Adjacent Channel)
APPENDIX A Page 8:	Channel 280FT (103.9 MHz.)	(I.F.-Related Channel)
APPENDIX A Page 9:	Channel 281FT (104.1 MHz.)	(I.F.-Related Channel)

In all instances, W227AB translator facilities are those of the licensed operation. The protected and/or interfering contours of other authorized facilities are based on the licensed data of record.

W227AB CH225FT Preclusion Map

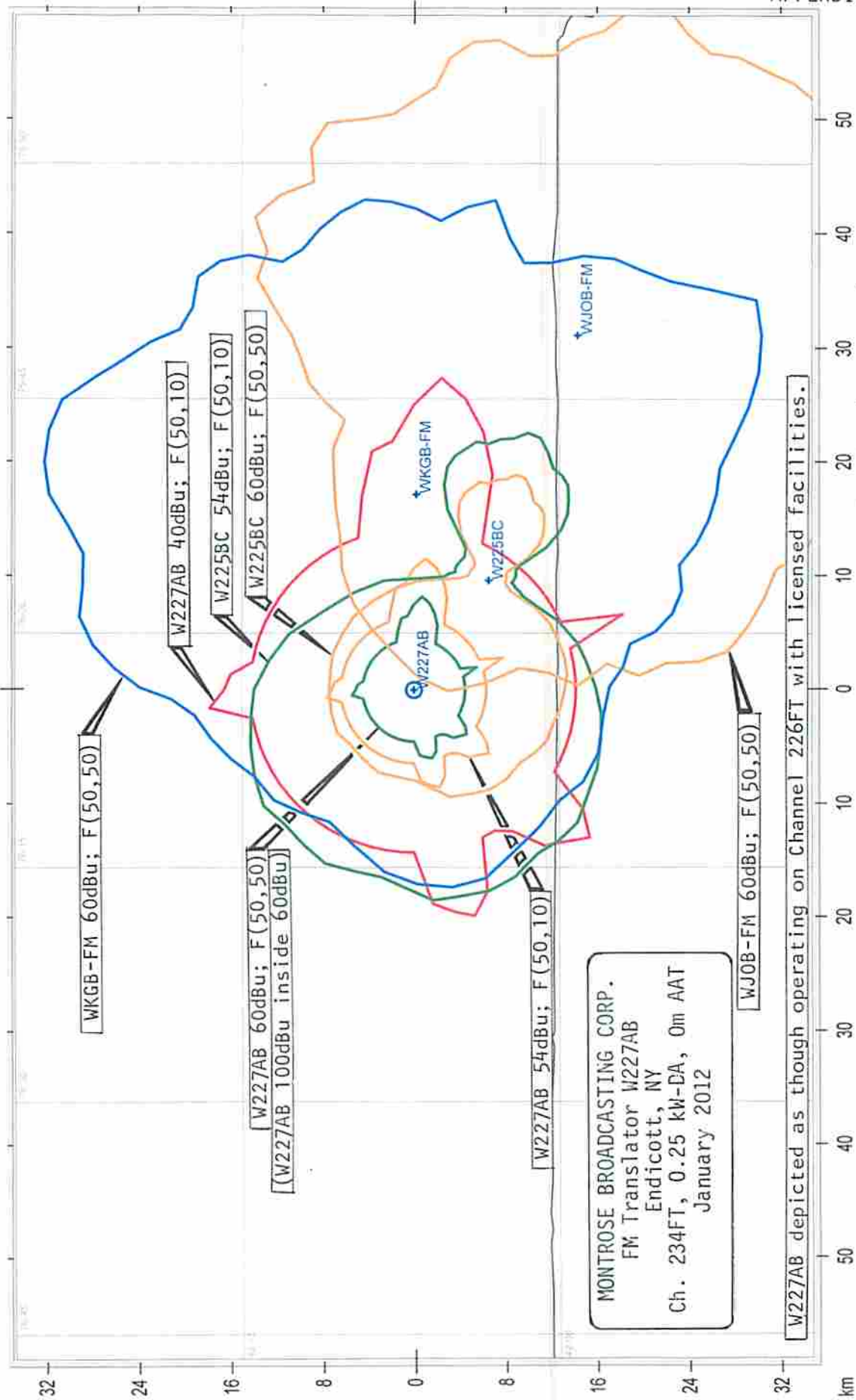


Authorized Facilities Impacting FM Translator W227AB on Adjacent Channel 225FT (92.9 MHz.):

Ch.	Freq.	Power	Notes
Ch. 223A	92.5 MHz.	0.25 kW-DA	Indicates a facility whose protected and/or interfering contour(s) would preclude W227AB on this channel by the standards of Section 74.1204.
Ch. 225FT	92.9 MHz.	0m AAT	Authorized Facility
Ch. 227A	93.3 MHz.	0.25 kW-DA	Authorized Facility

Key: *: Indicates a facility whose protected and/or interfering contour(s) would preclude W227AB on this channel by the standards of Section 74.1204.

W227AB CH226FT Preclusion Map



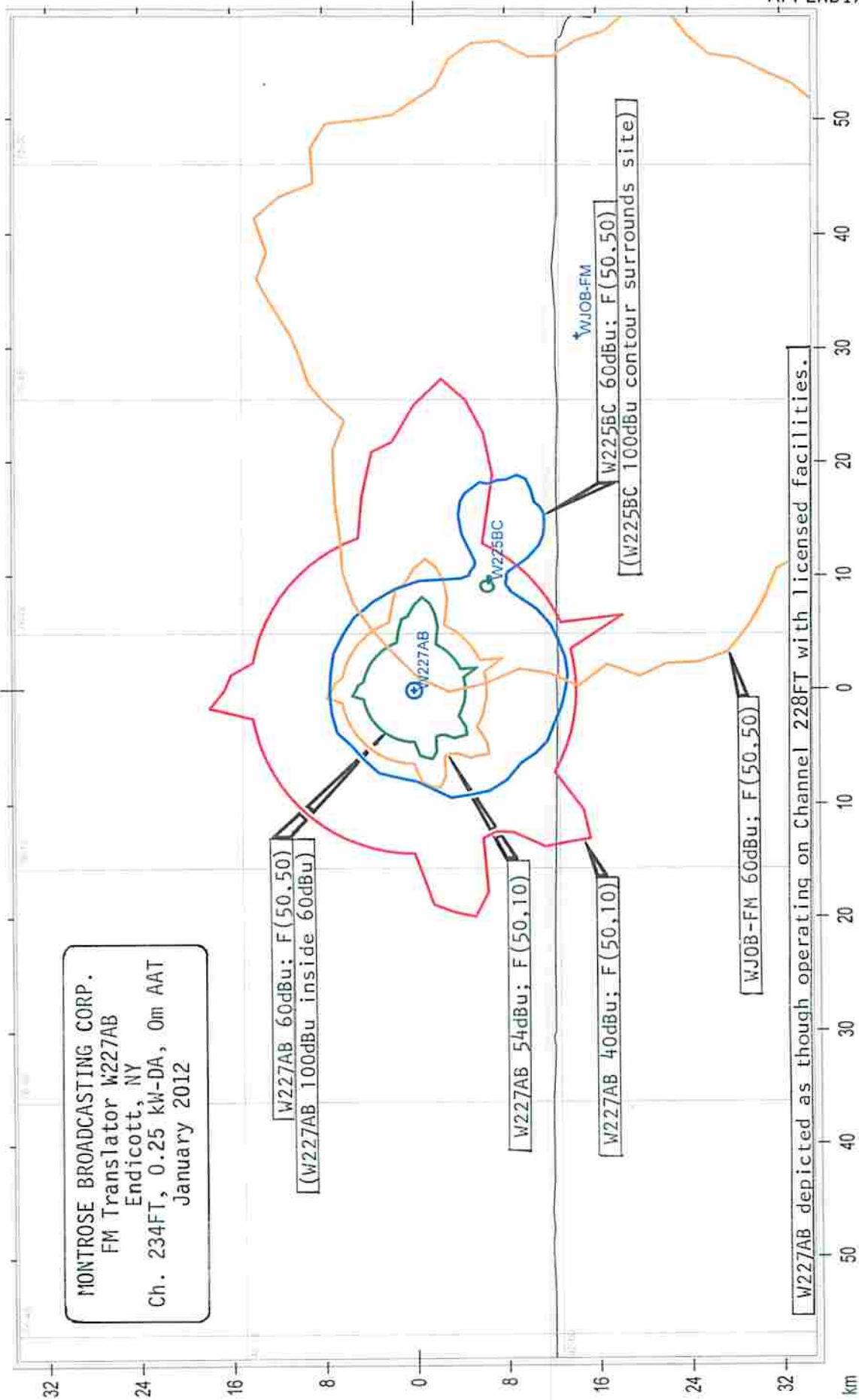
Authorized Facilities Impacting FM Translator W227AB on Adjacent Channel 226FT (93.1 MHz.):

Ch.	223A	(92.5 MHz.)	WKGB-FM*	(3rd-Adjacent Channel)	Key: *	Indicates a facility whose protected and/or interfering contour(s) would preclude W227AB on this channel by the standards of Section 74.1204.
Ch.	225FT	(92.9 MHz.)	W225BC*	(1st-Adjacent Channel)		
Ch.	227A	(93.3 MHz.)	WJOB-FM*	(1st-Adjacent Channel)		

Ch.	225FT (92.9 MHz.)
Ch.	227A (93.3 MHz.)

Ch. 227A (93.3 MHz.)

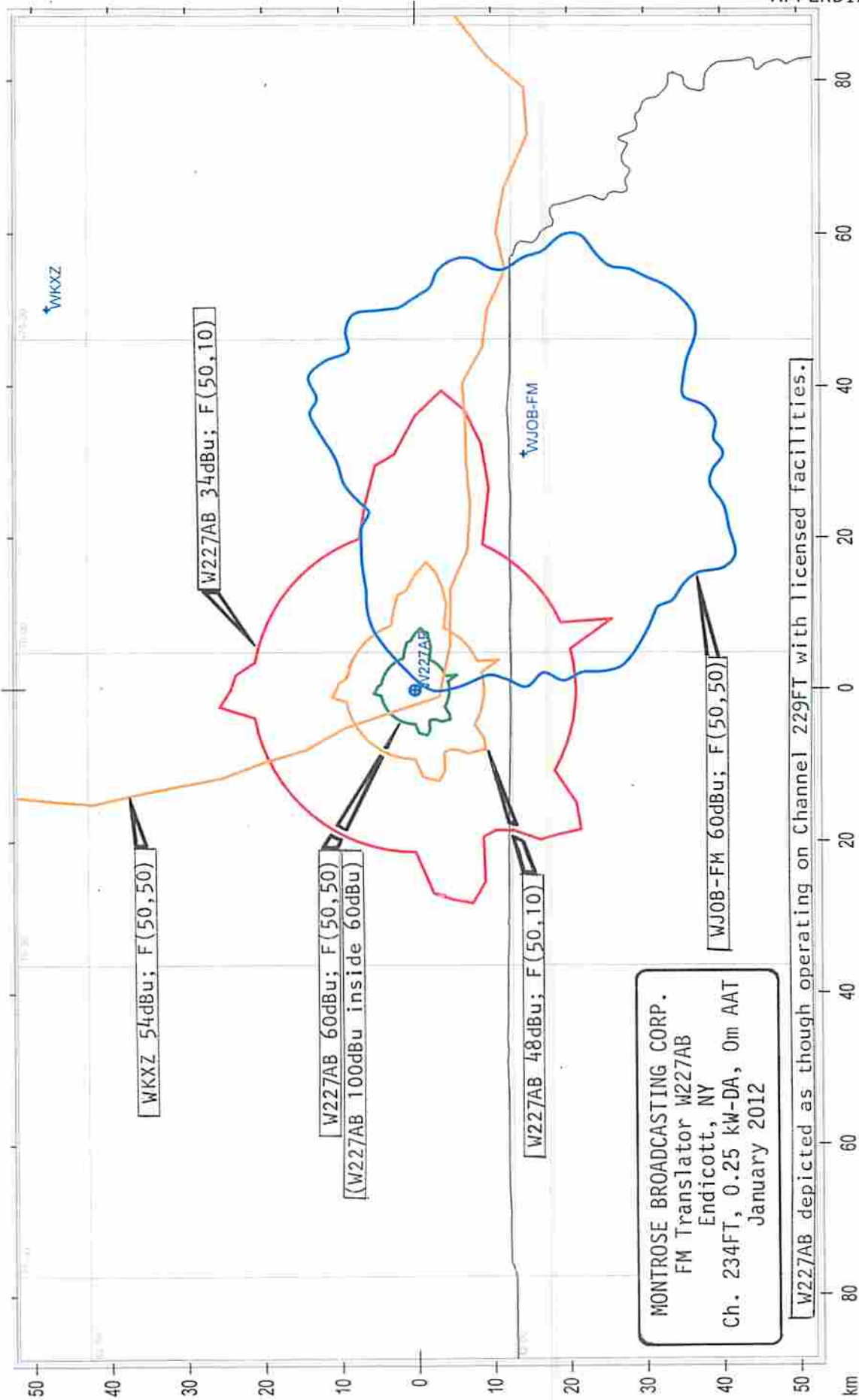
W227AB CH228FT Preclusion Map



Authorized Facilities Impacting FM Translator W227AB on Adjacent Channel 228FT (93.5 MHz.):

Facility	Channel	Power	Notes
W225BC*	225FT (92.9 MHz.)	60dBu; F(50,50)	Indicates a facility whose protected and/or interfering contour(s) would preclude W227AB on this channel by the standards of Section 74.1204.
WJ0B-FM*	227A (93.3 MHz.)	60dBu; F(50,50)	Indicates a facility whose protected and/or interfering contour(s) would preclude W227AB on this channel by the standards of Section 74.1204.

W227AB CH229FT Preclusion Map



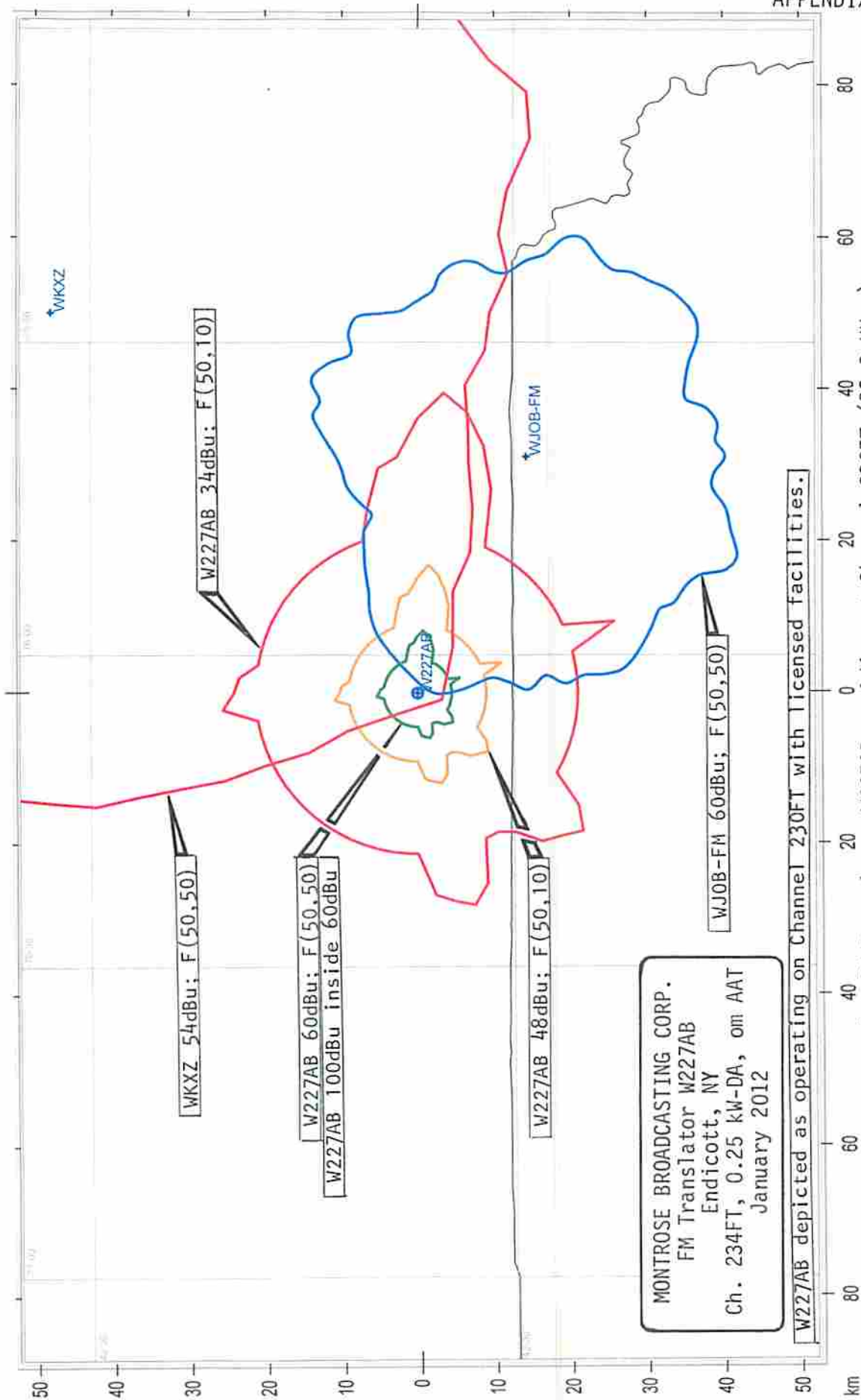
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FM Translator W227AB
Endicott, NY
Ch. 234FT, 0.25 kW-DA, 0m AAT
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W227AB depicted as though operating on Channel 229FT with licensed facilities.

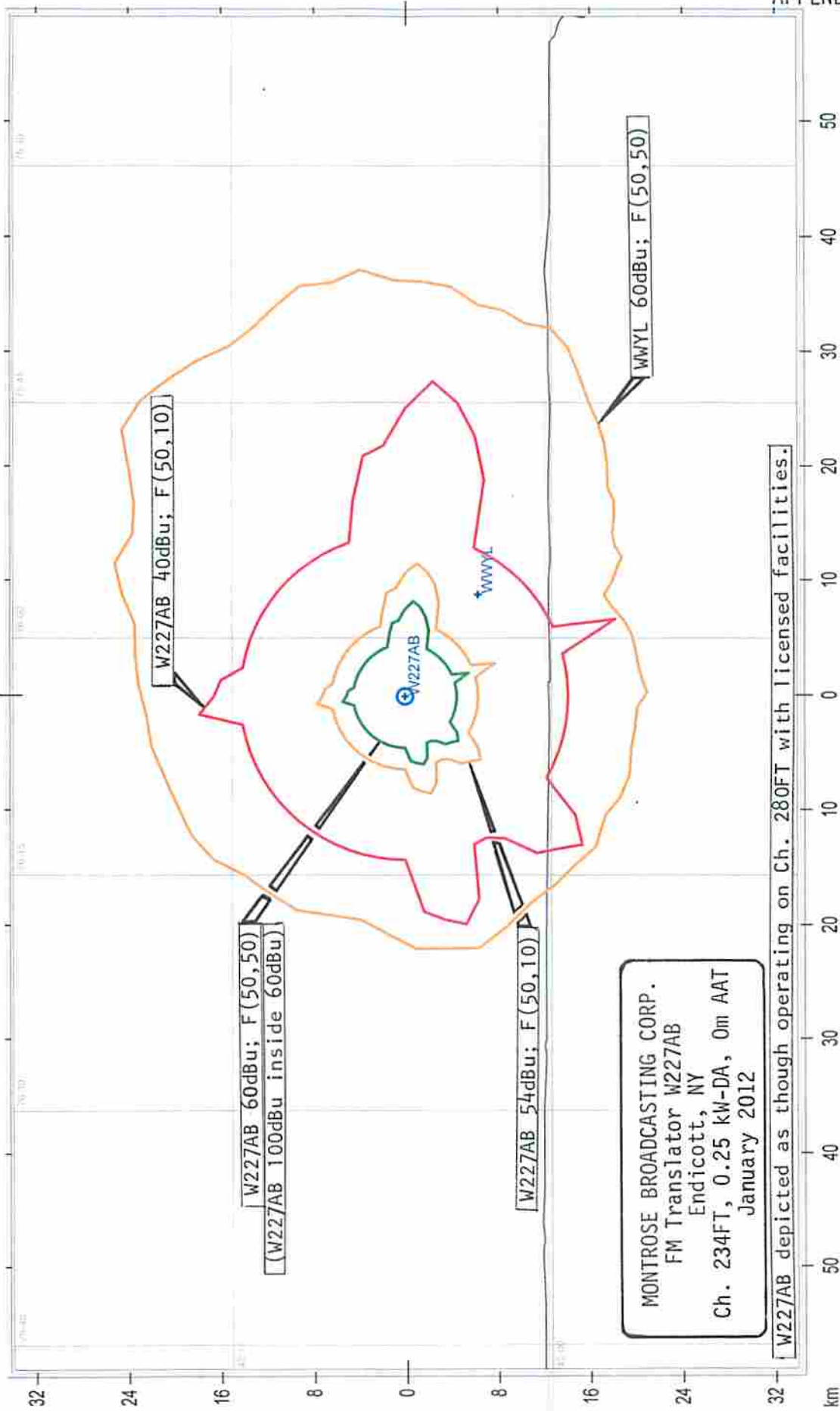
Authorized Facilities Impacting FM Translator W227AB on Adjacent Channel 229FT (93.7 MHz.):

Ch. 227A (93.3 MHz.)	WJ0B-FM (2nd-Adjacent Channel)	WKXZ* (1st-Adjacent Channel)	Key: *: Indicates a facility whose protected and/or interfering contour(s) would preclude W227AB on this channel by the standards of Section 74.1204.
Ch. 230B (93.9 MHz.)			

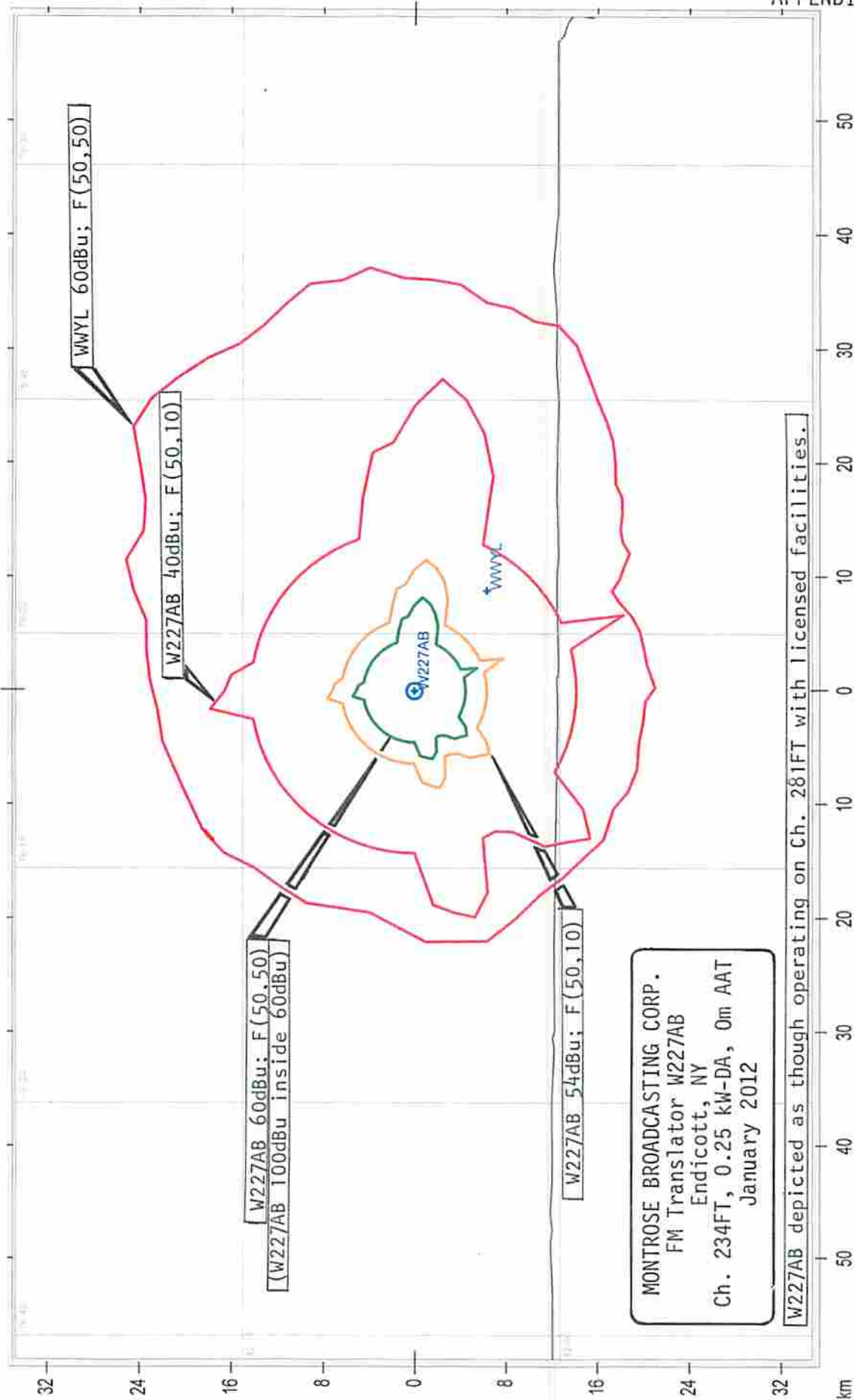
W227AB CH230FT Preclusion Map



W227AB CH280FT Preclusion Map



W227AB CH281FT Preclusion Map



Authorized Facilities Impacting FM Translator W227AB on I.F.-Related Channel 281FT (104.1 MHz.):

Ch. 281A (104.1 MHz.) W227AB* (Co-Channel)

WLRP-LP FACILITY DATA.TXT

Callsign : WLRP-LP
 Coordinates : 42-03-49.0 N, 75-57-02.0 W
 Frequency (MHz): 94.30000
 HAAT (m): 182.05 AMSL (m): 574.70
 Elevation (m): 551.70 Tower AGL (m): 23.00
 ERP (w): 2
 TX power (w): 0 Gain (dB): 0.00
 City/State : BINGHAMTON, NY
 ARN :
 Distance (km): 10
 Licensee : LATTER RAIN NETWORK, INC.

Contour type : F(50,50)
 Signal strength : 60.000 dbu
 Area covered : 0.000 sq. km
 Population covered: 0 persons
 Contour HAAT (m) : 185.8*

Brg	AT	HAAT	Dist	Brg	AT	HAAT	Dist	Brg	AT	HAAT	Dist	Brg	AT	HAAT	Dist
0	352	222	5.6	90	384	190	5.2	180	524	50	2.8	270	347	227	5.6
5	340	234	5.7	95	393	181	5.1	185	528	46	2.7	275	339	235	5.7
10	363	211	5.4	100	384	190	5.2	190	495	79	3.4	280	348	226	5.6
15	344	230	5.6	105	380	194	5.2	195	471	103	3.9	285	356	218	5.5
20	319	255	5.9	110	364	210	5.4	200	444	130	4.3	290	346	228	5.6
25	282	292	6.3	115	392	182	5.1	205	443	131	4.4	295	330	244	5.8
30	290	284	6.2	120	420	154	4.7	210	428	146	4.6	300	327	247	5.8
35	309	265	6.0	125	415	159	4.8	215	453	121	4.2	305	325	249	5.8
40	323	251	5.8	130	418	156	4.8	220	452	122	4.2	310	318	256	5.9
45	347	227	5.6	135	432	142	4.5	225	446	128	4.3	315	308	266	6.0
50	352	222	5.6	140	433	141	4.5	230	436	138	4.5	320	316	258	5.9
55	349	225	5.6	145	447	127	4.3	235	426	148	4.6	325	330	244	5.8
60	341	233	5.7	150	451	123	4.2	240	431	143	4.5	330	342	232	5.7
65	345	229	5.6	155	469	105	3.9	245	408	166	4.9	335	348	226	5.6
70	358	216	5.5	160	489	85	3.6	250	408	166	4.9	340	358	216	5.5
75	366	208	5.4	165	475	99	3.8	255	401	173	5.0	345	356	218	5.5
80	375	199	5.3	170	486	88	3.6	260	386	188	5.2	350	371	203	5.3
85	377	197	5.3	175	508	66	3.1	265	364	210	5.4	355	370	204	5.3

Calculated Average Terrain from the Licensed WLRP-LP Site: 392.5 meters AMSL
(standard eight-bearing average)

Calculated Height Above Average Terrain; WLRP-LP Antenna: 182.2 meters
(574.7m AMSL - 392.5m AMSL)

* Note: The "Contour HAAT" figure of 185.8 meters represents an average of all terrain bearings in this tabulation. It is not the same as the standard eight-bearing HAAT.

Note: The elevation data provided in this exhibit is based on antenna site AMSL figures on file with ASR Registration 1006942 and antenna elevation AGL and AMSL figures provided in the WLRP-LP License, File No: BLL-20061102ACC. Antenna HAAT calculations utilize a terrain calculation computer program of known reliability.

Registration 1006942

[Map Registration](#)

Registration Detail

Reg Number	1006942	Status	Constructed
File Number	A0008256	Constructed	07/01/1985
FAA Study	93-AEA-1347-OE	EMI	No
FAA Issue Date	08/16/1993	NEPA	No

Antenna Structure

Structure Type TOWER - Free standing or Guyed Structure used for Communications Purposes

Location (in NAD83 Coordinates)

Lat/Long	42-03-49.0 N 075-57-01.0 W	INGRAHAM HILL RD
City, State	BINGHAMTON , NY	
Center of AM Array		

Heights (meters)

Elevation of Site Above Mean Sea Level	Overall Height Above Ground (AGL)
551.7	53.3
Overall Height Above Mean Sea Level	Overall Height Above Ground w/o Appurtenances
605.0	45.7

Painting and Lighting Specifications

None

Owner & Contact Information

FRN	0003408317	Licensee ID	L00026607
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Owner

T & K COMMUNICATIONS SYSTEMS INC	P: (607)687-5544
Attention To: GORDON ICHIKAWA	E:
56 GAIL DR	
OWEGO , NY 13827-1057	

Contact

P:
E:

Last Action Status

Status	Constructed	Received	10/31/1996
Purpose	New	Entered	11/06/1996
Mode	Mail In (Manual)		

Related Applications

10/31/1996	A0008256 - New (NE)
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Comments

Comments

None

Automated Letters

None