

TECHNICAL STATEMENT
NEW(FM) TRANSLATOR
FCC FORM 349
CHARLOTTE, NORTH CAROLINA, CH. 234D
MARY MEDICUS
AUGUST 2013

This FCC “Long Form” 349 application is being submitted in response to DA 13-1675 released July 31st, 2013 regarding Non-Mutually exclusive Tech Box proposals, or “Singleton” applications for new Auction 83 FM translator stations. This application is response to an original application filed by Mary Medicus, BNPFT-20030317HMM, facility ID 156552, for a new FM translator for Charlotte, NC on channel 234D. This application is listed in “Attachment A” of DA 13-1675, report No. AUC-03-83-E.

The applicant does not seek to make any technical changes to the current pending “Tech Box” application, thus no new LPFM preclusion study is required since the applicant is relying on the previously filed LPFM preclusion study.

This application proposes service on channel 234D (104.7 Mhz) from an existing registered tower, 1017067, located at the NAD 27 coordinates of N 35° 16’ 34”, W 80° 48’ 00”. The existing tower has an overall height of 184.4 meters. The proposed antenna will be a Nicom Model BKG 77, one bay, with circular polarization, mounted at the 100 meters above ground center of radiation, and 330 meters height above mean sea level. An effective radiated power of 0.01 kilowatts (10 watts), both horizontal and vertical polarization will be utilized.

Figure 1 is a detailed channel interference study conducted at the proposed site. As can be seen, there will not be any outgoing prohibited overlap with any other stations on Co-channel or pertinent adjacent channels, with the exception of 2nd adjacent channel station WNKS

Charlotte, NC , operating on channel 236C, facility ID 53975, and a third adjacent channel Construction Permit for WWLV Lexington, NC, facility ID 15839, BPH-20030303ACA.

The proposed operation on 234D is located within the protected 60 dB μ contour of 2nd adjacent channel of WNKS (ch. 236C) and 3rd adjacent channel WWLV(CP) (ch. 231C1).

Figure 2 shows that WNKS produces a field strength of 83.2 dB μ at the proposed site.

Therefore, the respective worst case predicted interfering contour F(50-10) generated by the proposed translator on channel 234D is an additional 40 dB μ or 123.2 dB μ . Figure 3 shows that WNKS(CP) produces a field strength of 73.4 dB μ at the proposed site. Therefore, the respective worst case predicted interference contour F(50-10) generated by the proposed translator on channel 268D is an additional 40 dB μ or 113.4 dB μ . Since the WNKS interference contour would be a smaller coverage area than the interference contour for WWLV, only the WWLV interference contour was studied further.

Figure 4 shows the coverage area for the "worse case" 100 dB μ interference contour F(50-10) and shows that there is no population in the area of interference. The 113.4 dB μ interference contour would only extend 0.047 kilometers (47 meters). Since the antenna will be mounted 100 meters above the ground level, the interference contour will not reach the ground. Thus there will be no actual interference caused to WWLV (or the smaller WNKS interference contour) Figure 5 is a Satellite view map of the area located around the proposed site. The applicant, Mary Medicus, respectfully requests a waiver of C.F.R. 74.1204(d) of the Commission's rules based on the fact that there is no population within the area of predicted interference. There are no homes nearby the proposed existing tower site, which is a privately owned with private access. Should any unforeseen actual interference be caused, the licensee

will immediately cease broadcasting with new translator at Charlotte, NC until such interference can be eliminated.

Figure 6 is a tabulation for 36 standard radials (every 10 degrees), average heights above average terrain for each radial and the distances to pertinent contours for the proposed operation on channel 234D.

This application will not overlap with any other proposed FM translator applications submitted in “Auction 83”.

It was determined that this form 349 FM translator application will comply with all of the technical requirements under part C.F.R. 74 of the Commission’s rules and regulation.

FIGURE 1 - DETAILED CHANNEL INTERFERENCE STUDY

NEW FM TRANSLATOR, CHARLOTTE, NC, CH. 234D

CH# 234D - 94.7 MHZ, Pwr= 0.01 kw, HAAT= 0.0 M, COR= 330 M

Average Protected F(50-50)= 3.15 km

Omni-directional

DISPLAY DATES

DATA 08-07-13

SEARCH 08-07-13

REFERENCE
35 16 34.0 N.
80 48 00.0 W.

CH CITY	CALL	TYPE ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT* (in km)
236C Charlotte	WNKS	LIC _CX NC	286.6 106.4	33.68 BMLH20030619AAE	35 21 44.0 81 09 19.0	100.000 470	12.5 707	86.2 Cbs Radio Stations Inc.	14.9	-52.7
231C1 Lexington	WWLV	CP NCX NC	8.1 188.1	42.02 BPH20030303ACA	35 39 04.0 80 44 04.0	43.000 408	9.2 653	71.9 Davidson County Broadcasti	26.6	-30.1
234D Charlotte	1556527	APP _C_ NC	0.0 0.0	0.00 BNPFT20030317HMM	35 16 34.0 80 48 00.0	0.010	20.1 330	6.1 Mary Medicus	-26.2	-26.2
234D Indian Trails	1559286	APP _C_ NC	136.5 316.6	24.74 BNPFT20030310AEN	35 06 52.0 80 36 46.0	0.010	11.9 246	3.7 Positive Alternative Radio	6.6	0.2
231C Lexington	WWLV	LIC DCN NC	32.6 212.9	84.64 BLH19940909KH	35 55 02.0 80 17 37.0	100.000 309	10.2 543	72.7 Davidson County Broadcasti	67.8	11.8
234C Raleigh	WQDR-FM	LIC _CY NC	77.1 258.4	210.23 BLH19910411KB	35 40 35.0 78 32 09.0	100.000 512	191.1 603	87.1 Carolina Media Group, Inc.	12.2	100.5
233C Greenville	WGTK-FM	LIC _CX SC	256.2 75.3	151.52 BLH20080425ABD	34 56 29.0 82 24 41.0	100.000 454	125.8 760	84.5 Caron Broadcasting, Inc.	19.4	57.9
232D Rock Hill	W232AX	LIC _C_ SC	207.1 27.0	43.96 BLFT20080716AGK	34 55 25.0 81 01 13.0	0.054 65	0.5 242	6.8 Our Three Sons Broadcastin	36.8	36.7
233C1 Eden	WPTI	LIC DE_ NC	33.8 214.3	143.53 BMLH20010514AAN	36 20 48.0 79 54 30.0	100.000 299	98.1 522	67.0 Clear Channel Broadcasting	38.7	67.2
234C3 Sumter	WWBD	LIC _CX SC	158.4 338.7	146.34 BLH20040112ADC	34 02 56.0 80 12 51.0	8.100 174	101.2 222	38.3 Miller Communications, Inc	38.8	86.9
232D Lenoir	W232AV	LIC _CN NC	318.6 138.2	93.82 BLFT19950504TB	35 54 25.0 81 29 22.0	0.010 296	0.2 699	10.4 Eastern Airwaves, LLC	87.5	83.1
235C Roanoke	WSLC-FM	LIC _C_ VA	15.0 195.4	220.95 BLH20121126ARA	37 11 50.0 80 09 11.0	100.000 598	117.7 1181	79.4 Mel Wheeler, Inc.	96.8	131.4
234D Boone	637687	APP _C_ NC	323.2 142.7	128.35 BNPFT20030317LQY	36 11 54.0 81 39 24.0	0.010 -10	22.2 966	6.6 Blue Ridge Broadcasting Co	100.1	102.0
231D Spartanburg	W231BA	LIC _C_ SC	256.1 75.4	125.78 BLFT20091224AAB	34 59 54.0 82 08 17.0	0.250 139	1.1 408	15.7 Tower Above Media LLC	118.3	109.8
232C3 Latta	WCMG	LIC _CN SC	127.7 308.4	151.18 BLH19971113KB	34 26 20.0 79 29 44.0	10.500 153	3.9 183	39.2 Cumulus Licensing LLC	141.1	111.6
232A Forest Acres	WWNQ	LIC NCX SC	188.7 8.5	143.06 BLH20041208AAN	34 00 04.0 81 02 05.0	2.550 136	2.3 207	25.8 Hometown Columbia, LLC	134.2	117.0
234A Williston	WAAW	LIC _C_ SC	201.3 20.8	210.20 BLH20040109ACF	33 30 31.0 81 37 27.0	2.550 155	83.0 273	28.6 Wisdom, LLC	120.5	158.9
237A Quinby	WFRK	LIC ZCX SC	140.1 320.7	150.87 BLH20100512AEH	34 13 48.0 79 44 49.0	3.900 125	2.6 155	27.4 Miller Communications, Inc	142.0	122.9
231A Cross Hill	WGFJ	LIC ZCX SC	220.7 40.1	156.43 BMLD20100511ABZ	34 12 16.0 81 54 37.0	3.600 127	2.7 272	28.8 Radio Training Network, In	147.2	127.0
237A South Congaree	WFMV	CP ZCX SC	189.2 9.1	157.33 BPH20120319ABG	33 52 34.0 81 04 28.0	6.000 80	2.8 160	29.0 Glory Communications, Inc.	147.9	128.1
237A South Congaree	WFMV	LIC ZC_ SC	194.4 14.1	157.60 BLH20010725AEF	33 53 58.0 81 13 29.0	6.000 100	2.4 213	26.1 Glory Communications, Inc.	148.5	129.9
235C0 Greeneville	WAEZ	LIC DEX TN	298.1 117.0	192.84 BMLH20010504AAT	36 04 34.0 82 41 28.0	100.000 332	45.3 1042	26.5 Bristol Broadcasting Compa	141.4	146.3
237A Due West	WYPJ	LIC ZCX SC	237.5 56.6	173.46 BLH20091028AAY	34 25 41.0 82 23 37.0	6.000 83	1.6 300	15.3 Rfpjy, LLC	165.3	155.7
237A Rural Retreat	WXBX	LIC NCN VA	347.9 167.6	186.86 BLH19910910KC	36 55 17.0 81 14 34.0	6.000 58	2.5 867	25.8 Three Rivers Media Corpora	178.4	158.8
231A Kingstree	WRZE	LIC _CN SC	156.0 336.5	188.06 BLH19990125KG	33 43 32.0 79 58 19.0	6.000 100	2.7 120	27.5 Qantum Of Florence License	179.0	160.1

CH	CALL	TYPE	ANT	AZI	DIST	LAT	PWR(kw)	INT(km)	PRO(km)	Page #	*IN*	*OUT*
CITY		STATE		<--	FILE #	LNG	HAAT(M)	COR(M)	LICENSEE	2	(Overlap	in km)
233A	WSPX	LIC _CX		178.3	217.04	33 19 13.0	3.500	42.2	27.7	168.4	180.3	
Bowman		SC		358.4	BLH20040818AAI	80 43 52.0	132	172	Glory Communications, Inc.			
235C3	WVCO	LIC _C_		126.9	234.16	33 59 39.0	11.000	55.8	37.0	172.2	188.3	
Loris		SC		308.1	BLH20021016AAD	78 46 16.0	149	160	Carolina Beach Music, Llc			
237A	AL8952	VAC _		270.4	214.23	35 15 56.0	6.000	2.3	22.4	205.6	174.7	
Dillsboro		NC		89.0	RM9871	83 09 16.0	100	1069	Sutton Radiocasting Corp.			
233C3	WYEZ	LIC _CX		142.4	239.98	33 33 13.0	12.000	58.5	39.1	175.1	191.8	
Murrells Inlet		SC		323.3	BMLH20100824ABC	79 13 14.0	145	151	Fidelity Broadcasting Corp			
237A	1356789	APP _CX		269.5	216.23	35 14 08.0	1.350	2.3	33.0	207.6	182.4	
Dillsboro		NC		88.1	BNPED20100226ABN	83 10 32.0	214	1180	Western Carolina Universit			
234A	WULK	LIC NCX		225.4	276.09	33 30 54.0	3.800	85.0	28.9	184.5	224.5	
Crawfordville		GA		44.2	BLH20121026AAB	82 55 18.0	128	301	Lyness, Arthur			
237A	1358227	APP ZCX		271.4	224.71	35 17 58.8	1.250	1.9	25.3	216.6	199.2	
Dillsboro		NC		90.0	BNPED20100226AIG	83 16 12.4	56	936	The Canary Coalition, Inc.			
236C3	WGAC-FM	LIC ZCN		213.3	236.82	33 29 07.0	5.700	2.7	31.1	227.6	205.4	
Harlem		GA		32.5	BLH19940415KB	82 12 07.0	164	273	wchz License, Llc			
237A	WHLF	LIC ZCX		46.1	231.94	36 42 24.0	6.000	2.4	24.4	222.6	206.4	
South Boston		VA		227.2	BLH20060313ADI	78 55 28.0	75	206	Lakes Media Holding Compan			
232C2	WIFX-FM	LIC ZEX		322.7	266.04	37 09 59.0	6.300	4.6	51.7	255.4	214.1	
Jenkins		KY		141.6	BLH20070511ACW	82 37 13.0	410	956	Ajspd, Llc			
236C0	WSSX-FM	LIC _CN		162.0	289.04	32 47 44.0	100.000	10.2	72.8	272.4	216.0	
Charleston		SC		342.5	BLH19900924KC	79 50 27.0	305	306	Radio License Holding Cbc,			
231A	WMXK	LIC _CX		295.6	252.22	36 13 42.0	1.000	2.0	28.3	244.0	223.8	
Morristown		TN		114.1	BLED20090901ADD	83 19 56.0	247	632	Educational Media Foundati			
234C3	WKLW-FM	LIC _CN		328.0	332.01	37 47 42.0	4.900	102.1	40.0	224.0	273.1	
Paintsville		KY		146.9	BLH19930719KD	82 48 03.0	223	488	B & G Broadcasting, Inc.			
236C	WRNS-FM	LIC _C_		92.5	316.01	35 06 15.0	100.000	12.3	84.4	297.1	231.3	
Kinston		NC		274.5	BLH20000531AED	77 20 12.0	459	472	Nm Licensing Llc			
232A	WZKB	LIC _CX		101.9	262.13	34 45 30.0	6.000	2.7	28.3	252.8	233.6	
Wallace		NC		283.5	BLH20070821ADR	77 59 52.0	100	115	Carolina's Christian Broad			
235C3	WHKN	LIC NCN		199.4	298.70	32 43 57.0	14.500	56.8	37.4	235.2	251.7	
Millen		GA		18.8	BLH19920214KC	81 51 43.0	122	181	Georgia Eagle Media, Inc.			
231B	WAXS	LIC _CY		354.1	299.29	37 57 30.0	26.500	5.3	61.0	287.9	237.9	
Oak Hill		WV		173.9	BMLH19960118KD	81 09 03.0	198	775	Plateau Broadcasting, Inc.			
232C3	WTHP	LIC NC_		217.2	275.93	33 17 05.0	6.300	3.5	36.4	266.0	239.0	
Gibson		GA		36.2	BLED201111114ADZ	82 35 45.0	174	310	Augusta Radio Fellowship In			
232A	WVRH	LIC _C_		59.3	271.68	36 29 38.0	6.000	2.6	26.9	262.0	244.8	
Norlina		NC		240.8	BLED20010913AAW	78 11 23.0	100	195	Liberty University, Inc.			
232C3	WSCC-FM	LIC _CX		161.7	286.85	32 49 04.0	25.000	4.1	39.5	276.3	247.0	
Goose Creek		SC		342.3	BLH20020118AAA	79 50 08.0	100	105	Clear Channel Broadcasting			
233A	WKXS-FM	LIC ZCX		113.7	286.70	34 12 35.0	3.800	29.3	19.9	251.0	257.1	
Leland		NC		295.3	BLH20060403BWN	77 56 53.0	127	131	Cumulus Licensing Llc			
235C1	WUBL	LIC _C_		244.3	363.57	33 48 27.0	100.000	102.4	70.2	254.8	283.5	
Atlanta		GA		62.3	BLH20000413ABM	84 20 27.0	298	581	Citicasters Licenses, Inc.			
235C1	WUBL	CP _CY		244.3	363.47	33 48 26.0	80.000	102.2	70.4	254.9	283.4	
Atlanta		GA		62.3	BMPH20120801ABA	84 20 21.8	330	612	Citicasters Licenses, Inc.			
237B1	WRLB	LIC ZC_		0.6	297.59	37 57 28.0	13.000	2.9	38.5	288.6	258.6	
Rainelle		WV		180.7	BMLH20080513ABO	80 45 45.0	139	991	Faith Communications Netwo			
236A	WJRB	LIC NCX		263.4	286.77	34 56 26.0	0.200	1.0	26.8	279.4	258.7	
Young Harris		GA		81.6	BLH20070830ADE	83 55 08.0	483	1123	wjrb Radio, Llc			
237D	WRLB-FM1	CP DC_		5.1	281.04	37 47 54.0	0.190	0.5	14.9	274.4	265.9	
Lewisburg		WV		185.3	BNPFTB20120516AAS	80 30 55.0		898	Faith Communications Netwo			
233L1	WRMV-LP	LIC _		31.6	281.05	37 25 11.0	0.096	7.9	5.6	266.4	266.2	
Madison Heights		VA		212.6	BLL20030529AFE	79 07 56.0	25	236	Fellowship Community Churc			

Terrain database is NGDC 30 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
In & Out distances between contours are shown at closest points. Reference zone= East Zone, Co to 3rd adjacent.
All separation margins (if shown) include rounding
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 protected contour.

* Translator Long Form being filed for by this application.

** No actual interference will be caused to either of these stations since the 100 DBU contour will not cover any population.

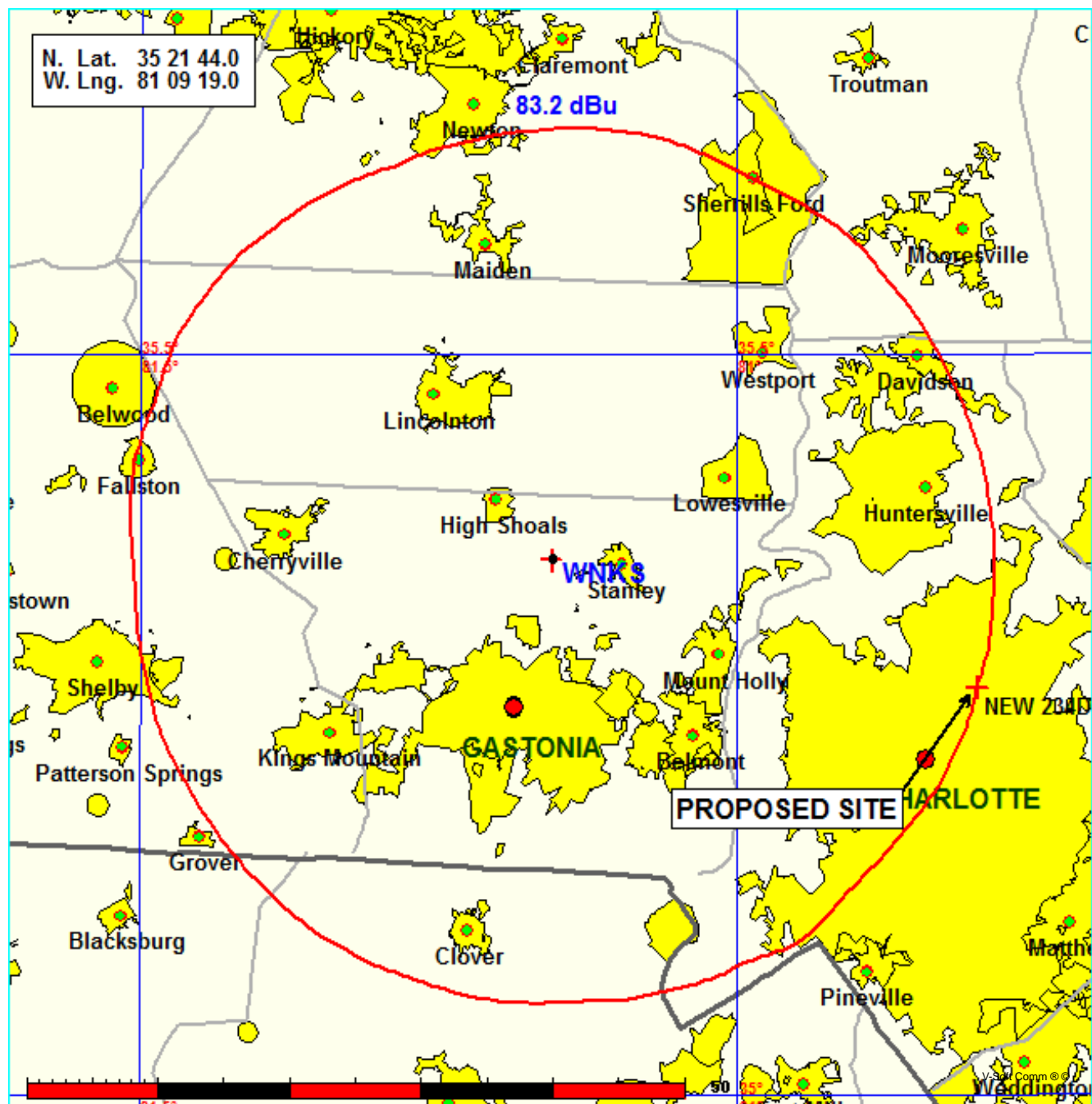


FIGURE 3 - WWLV-CP PROPOSED 73.4 DBU AT SITE
NEW FM TRANSLATOR, CHARLOTTE, NC, CH. 234D

Coverage Study - NGDC 30 SEC
08-07-2013

WWLV-C CH231 C1, 43.0 kW, 408.4M HAAT, 652.7M COR AMSL
Service Contour = 73 dBu. Population = 832,090

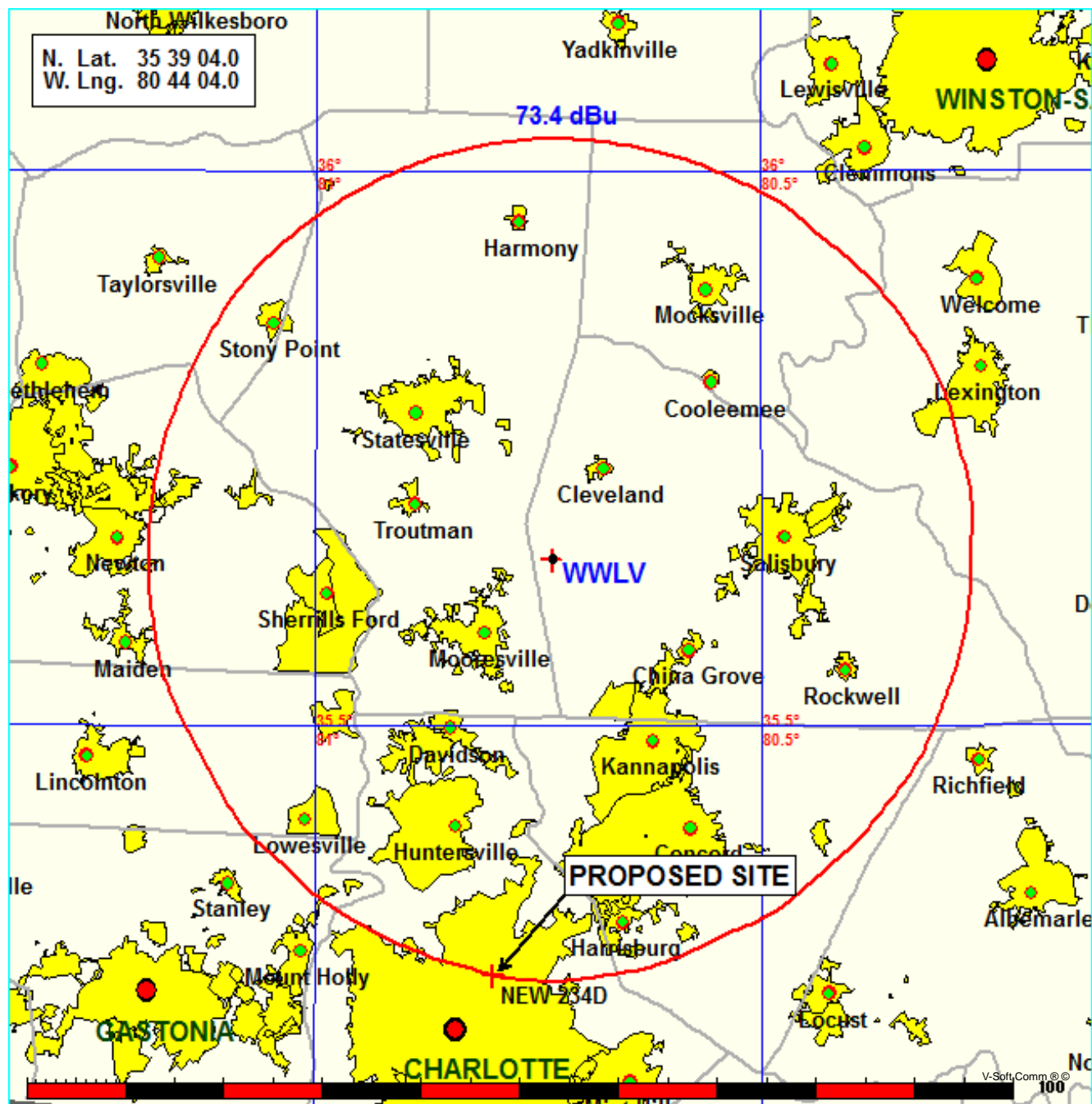


FIGURE 4 - PREDICTED 100 DBU CONTOUR
NEW FM TRANSLATOR, CHARLOTTE, NC, CH. 234D

Coverage Study - NGDC 30 SEC
08-07-2013

1556527 CH234 D , 0.01 kW, 0.0M HAAT, 330.0M COR AMSL
Interference Contour = 100 dBu. Population = 0

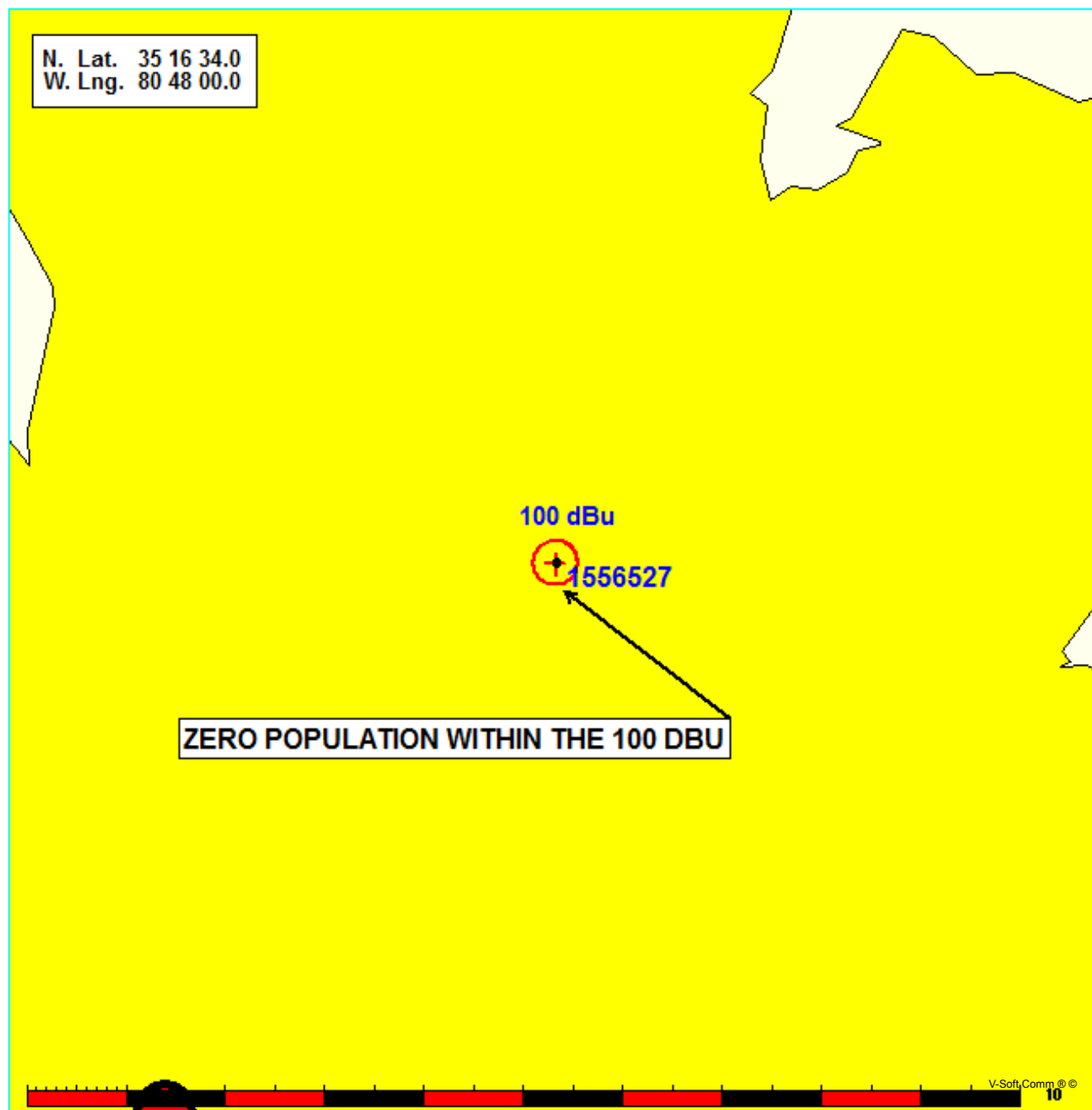
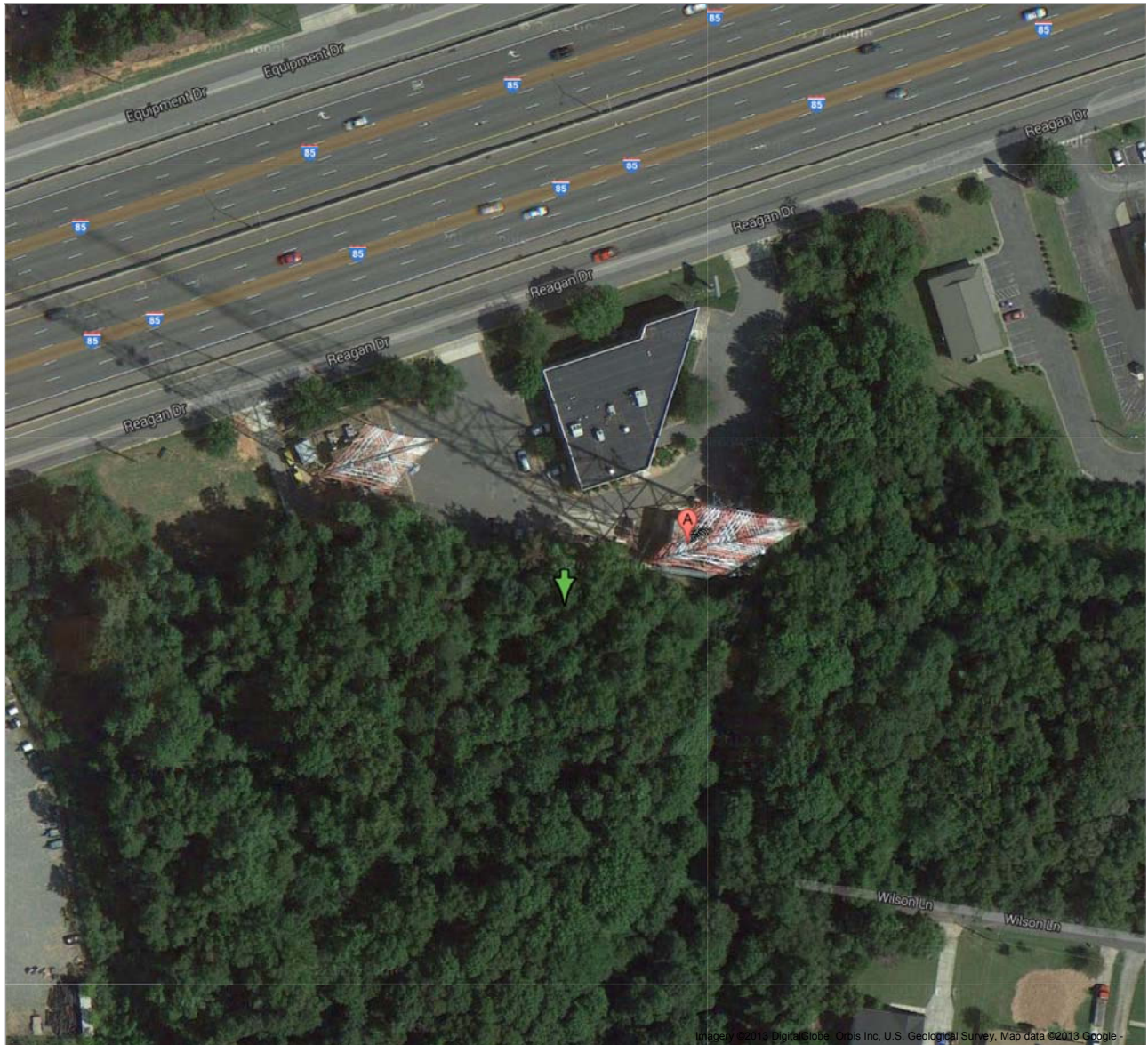




FIGURE 5 - SATELLITE MAP OF SITE

To see all the details that are visible on the screen, use the "Print" link next to the map.



Contour.out

N. Lat. = 351634.0 W. Lng. = 804800.0
 HAAT and Distance to Contour,
 FCC, FM 2-10 Mi, 51 pts Method - NGDC 30 SEC

FIGURE 6 - TABULATION OF DISTANCES TO CONTOURS

Azi.	AV EL	HAAT	dBk	60-F5	100-F1	113.4-F1
000	221.8	108.2	-20.00	6.09	0.22	0.05
010	218.1	111.9	-20.00	6.19	0.22	0.05
020	210.0	120.0	-20.00	6.40	0.22	0.05
030	202.7	127.3	-20.00	6.56	0.22	0.05
040	194.4	135.6	-20.00	6.76	0.22	0.05
050	186.6	143.4	-20.00	6.94	0.22	0.05
060	184.3	145.7	-20.00	6.99	0.22	0.05
070	185.6	144.4	-20.00	6.96	0.22	0.05
080	194.1	135.9	-20.00	6.76	0.22	0.05
090	201.1	128.9	-20.00	6.60	0.22	0.05
100	202.8	127.2	-20.00	6.56	0.22	0.05
110	207.9	122.1	-20.00	6.44	0.22	0.05
120	216.7	113.3	-20.00	6.23	0.22	0.05
130	218.6	111.4	-20.00	6.18	0.22	0.05
140	213.6	116.4	-20.00	6.31	0.22	0.05
150	209.3	120.7	-20.00	6.41	0.22	0.05
160	212.8	117.2	-20.00	6.33	0.22	0.05
170	208.9	121.1	-20.00	6.42	0.22	0.05
180	207.8	122.2	-20.00	6.45	0.22	0.05
190	206.9	123.1	-20.00	6.47	0.22	0.05
200	195.6	134.4	-20.00	6.73	0.22	0.05
210	211.8	118.2	-20.00	6.35	0.22	0.05
220	211.5	118.5	-20.00	6.36	0.22	0.05
230	202.7	127.3	-20.00	6.56	0.22	0.05
240	209.8	120.2	-20.00	6.40	0.22	0.05
250	218.5	111.5	-20.00	6.18	0.22	0.05
260	211.0	119.0	-20.00	6.37	0.22	0.05
270	221.9	108.1	-20.00	6.09	0.22	0.05
280	213.4	116.6	-20.00	6.32	0.22	0.05
290	220.1	109.9	-20.00	6.14	0.22	0.05
300	220.1	109.9	-20.00	6.14	0.22	0.05
310	217.8	112.2	-20.00	6.20	0.22	0.05
320	226.2	103.8	-20.00	5.96	0.22	0.05
330	232.8	97.2	-20.00	5.76	0.22	0.05
340	237.0	93.0	-20.00	5.63	0.22	0.05
350	232.7	97.3	-20.00	5.77	0.22	0.05

Ave EI = 210.75 M HAAT= 119.25 M AMSL= 330.0