

Channel Study

REFERENCE		CH# 254D - 98.7 MHz, Pwr= 0.25 kW DA, HAAT= 230.7 M, COR= 562 M								DISPLAY DATES	
42 02 15.8 N.		Average Protected F(50-50)= 19.9 km								DATA 06-24-16	
80 03 43.8 W.		Standard Directional								SEARCH 06-28-16	
CH CITY	CALL	TYPE STATE	ANT DC	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
254D Erie	W254AJ!	CP	DC PA	0.0 0.0	0.00 BMPFT20151215AID	42 02 15.8 80 03 43.8	0.099 562	34.0 562	10.1 Family Life Ministries, In	-46.8	-53.0
254D Erie	W254AJ!	LIC	DC PA	349.4 169.4	10.46 BLFT20120305ABJ	42 07 49.0 80 05 08.0	0.220 -1	23.0 237	6.9 Family Life Ministries, In	-25.4	-39.7
201A Erie	WEFR%	LIC	CX PA	207.0 27.0	8.90 BMLED20130530AMM	41 57 59.0 80 06 40.0	0.630 131	39.5 497	26.0 Family Stations, Inc.	10.0R	-1.1M
256D North East	W256AL	LIC	DC PA	47.2 227.3	25.41 BLFT20040709ACN	42 11 34.0 79 50 10.0	0.200 -4	0.9 303	6.3 Inspiration Time, Inc.	5.7	18.0
255L1 Corry	WHYP-LP	CP	PA	111.8 292.0	37.87 BNPL20131113AYC	41 54 39.4 79 38 16.8	0.100 29	520	12.0 Corry Area Radio Service		7.2
253B1 Oil City	WGYI	LIC	NCX PA	157.2 337.4	74.67 BLH20111205AHW	41 25 04.0 79 42 53.0	20.000 91	49.3 501	35.9 Fm Radio Licenses, Llc	9.0	9.9
254D Jamestown	W254AQ	LIC	C NY	81.2 261.8	70.43 BLFT20140129AIL	42 07 53.0 79 13 13.0	0.010 88	20.0 543	6.1 Calvary Chapel Of Russell	34.3	12.0
255B Youngstown	WMXY	LIC	CN OH	204.2 23.8	119.33 BLH19890405KE	41 03 24.0 80 38 44.0	5.900 418	80.3 745	67.2 Citicasters Licenses, Inc.	22.3	16.9
257B1 Franklin	WHMJ	LIC	CN PA	170.3 350.3	67.60 BLH19891121KC	41 26 16.0 79 55 29.0	7.300 183	3.4 598	41.0 Fm Radio Licenses, Llc	49.2	25.0
252A Ashtabula	WYBL	LIC	ZCX OH	248.7 68.3	55.85 BLH20160321ABH	41 51 13.8 80 41 20.7	4.700 110	2.6 350	27.3 Media One Holdings, Llc	32.3	27.4
252D Westfield	W252CG	CP	DV NY	49.9 230.2	51.51 BPFT20160317ABQ	42 20 04.9 79 34 59.7	0.099 212	0.6 212	5.3 Family Life Ministries, In	32.7	45.1
253B Niagara Falls	WKSE	LIC	CX NY	38.8 219.5	138.80 BMLH20080910ABV	43 00 18.0 78 59 34.0	46.000 128	71.9 304	59.6 Entercom Buffalo License,	46.7	36.9
253B Niagara Falls	WKSE	CP	ZCX NY	40.5 221.3	138.45 BPH20131030AHQ	42 58 42.2 78 57 24.9	41.000 129	70.6 307	58.8 Entercom Buffalo License,	47.8	37.6
255B Simcoe	CHCD-FM	OP	DHN ON	345.1 165.0	81.50 6025	42 44 48.0 80 19 06.0	50.000 150	16.1 355	15.8 Chcd-fm	52.6	38.9<
252D Westfield	W252CG	LIC	DV NY	59.1 239.5	58.54 BLFT20110124AAS	42 18 21.0 79 27 08.0	0.007 149	0.2 521	4.3 Family Life Ministries, In	41.7	53.1
253B Cleveland	WNCX	LIC	CX OH	241.5 60.4	159.68 BMLH20050901AAQ	41 20 28.0 81 44 24.0	16.000 293	79.2 573	67.3 Cbs Radio Stations Inc.	59.7	48.8
201A Jamestown	WUBJ	LIC	DC NY	74.9 255.4	61.66 BLED20010308AAH	42 10 47.0 79 20 29.0	2.700 152	39.5 605	26.0 Western New York Public Br	10.0R	51.7M
255D Warren	W255AE	LIC	DHN PA	104.2 284.9	79.19 BLFT19950615TE	41 51 33.0 79 08 15.0	0.050 -49	1.6 440	1.0 Public Broadcasting Of Nor	61.8	54.5

Terrain database is GLOBE 30 Sec, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM

Contour distances are on direct line to and from reference station. Reference Zone= East Zone, Co to 3rd adjacent.

Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)

""affixed to 'IN' or 'OUT' values = site inside restricted contour.

< = Station meets FCC minimum distance spacing for its class.

< = Contour Overlap

Reference station has protected zone issue: Canada- AM tower

% = Station Fails minimum 73.215 spacings. 73.215 spacings are used.

Intermediate Frequency Distance Separation Waiver Request

FLM respectfully requests a waiver of the Intermediate Frequency ("IF") distance separation requirements for the proposed operation of W254AJ with respect to WEFR, Channel 201A, Erie, PA.

A study has been performed in regards to channel 254 as well as the 1st, 2nd, and 3rd adjacent channels. No overlaps will occur to any of these existing or proposed facilities as a result of a grant of this proposal.

However, the channel study does show a short spacing to WEFR, 201A, Erie, Pa, which operates 53 channels (10.6 MHz) below the translator. WEFR is located at a distance of 8.9 km from the proposed site of W254AJ. According to §73.207(b)(1), the required "IF" distance separation is 10 km, under the assumption that both stations are full 6 kW/100m Class A facilities.

We note that §73.213(c)(1) permits a minimum separation of 8 km between "grandfathered" Class A stations not exceeding 3 kW effective radiated power at 100 meters height above average terrain. Since the proposed translator ERP is far less than 3 kW, FLM believes that it is more appropriate to apply this relaxed 3 kW "IF" distance separation, as the §73.207 requirement for 6 kW stations is unnecessarily restrictive. In past proceedings, the Commission has ruled in favor of uniform protection from IF interference rather than maintaining "overprotection"¹, and we believe our request is consistent with that established policy.

We do not anticipate that a grant of this request would set a dangerous precedent, as the waiver does not involve the use of "contour protection", but rather substitution of one existing Part 73 table for another – one that is more suitable in situations involving FM Translators, given their limited potential to cause "IF" interference. At maximum ERP of 250 watts and regardless of antenna height, an FM translator clearly does not have greater ability to cause "IF" interference than a Class A station operating with 3 kW ERP at 100 m HAAT in accordance with §73.213(c)(1).²

A grant of this waiver request would serve the public interest, because it would permit a substantial increase of coverage area and population of W254AJ, as shown in Exhibits 13-B and 13-C. A 20.5% increase in population and a 46.06% increase in the coverage area within the 60dbu contour is predicted. The proposed distance separation of 8.9 km between W254AJ and WEFR exceeds the 8 km requirement of §73.213(c)(1).

1 See *Review of Technical Parameters for FM Allocation Rules of Part 73, Subpart B, FM Broadcast Stations*, 4 FCC Rcd 3557, 3560 (1989), MM Docket 86-144. In this proceeding, the minimum "IF" distance separations for Class B1, C2, and C1 were reduced to eliminate excessive protection.

2 The "IF" separation requirements are based on avoidance of overlap of the 36 mV/m or 91 dBu contours of the affected stations, operating with full Class facilities. According to the FM Propagation Curves, a 3 kW station at 100 meters HAAT has a 91 dBu contour radius of 4.01 kilometers, whereas a translator operating with an ERP of 250 watts at 1600 meters HAAT (a "worst-case scenario") would have a 91 dBu contour radius of only 3.05 kilometers.

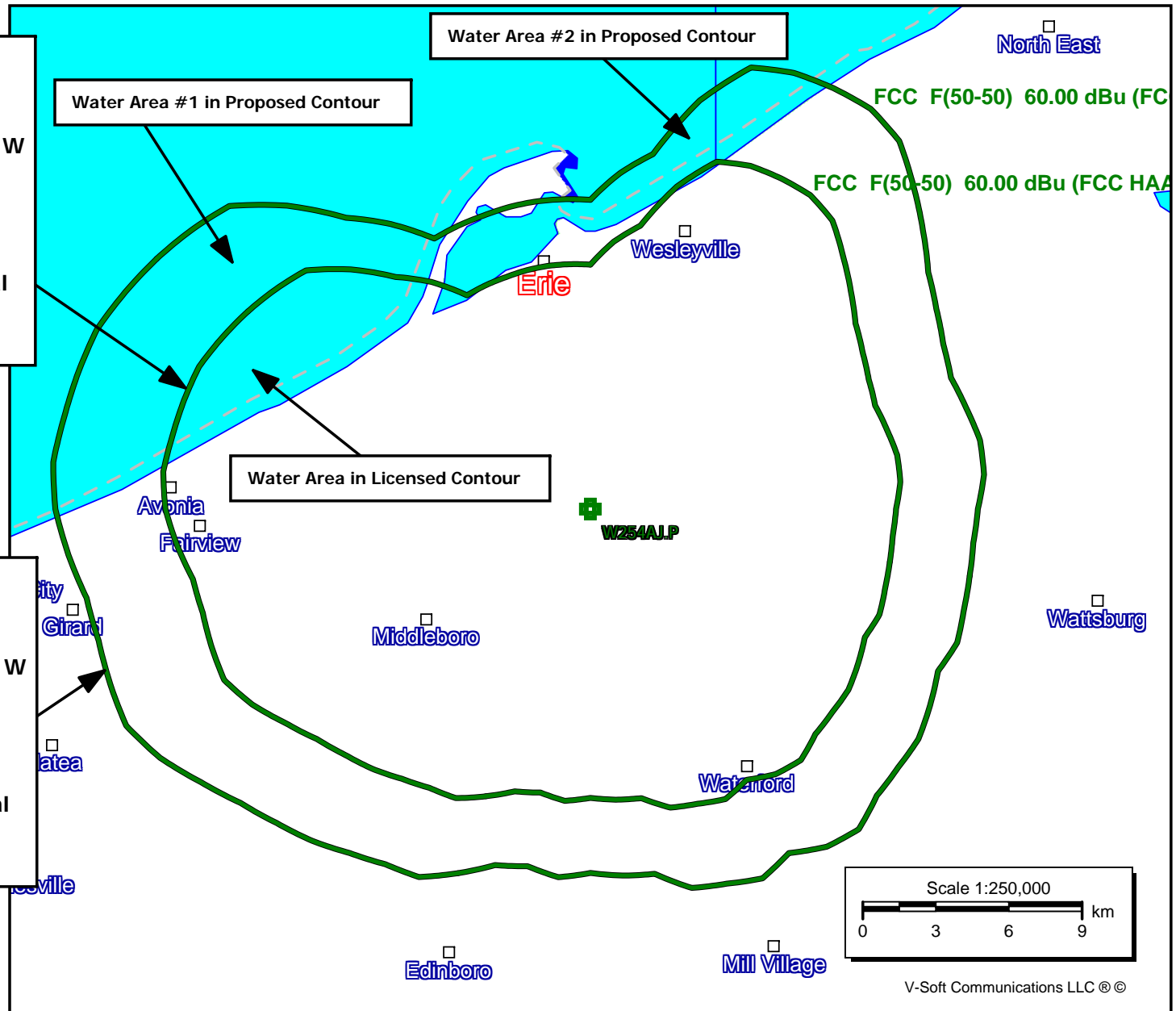
Exhibit 13-B
Licensed and Proposed Contours

W254AJ

Latitude: 42-02-15.80 N
Longitude: 080-03-43.80 W
ERP: 0.099 kW
Channel: 254
Frequency: 98.7 MHz
AMSL Height: 562.0 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: None

W254AJ.P

Latitude: 42-02-15.80 N
Longitude: 080-03-43.80 W
ERP: 0.25 kW
Channel: 254
Frequency: 98.7 MHz
AMSL Height: 562.0 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: None



Population and Coverage Area Report**W254AJ 99 watt Licensed Contour**

Area Description	Total Population	Total Area [sq. km]	Percent Population	Percent Area
W254AJ (254): FCC F(50-50) 6	179,965	591.16	2.5 %	6.3 %
Polygon over water	0	37.13	100.0 %	99.7 %

591.16 (total area) - 37.13 (portion of contour over water) = 554.03 sq km

W254AJ 250 watt Proposed Contour

250w contour over water area #1:

Area Description	Total Population	Total Area [sq. km]	Percent Population	Percent Area
W254AJ.P (254): FCC F(50-50)	216,920	950.45	2.1 %	11.4 %
Polygon over water area #1	0	108.35	100.0 %	99.8 %

250w contour over water area #2:

Area Description	Total Population	Total Area [sq. km]	Percent Population	Percent Area
W254AJ.P (254): FCC F(50-50)	216,920	950.45	3.9 %	3.4 %
Polygon over water area #2	0	32.9	100.0 %	98.9 %

Total area of portions of contour over water: 108.35 + 32.9 = 141.25 sq km
 950.45 (total area) - 141.25 (portions of contour over water) = 809.2 sq km

809.2 (proposed coverage area) - 554.03 (licensed coverage area) = 255.2 sq km
 increased coverage area.

255.2 (increased coverage area) / 554.03 (licensed coverage area) = .4606

Increase in coverage area when discounted for water in both contours: 46.06%

Population in licensed contour: 179,965
 Population in proposed contour: 216,920
 Increase in population: 36,955
 36,955 / 179,965 = .205
Percent Increase in Population: 20.5%