

**WYYU Dalton, GA  
Channel 283A – 104.5 MHz – 6.0 kW ERP  
Dalton, GA**

**Proposed Channel 283C3 – 104.5 MHz – 13.5 kW ERP  
Dalton, GA**

**September 20, 2021**

**Technical Narrative**

This Technical Narrative and attached exhibits were prepared on behalf of North Georgia Radio Group, L.P. (“NGRG”), licensee of WYUU, Facility ID No. 54517, Dalton, Georgia. NGRG herein is filing a minor modification application to upgrade WYYU from Class A to Class C3.

The proposed WYYU facility would operate on Channel 283C3 (104.5 MHz) with 13.5 kW non-directional with the transmit antenna located at 54.5 meters height above ground level and 87.13 meters HAAT. To facilitate the upgrade to Class C3, NGRG is proposed new reference site coordinates for WZTR, Channel 282A, Dahlonega, Georgia. The proposed reference site coordinates for WZTR are 34° 37' 20" N. Latitude and 84° 00' 22" W. Longitude (NAD 83). The site is fully spaced to all full power FM stations, including the WYYU Channel 283C3 reference site. The WYYU Channel 283C3 reference site coordinates are 34° 47' 20" N. Latitude and 84° 57' 20" W. Longitude (NAD 83) and are fully spaced to all full power FM stations including the WZTR reference site. Channel studies are provided for both the WZTR reference site as well as the WYYU reference and application sites. Hypothetical site city grade exhibits are provided for both WZTR and WYYU. The WYYU application site shows one short spacing to WZTR, Channel 282A, Dahlonega, GA. NGRG requests Section 73.215 contour protection with respect

to WZTR. A Section 73.215 contour protection exhibits demonstrates there will be contour overlap with WZTR.

A study has been undertaken and exhibits are provided to show the proposed facility is in compliance with the Commission's radio frequency emission limits and Section 106 Compliance.

# WYYU Class C3 Ref. Site Channel Study

REFERENCE	CLASS = C3 Int = B1	DISPLAY DATES
34 47 20.0 N.		DATA 09-19-21
84 57 20.0 W.	Current Spacings to 3rd Adj.	SEARCH 09-19-21

----- Channel 283 - 104.5 MHz -----

Call	Channel	Location	Azi	Dist	FCC	Margin
Lat.	Lng.	Ant	Power	HAAT		

ALLO	USE	283C3	Dalton	GA	0.0	141.5	-141.5
34 47 20.0	84 57 20.0		0.000 kW	100 M			

WYYU	LIC	283A	Dalton	GA	51.7	7.1	141.5	-134.4
34 49 42.2	84 53 40.7	CN	6.000 kW	100 M				
North Georgia Radio Group,				BLH19970721KB				

W283CM	LIC	283D	Fort Payne	AL	242.4	79.2	92.5	-13.3
34 27 26.5	85 43 11.7	CN	0.013 kW	0 M				
Sand Mountain Broadcasting				BLFT20170201AAK				

WHLB-LP	LIC	283L1	Cartersville	GA	169.8	65.1	77.5	-12.4
34 12 40.3	84 49 46.7	CN	0.100 kW	18 M				
House Of Liberty Ministrie				BLL20110314ADK				

WZTR	LIC-Z	282A	Dahlonega	GA	113.2	81.2	88.5	-7.3
34 29 56.3	84 08 31.7	ZCN	3.700 kW	127 M				
Grady W. Turner				BLH20040709ACR				

**Note: See below proposed Reference Site coordinate change**

<b>ALLO</b>	<b>USE</b>	<b>282A</b>	<b>Dahlonega</b>	<b>GA</b>	<b>101.8</b>	<b>88.9</b>	<b>88.5</b>	<b>0.43</b>
<b>34 37 20.0</b>	<b>84 00 22.0</b>		<b>6.000 kW</b>	<b>100 M</b>				

**Note: New Reference Coordinates for WZTR CH282A**

WZYP	LIC	282C0	Athens	AL	271.7	163.1	162.5	0.6
34 49 06.3	86 44 16.0	CN	100.000 kW	340 M				
Cumulus Licensing LLC				BMLH20081022ACH				

WSGM	LIC-D	284A	Coalmont	TN	307.8	89.4	88.5	0.9
35 16 44.2	85 44 01.9	DCN	1.000 kW	167 M				
Cumberland Communication C				BLH19931201KA				

WKPJ-LP	LIC	283L1	Athens	TN	25.5	79.3	77.5	1.8
35 25 57.3	84 34 39.8	CN	0.056 kW	40 M				
Athens Christian Radio, In				BLL20050315AFM				

WFSH-FM	LIC	284C1	Athens	GA	134.4	145.6	143.5	2.1
33 52 02.4	83 49 43.6	CN	24.000 kW	505 M				
Salem Communications Holdi				BMLH20060726APQ				

W282AY	LIC-D	282D	Chattanooga	TN	317.8	51.2	48.5	2.7
35 07 45.3	85 20 01.9	DVN	0.050 kW	284 M				
Immanuel Broadcasting Netw				BLFT20121022AAA				

W284AE	LIC-D	284D	Chattanooga	TN	327.6	55.1	48.5	6.6
35 12 26.0	85 16 52.0	DCN	0.250 kW	0 M				
Way-Fm Media , Inc.				BLFT20190923ABJ				

Call	Channel	Location		Azi	Dist	FCC	Margin
Lat.	Lng.	Ant	Power		HAAT		
WRBF	LIC-N 285A	Plainville	GA	188.8	50.0	41.5	8.5
34 20 35.3	85 02 19.8	NCN	0.950 kW		185 M		
Toole, Howard C BLH20110408ABI							
WHLC	APP-D 283A	Highlands	NC	71.6	152.3	141.5	10.8
35 12 40.0	83 22 07.0	DCN	0.099 kW	0 M			
0000145376							
WCLE-FM	LIC-N 281A	Calhoun	TN	11.2	54.0	41.5	12.5
35 15 59.3	84 50 22.8	NCN	2.200 kW		159 M		
Hartline, LLC BLH20160614ABJ							
ALLO	USE 286A	Lakesite	TN	334.7	57.4	41.5	15.9
35 15 20.2	85 13 33.9		0.000 kW		100 M		
WUIE	LIC 286A	Lakesite	TN	334.7	57.4	41.5	15.9
35 15 20.2	85 13 33.8	CN	0.850 kW		268 M		
American Family Associatio 0000149575							
WPPL	LIC-D 280A	Blue Ridge	GA	81.1	57.5	41.5	16.0
34 52 03.3	84 20 01.7	DCN	5.500 kW		104 M		
Fannin County Broadcasting BLH20000216AAW							
W229CX	LIC 229D	Lafayette	GA	254.1	29.7	11.5	18.2
34 42 56.2	85 16 04.2	CN	0.250 kW	0 M			
Radix Broadcasting, Inc. BLFT20180601AAV							
WKHT	LIC 283A	Knoxville	TN	33.9	163.0	141.5	21.5
36 00 10.3	83 56 39.7	CN	1.400 kW		209 M		
Sm-Wkht, LLC BLH20140528AHW							
W283CT	CP -D 283D	Douglasville	GA	170.1	115.4	92.5	23.0
33 45 48.4	84 44 27.8	DCN	0.180 kW	0 M			
Exponent Broadcasting, Inc BPFT20180330AAZ							
W283CT	LIC-D 283D	Douglasville	GA	170.1	115.4	92.5	23.0
33 45 48.4	84 44 27.8	DCN	0.180 kW	0 M			
Exponent Broadcasting, Inc 0000143315							
WHLC	LIC 283A	Highlands	NC	78.9	164.6	141.5	23.1
35 03 40.3	83 11 04.5	CN	0.540 kW		330 M		
Charisma Radio Corp. BLH20180118AAH							

# WZTR Reference Site Channel Study

REFERENCE					CLASS = A	Int = A	DISPLAY DATES	
34 37 20.0 N.							DATA	09-19-21
84 00 22.0 W.					Current Spacings to 3rd Adj.		SEARCH	09-19-21
----- Channel 282 - 104.3 MHz -----								
Call	Channel	Location			Azi	Dist	FCC	Margin
Lat.	Lng.	Ant		Power		HAAT		
WZTR	LIC-Z 282A	Dahlonaga		GA	222.3	18.5	114.5	-96.0
34 29 56.3	84 08 31.7	ZCN		3.700 kW		127 M		
Grady W. Turner BLH20040709ACR								
WXKT	LIC-N 279C3	Maysville		GA	130.5	41.8	41.5	0.32
34 22 39.4	83 39 34.6	NCN		4.100 kW		250 M		
Cox Radio, LLC BLH20090918ACK								
WYYU Ref	LIC 283C3	Dalton		GA	282.3	88.9	88.5	0.43
34 47 20.0	84 57 20.0	CN		0.020 kW		65 M		
The Church In Atlanta BLL20180214AAP								
WALR-FM	LIC-Z 281C1	Palmetto		GA	216.5	139.7	132.5	7.2
33 36 27.4	84 54 11.8	ZCN		100.000 kW		283 M		
Cox Radio, LLC BLH20180306AAG								
WPPL	LIC-D 280A	Blue Ridge		GA	312.4	40.5	30.5	10.0
34 52 03.3	84 20 01.7	DCN		5.500 kW		104 M		
Fannin County Broadcasting BLH20000216AAW								
WFSH-FM	LIC 284C1	Athens		GA	169.0	85.3	74.5	10.8
33 52 02.4	83 49 43.6	CN		24.000 kW		505 M		
Salem Communications Holdi BMLH20060726APQ								
WYYU	LIC 283A	Dalton		GA	286.0	84.5	71.5	13.0
34 49 42.2	84 53 40.7	CN		6.000 kW		100 M		
North Georgia Radio Group, BLH19970721KB								
WHLC	APP-D 283A	Highlands		NC	41.4	87.5	71.5	16.0
35 12 40.0	83 22 07.0	DCN		0.099 kW	0 M			
0000145376								
WHLC	LIC 283A	Highlands		NC	56.7	89.5	71.5	18.0
35 03 40.3	83 11 04.5	CN		0.540 kW		330 M		
Charisma Radio Corp. BLH20180118AAH								
WBBQ-FM	LIC-N 282C0	Augusta		GA	123.1	240.5	214.5	26.0
33 25 17.1	81 50 18.0	NCN		80.000 kW		436 M		
Ihm Licenses, LLC BLH20120403ACE								
WNCC	LIC 281A	Franklin		NC	37.7	99.3	71.5	27.8
35 19 38.3	83 20 08.5	CN		0.115 kW		681 M		
Sutton Radiocasting Corpor BLH20160412AAK								
WHLB-LP	LIC 283L1	Cartersville		GA	239.1	88.4	55.5	32.9
34 12 40.3	84 49 46.7	CN		0.100 kW		18 M		
House Of Liberty Ministrie BLL20110314ADK								
WCLE-FM	LIC-N 281A	Calhoun		TN	313.6	104.4	71.5	32.9
35 15 59.3	84 50 22.8	NCN		2.200 kW		159 M		
Hartline, LLC BLH20160614ABJ								

Call	Channel	Location		Azi	Dist	FCC	Margin
Lat.	Lng.	Ant	Power		HAAT		
W229CE	LIC 229D	Ellijay		GA 271.2	44.5	9.5	35.0
34 37 46.3	84 29 28.7	CN	0.250 kW	0 M			
	Tri-State Communications,		BLFT20180914AAG				
WZYP	LIC 282C0	Athens		AL 275.8	251.2	214.5	36.7
34 49 06.3	86 44 16.0	CN	100.000 kW		340 M		
	Cumulus Licensing LLC		BMLH20081022ACH				
W282CL	LIC-D 282D	Easley		SC 78.7	127.5	84.5	43.0
34 50 22.4	82 38 19.5	DCN	0.095 kW		90 M		
	Upstate Radio, Inc.		BLFT20180327ABB				
W228CA	LIC-D 228D	Suwanee		GA 166.2	56.7	9.5	47.2
34 07 32.4	83 51 31.6	DCN	0.230 kW	0 M			
	Cox Radio, LLC		BLFT20141119AFW				
WKPJ-LP	LIC 283L1	Athens		TN 330.2	103.9	55.5	48.4
35 25 57.3	84 34 39.8	CN	0.056 kW		40 M		
	Athens Christian Radio, In		BLL20050315AFM				
WFOX-LP	LIC 282L1	Sandy Springs		SC 91.3	115.1	66.5	48.6
34 35 33.9	82 45 05.0	CN	0.037 kW		49 M		
	Spreading Cheer		0000098110				
W280EZ	LIC 280D	Lawrenceville		GA 177.5	74.3	25.5	48.8
33 57 11.0	83 58 15.0	CN	0.250 kW	0 M			
	B&grs Enterprises, LLC		BLFT20160418ABV				
W282AY	LIC-D 282D	Chattanooga		TN 295.3	133.8	84.5	49.3
35 07 45.3	85 20 01.9	DVN	0.050 kW		284 M		
	Immanuel Broadcasting Netw		BLFT20121022AAA				
WQNO	LIC 282A	Fletcher		NC 53.3	170.4	114.5	55.9
35 31 39.4	82 29 48.4	CN	0.470 kW		349 M		
	Ihm Licenses, LLC		BLH20050323AAV				

**WYYU Ref.**

Dalton, GA  
Latitude: 34-47-20 N  
Longitude: 084-57-20 W  
ERP: 25.00 kW  
HAAT: 100.0 m  
Channel: 283  
Frequency: 104.5 MHz  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: FCC Model  
Loc. Variability: 50.0%  
Time Variability: 50.0%  
HAAT Mthd: FCC

**Reference Site Hypothetical City Grade Exhibit**

WYYU Channel 283C3 Dalton, GA

Chattanooga

East Ridge

Hypo 70 dBu contour (23.2 km.)

+WYYU Ref.

Dalton

**HORIZON**  
BROADCAST SOLUTIONS

Scale 1:350,000

0 4 8 12 km

V-Soft Communications LLC ©

**WZTR Ref.**

Dahlonega, GA  
Latitude: 34-37-20 N  
Longitude: 084-00-22 W  
ERP: 6.00 kW  
HAAT: 100.0 m  
Channel: 282  
Frequency: 104.3 MHz  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: FCC Model  
Loc. Variability: 50.0%  
Time Variability: 50.0%  
HAAT Mthd: FCC

**Reference Site Hypothetical City Grade Exhibit**

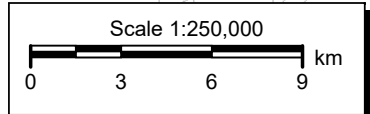
WZTR Channel 282A Dahlonega, GA

Hypo 70 dBu contour (16.2 km.)

+ WZTR Ref.

Dahlonega

**HORIZON**  
BROADCAST SOLUTIONS



V-Soft Communications LLC ©



## WYYU C3 Appl. Site Channel Study

REFERENCE	DISPLAY DATES
34 49 42.2 N.	DATA 09-19-21
84 53 40.7 W.	SEARCH 09-19-21

Call	Channel	Location	Azi	Dist	FCC	Margin
Lat.	Lng.	Ant	Power	HAAT		

WYYU	LIC	283A	Dalton	GA	0.0	0.0	141.5	-141.5
34 49 42.2	84 53 40.7	CN	6.000 kW			100 M		
North Georgia Radio Group,				BLH19970721KB				

WZTR LIC-Z 282A Dahlongega GA 117.8 78.1 88.5 -10.4  
34 29 56.3 84 08 31.7 ZCN 3.700 kW 127 M  
Grady W. Turner BLH20040709ACR

Note: Adopt Section 73.215 contour protection with respect to WZTR

```

WHLB-LP    LIC    283L1  Cartersville      GA  175.0    68.7    77.5    -8.8
 34 12 40.3   84 49 46.7   CN      0.100 kW    18 M
      House Of Liberty Ministrie      BLL20110314ADK

```

W283CM	LIC	283D	Fort Payne	AL	241.6	86.1	92.5	-6.4
34	27	26.5	85 43 11.7	CN	0.013 kW	0 M		
Sand Mountain Broadcasting				BLFT20170201AAK				

WKPJ-LP LIC 283L1 Athens TN 23.1 73.0 77.5 -4.5  
35 25 57.3 84 34 39.8 CN 0.056 kW 40 M  
Athens Christian Radio, Inc. BLL20050315AFM

WFSH-FM	LIC	284C1	Athens	GA	137.2	144.9	143.5	1.4
33 52 02.4	83 49 43.6	CN	24.000 kW			505 M		
Salem Communications Holdi			BMLH20060726APO					

WSGM	LIC-D 284A	Coalmont	TN 303.5	91.4	88.5	2.9
35 16 44.2	85 44 01.9	DCN	1.000 kW	167 M		
Cumberland Communication C			BLH19931201KA			

W282AY	LIC-D 282D	Chattanooga	TN	310.0	52.2	48.5	3.7
35 07 45.3	85 20 01.9	DVN	0.050 kW		284 M		
Immanuel Broadcasting Netw		BLFT20121022AAA					

WHLC	APP-D 283A	Highlands	NC	72.5	145.6	141.5	4.1
35 12 40.0	83 22 07.0	DCN	0.099 kW	0 M			
			0000145376				

WZYP LIC 282C0 Athens AL 270.1 168.6 162.5 6.1  
34 49 06.3 86 44 16.0 CN 100.000 kW 340 M  
Cumulus Licensing LLC BMLH20081022ACH

W284AE      LIC-D 284D      Chattanooga      TN 320.2      54.9      48.5      6.4  
35 12 26.0      85 16 52.0      DCN      0.250 kW      0 M  
Way-Fm Media , Inc.      BLFT20190923ABJ

WCLE-FM	LIC-N 281A	Calhoun	TN	5.8	48.9	41.5	7.4
35 15 59.3	84 50 22.8	NCN	2.20 kW		159 M		
Hartline, LLC			BLH20160614ABJ				

WPPL LIC-D 280A Blue Ridge GA 85.0 51.5 41.5 10.0  
34 52 03.3 84 20 01.7 DCN 5.500 kW 104 M  
Fannin County Broadcasting BLH20000216AAW

Call	Channel	Location	Azi	Dist	FCC	Margin
Lat.	Lng.	Ant	Power	HAAT		
WRBF	LIC-N 285A	Plainville	GA 193.8	55.4	41.5	13.9
34 20 35.3	85 02 19.8	NCN	0.950 kW	185 M		
Toole, Howard C			BLH20110408ABI			
WUIE	LIC 286A	Lakesite	TN 327.7	56.2	41.5	14.7
35 15 20.2	85 13 33.8	CN	0.850 kW	268 M		
American Family Associatio			0000149575			
WKHT	LIC 283A	Knoxville	TN 33.1	156.3	141.5	14.8
36 00 10.3	83 56 39.7	CN	1.400 kW	209 M		
Sm-Wkht, LLC			BLH20140528AHW			
WHLC	LIC 283A	Highlands	NC 80.1	158.3	141.5	16.8
35 03 40.3	83 11 04.5	CN	0.540 kW	330 M		
Charisma Radio Corp.			BLH20180118AAH			
WGSM-LP	LIC 284L1	Madisonville	TN 32.1	89.8	66.5	23.3
35 30 43.2	84 22 02.7	CN	0.100 kW	29 M		
Spirit Ministries, Inc			BLL20170825AAB			
WGFX	LIC-Z 283C1	Gallatin	TN 313.5	235.0	210.5	24.5
36 16 05.2	86 47 45.0	ZCN	58.000 kW	368 M		
Radio License Holding Cbc,			BLH20020909ABA			
W229CX	LIC 229D	Lafayette	GA 249.9	36.4	11.5	24.9
34 42 56.2	85 16 04.2	CN	0.250 kW 0 M			
Radix Broadcasting, Inc.			BLFT20180601AAV			
W283CT	LIC-D 283D	Douglasville	GA 173.2	119.0	92.5	26.5
33 45 48.4	84 44 27.8	DCN	0.180 kW 0 M			
Exponent Broadcasting, Inc			0000143315			
W283CT	CP -D 283D	Douglasville	GA 173.2	119.0	92.5	26.5
33 45 48.4	84 44 27.8	DCN	0.180 kW 0 M			
Exponent Broadcasting, Inc			BPFT20180330AAZ			
W285FW	LIC-D 285D	South Pittsburg	TN 281.0	71.1	40.5	30.6
34 56 51.0	85 39 30.0	DCN	0.180 kW 0 M			
			0000120903			
W229CE	LIC 229D	Ellijay	GA 120.8	43.0	11.5	31.5
34 37 46.3	84 29 28.7	CN	0.250 kW 0 M			
Tri-State Communications,			BLFT20180914AAG			
W285CG	LIC-D 285D	Athens	TN 22.7	73.2	40.5	32.7
35 26 11.2	84 34 53.7	DCN	0.250 kW 0 M			
			0000121637			
W230DF	CP -D 230D	Chattanooga	TN 303.8	48.0	11.5	36.5
35 04 04.0	85 19 58.0	DCN	0.175 kW 0 M			
Radio License Holding Cbc,			BNPFT20180502ABZ			
W286DU	LIC-D 286D	Canton	GA 154.8	82.7	40.5	42.2
34 09 14.0	84 30 44.0	DCN	0.100 kW 0 M			
Davis Broadcasting Of Atla			0000129612			

**WYYU Appl.**

Dalton, GA  
BLH19970721KB  
Latitude: 34-49-42.20 N  
Longitude: 084-53-40.70 W  
ERP: 13.50 kW  
HAAT: 87.13 m  
Channel: 283  
Frequency: 104.5 MHz  
AMSL Height: 331.9 m  
Elevation: 277.4 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: FCC Model  
Loc. Variability: 50.0%  
Time Variability: 50.0%  
HAAT Mthd: FCC

**Section 73.315 Application Site City Grade Exhibit**

FCC F(50,50) 70 dBu contour show

**FCC F(50,50) 70 dBu Contour**

**+ WYYU Appl.**

Catoosa

Dalton

Whitney

Murray

**HORIZON**  
BROADCAST SOLUTIONS

Scale 1:300,000

0 4 8 12 km

V-Soft Communications LLC ©

**WYU Appl.**

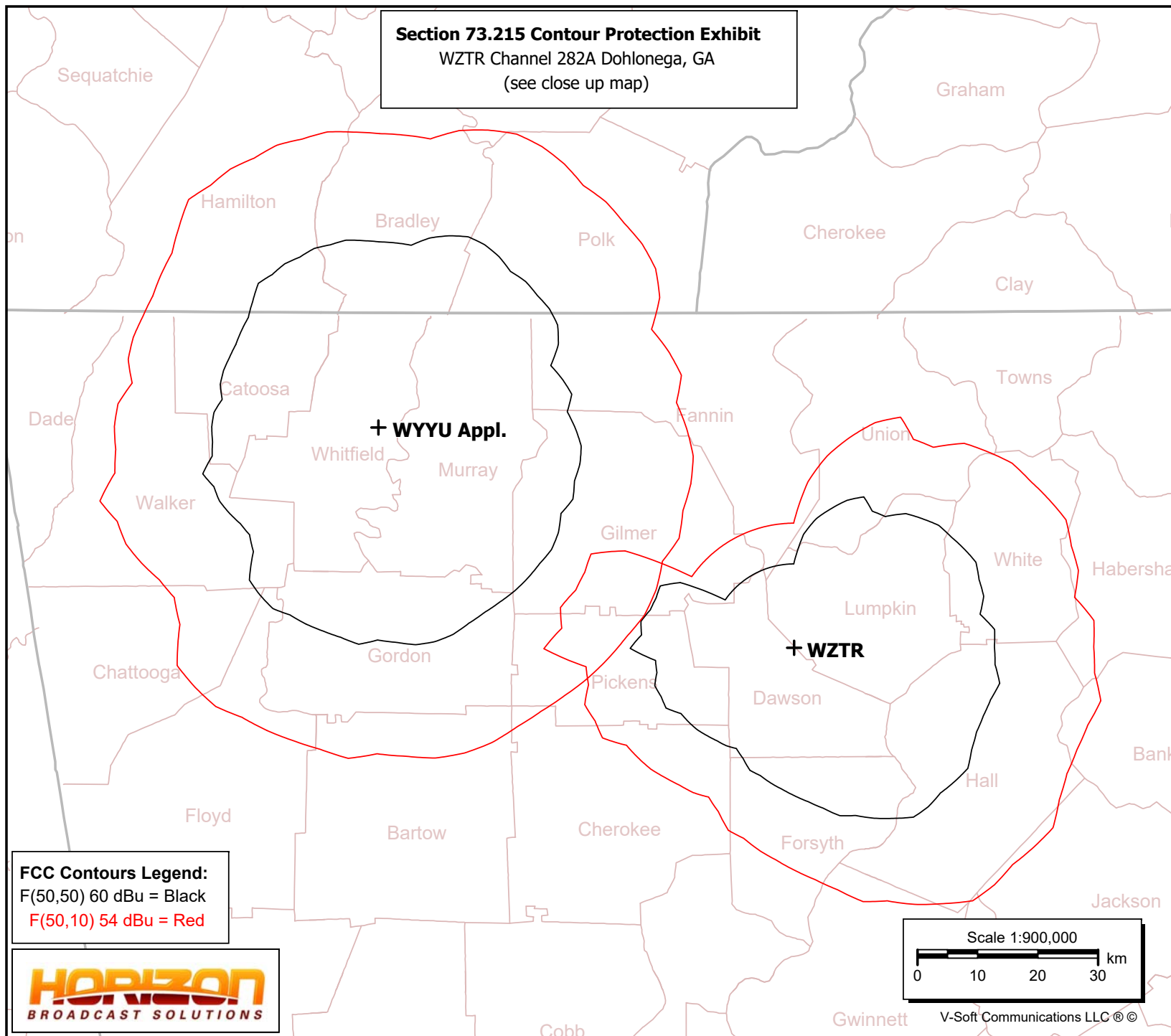
Dalton, GA  
Latitude: 34-49-42.20 N  
Longitude: 084-53-40.70 W  
ERP: 13.50 kW  
HAAT: 87.13 m  
Channel: 283  
Frequency: 104.5 MHz  
AMSL Height: 331.9 m  
Elevation: 277.4 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: FCC Model  
Loc. Variability: 50.0%  
Time Variability: 50.0%  
HAAT Mthd: FCC

**WZTR**

Dahlonega, GA  
Latitude: 34-29-56.30 N  
Longitude: 084-08-31.70 W  
ERP: 3.70 kW  
HAAT: 127 m  
Channel: 282  
Frequency: 104.3 MHz  
AMSL Height: 602.0 m  
Elevation: 512.0 m  
Horiz. Pattern: Directional  
Vert. Pattern: No  
Prop Model: FCC Model  
Loc. Variability: 50.0%  
Time Variability: 50.0%  
HAAT Mthd: FCC

**Section 73.215 Contour Protection Exhibit**

WZTR Channel 282A Dahlonega, GA  
(see close up map)



**WYYU Appl.**

Dalton, GA  
Latitude: 34-49-42.20 N  
Longitude: 084-53-40.70 W  
ERP: 13.50 kW  
HAAT: 87.13 m  
Channel: 283  
Frequency: 104.5 MHz  
AMSL Height: 331.9 m  
Elevation: 277.4 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: FCC Model  
Loc. Variability: 50.0%  
Time Variability: 50.0%  
HAAT Mthd: FCC

**WZTR**

Dalton, GA  
Dahlonega, GA  
Latitude: 34-29-56.30 N  
Longitude: 084-08-31.70 W  
ERP: 3.70 kW  
HAAT: 127 m  
Channel: 282  
Frequency: 104.3 MHz  
AMSL Height: 602.0 m  
Elevation: 512.0 m  
Horiz. Pattern: Directional  
Vert. Pattern: No  
Prop Model: FCC Model  
Loc. Variability: 50.0%  
Time Variability: 50.0%  
HAAT Mthd: FCC

**Section 73.215 Contour Protection Exhibit**

WZTR Channel 282A Dohlonega, GA  
(close up of WYYU 54 dBu interfering &  
WZTR 60 dBu protected contours)

contours do  
not overlap

**FCC Contours Legend:**

F(50,50) 60 dBu = Black

F(50,10) 54 dBu = Red

**HORIZON**  
BROADCAST SOLUTIONS

Jasper

Pickens

Scale 1:150,000

0 2 4 6 km

V-Soft Communications LLC ©

**Human Exposure to Radiofrequency Electromagnetic Field  
&  
Section 106 Compliance  
(Environmental)**

A study has been made to determine whether this proposal is in compliance with 47 C.F.R. 1.1307 of the Commission's rules and with OET Bulletin #65, dated August 1997, regarding human exposure to radio frequency radiation in the vicinity of broadcast towers. North Georgia Radio Group, L.P. ("NGRG"), licensee of WYYU, Facility ID No. 54517, Dalton, Georgia. The WYYU transmit location is a tower 71.3 meters in overall height and is located at 34° 49' 42" N ~ 84° 53' 41" W (NAD 83). The tower is registered with the Antenna Registration Structure "ASR" number 1032618. The proposed antenna is a Jampro Model JMPC four bay full wave circular polarized non-directional antenna with a center of radiation of 54.5 meters AGL. WYYU will operate on Channel 283C3, 104.5 MHz, with 13.5 kW ERP directional at 87.13 meters HAAT. The use of existing transmitting locations has been characterized as being environmentally preferable by the Commission, according to Note 1 of § 1.1306 of the FCC Rules. Because the proposed new facility proposes to operate from an existing tower and no modifications are being made to the tower, it is believed to be exempt from a Section 106 review by the SHPO/THPO.

The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the Commission's OET Bulletin Number 65. The Jampro antenna is included in the recently revised OET FM Model Program under Type 2, Opposed "V" dipole. Using the Type 2 antenna selection, the maximum calculated signal density near the tower at two meters above ground level attributable to the proposed facility is 42.637  $\mu\text{W}/\text{cm}$  at 20.2 meters, which is 21.819 percent of the general population/uncontrolled maximum permitted exposure limit.

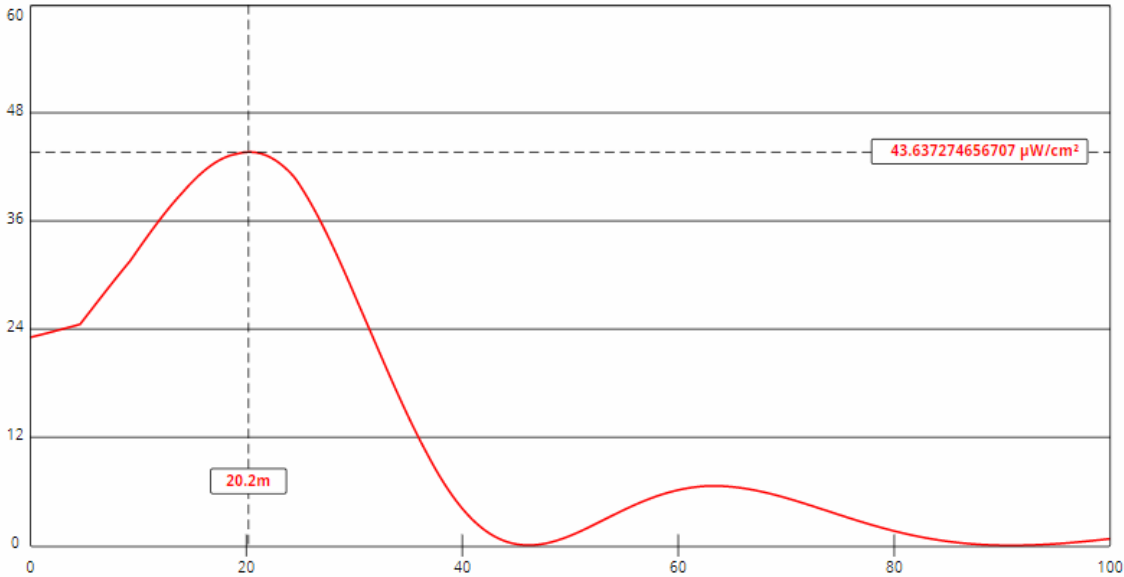
The applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower for maintenance or inspection.

# FM Model

- Radio Frequency Safety
- FCC Policy on Human Exposure
- RF Safety FAQ
- Body Tissue Dielectric Parameters
- RF Safety Highlighted Releases
- FM Model

The FM Model calculator determines the potential exposure from radiofrequency (RF) electromagnetic fields produced by FM broadcast station antennas at ground level. The FM Model software was originally developed by the FCC in 1997 as a standalone executable program and this improved version provides more precise predictions and runs via a JavaScript enabled web browser. The FM Model is originally based on measured data published in 1985 by the EPA.

▼ Show More.....



View Tabular Results +

Channel Selection	Channel 283 (104.5 MHz) ▼		
Antenna Type +	EPA Type 2: Opposed V Dipole ▼		
Height (m)	54.5	Distance (m)	100
ERP-H (W)	13500	ERP-V (W)	13500
Num of Elements	4	Element Spacing (λ)	1
Num of Points	500	Apply	