TECHNICAL NARRATIVE

February 18, 2022

This Technical Statement and attached exhibits were prepared on behalf of Radio Training Network, Inc., ("RTN"). RTN is the licensee of WPHH, Channel 228A, Facility ID No. 62206, Hull Hope, Alabama. RTN herein is filing a one-step FCC minor modification application proposing to change the transmit location and to operate on non-adjacent Channel 293A while remaining licensed to Hull Hope, AL. The proposal is described in its entirety for the convenience of the FCC staff but the actual requests are made by the application itself.

RTN is proposing to implement this change at an existing communications site. The tower is 356.1 meters in overall height and is registered with FCC Antenna Structure Registration No. 1042484.

The proposed reference site for Channel 293A is located at 32° 20' 07" North Latitude 86° 17' 16" West Longitude (NAD 83), is fully spaced to all full power FM facilities and allotments with one exception. The reference site is short spaced to LMS pending application number 0000159093 for Channel 292A at Maplesville, AL. RTN herein proposes to change the reference coordinates of the Maplesville application to 32° 42' 56" N Latitude and 86° 54' 24" West Longitude. The proposed coordinates are fully spaced to all full power FM stations and allotments. A hypothetical city grade map and reference site channel study for Channel 292A at Maplesville are included as exhibits with this application.

The proposed application site is located at 32° 24' 13" North Latitude 86° 11' 47" West Longitude (NAD 83) which is an existing tower 356.1 meters in overall height and is registered with FCC Antenna Structure Registration ("ASR") No. 1042484. This modification is also compliant with all the requirements of 47CFR §73.207 and 47CFR §73.315 with one exception. The application site is short spaced to co-channel full power FM LMS application 0000159093 for Channel 292A, Maplesville, AL. RTN herein requests Section 73.215 contour protection with respect to the pending Maplesville, AL application. The proposed WPHH Channel 293A facility would operate with 1.2 kW ERP non-directional at 238 meters height above ground and 222.5 meters HAAT. The FCC F(50,50) 70 dBu contour does not cover 80 percent of Hull Hope. Therefore, an FCC Section 73.315 Supplemental Showing utilizing Longley-Rice methodology is included to demonstrate compliance with FCC Section 73.315. It should be noted that Hull Hope is an unincorporated community that the Commission has already determined to be qualified for allotment purposes. Every effort was made to determine the approximate boundaries of Hull Hope in order to demonstrate FCC Section 73.315 compliance.

The proposed WPHH facility would serve within the FCC F(50,50) 60 dBu protected contour an area of 2,503.77 sq. km. and 320,434 persons (2010 U.S Census).

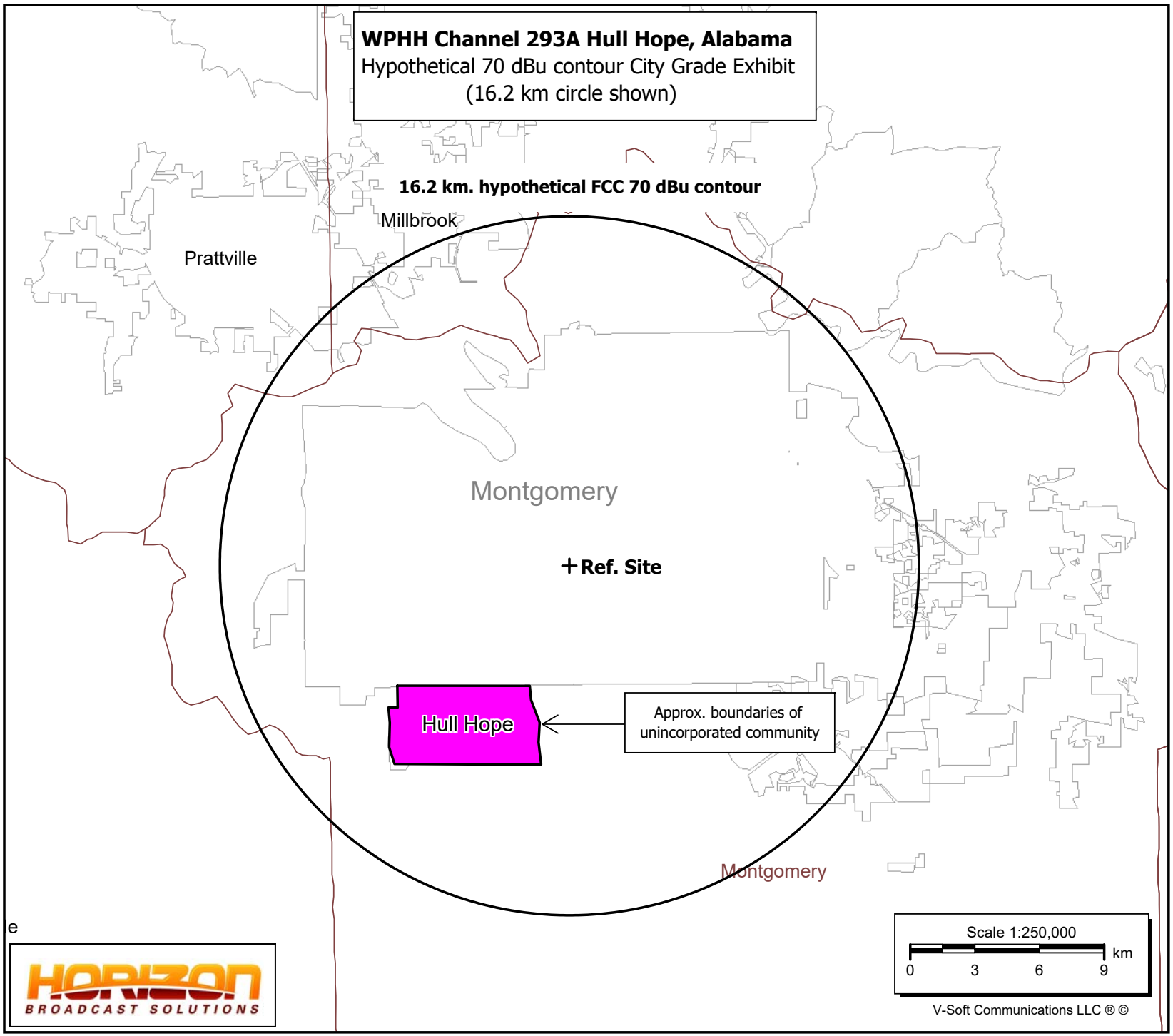
WPHH Ref. Site Channel Study

REFERENCE — DISPLAY DATES
32 20 07.0 N. — CLASS = A Int = AA — DATA 02-17-22
86 17 16.0 W. — Current Spacings to 3rd Adj. — SEARCH 02-17-22
Channel 293 - 106.5 MHz

Call	Channel	Location		Azi	Dist	FCC	Margin
Lat.	Lng.	Ant	Power		HAAT		
W293BK	CP	293D	Tallassee	AL	53.9	42.4	84.5	-42.1
32 33 34.6	85 55 21.0	CN	0.250 kW	0 M			
Michael Butler Broadcastin			0000177347				
W293BK	LIC-D	293D	Tallassee	AL	53.9	42.4	84.5	-42.1
32 33 34.5	85 55 20.9	DCN	0.250 kW		154 M		
Michael Butler Broadcastin			BLFT20111121FIO				
DW292FX	APP-D	292D	Montgomery	AL	161.4	3.4	33.5	-30.1
32 18 22.3	86 16 34.4	DCN	0.250 kW	0 M			
Cumulus Licensing LLC			BNPFT20180426ABE				
W296AI	LIC	296D	Montgomery	AL	34.1	4.4	25.5	-21.1
32 22 04.1	86 15 42.0	CN	0.099 kW	0 M			
Katherine Timmerman Hagler			BLFT20150928ACV				
NEW	**APP-N**	**292A**	**Maplesville**	**AL**	**310.4**	**68.3**	**71.5**	**-3.2**
32 43 56.8	**86 50 37.0**	**NCN**	**1.500 kW**		**58 M**		
Wklf LLC			**0000159093**				
Note: See reference coordinates site below.							
WKMX	LIC-N	294C1	Enterprise	AL	149.8	132.6	132.5	0.13
31 18 02.6	85 35 04.8	NCN	100.000 kW		214 M		
Gulf South Communications,			BLH20161107AAP				
AL6240	**RSV**	**292A**	**Maplesville**	**AL**	**306.2**	**71.8**	**71.5**	**0.33**
32 42 56.0	**86 54 24.0**		**0.000 kW**		**100 M**		
Note: Modified fully spaced reference coordinates							
W293CQ	LIC-D	293D	Sylacauga	AL	0.0	88.1	84.5	3.6
33 07 47.5	86 17 14.5	DCN	0.250 kW	0 M			
Marble City Media, LLC			BLFT20180709AAK				
WZNJ	LIC	293C3	Demopolis	AL	277.8	145.2	141.5	3.7
32 30 08.5	87 49 07.0	CN	25.000 kW		93 M		
Westburg Broadcasting Alab			BMLH20100205ABH				
WSTH-FM	LIC	291C1	Alexander City	AL	58.2	89.8	74.5	15.3
32 45 30.4	85 28 19.8	CN	86.000 kW		319 M		
Ihm Licenses, LLC			BLH19950410KB				
W292HL	LIC-D	292D	Troy	AL	154.9	64.5	33.5	31.0
31 48 32.0	85 59 50.0	DCN	0.250 kW	0 M			
Autaugaville Radio, Inc.			0000106564				
W294AR	APP-D	294D	Auburn	AL	61.7	78.5	33.5	45.0
32 40 03.5	85 33 00.8	DCN	0.250 kW	0 M			
Auburn Network, Inc.			BMPFT20170717ACX				
W293BV	LIC-D	293D	Columbus	GA	83.7	132.6	84.5	48.1
32 27 28.5	84 53 07.7	DCN	0.250 kW	0 M			
Pmb Broadcasting, LLC			BLFT20160804ADC				

Call	Channel	Location		Azi	Dist	FCC	Margin
Lat.	Lng.	Ant	Power		HAAT		
WKXN	LIC	239A	Fort Deposit	AL	222.3	58.1	9.5	48.6
31 56 52.5	86 42 08.9	CN	2.100 kW		171 M		
Autaugaville Radio, Inc.			BLH20111108AHB				
W293CM	LIC	293D	Graysville	AL	336.0	134.8	84.5	50.3
33 26 38.0	86 52 47.0	CN	0.065 kW	0 M			
Educational Media Foundati			BLFT20150430ADQ				
WBPT	LIC-N	295C0	Homewood	AL	339.4	136.4	85.5	50.9
33 29 04.4	86 48 25.0	NCN	100.000 kW		404 M		
Sm-Wbpt, LLC			BLH20130207ABS				
W294AR	LIC-D	294D	Auburn	AL	73.2	90.0	33.5	56.5
32 33 54.5	85 22 12.8	DCN	0.165 kW	0 M			
Auburn Network, Inc.			BLFT20160715ABD				
WTGZ	LIC	240A	Tuskegee	AL	77.1	68.8	9.5	59.3
32 28 17.4	85 34 27.8	CN	4.300 kW		115 M		
New World Communications,			BLH19920803KD				

Ref. Site
Hull Hope, AL
Latitude: 32-20-07 N
Longitude: 086-17-16 W
ERP: 6.00 kW
HAAT: 100 m
Channel: 293
Frequency: 106.5 MHz
AMSL Height: 163.76 m
Elevation: 64.11 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None



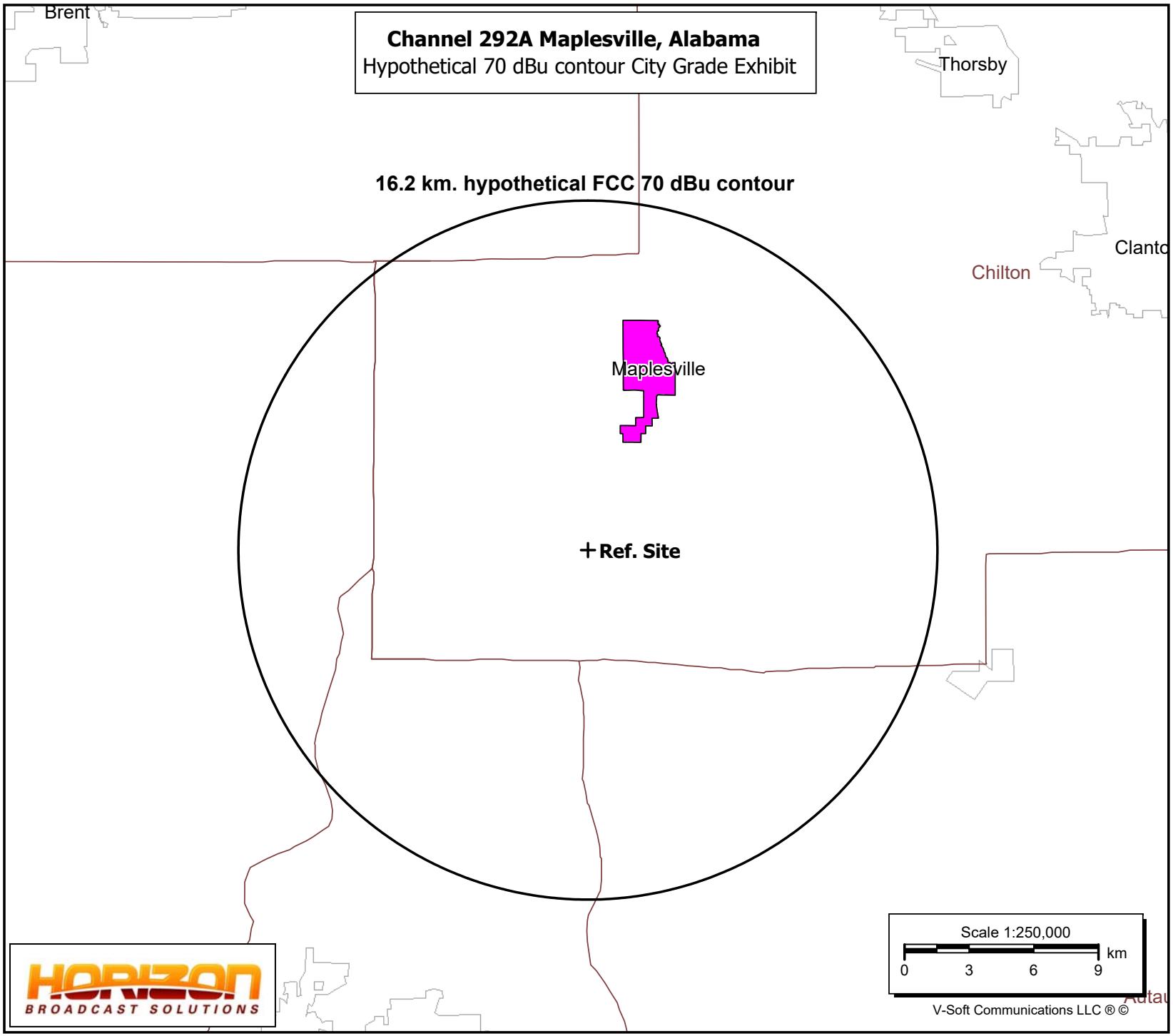
Maplesville, AL CH292A Ref. Site Channel Study

REFERENCE — DISPLAY DATES
32 42 56.0 N. — CLASS = A Int = AA — DATA 02-17-22
86 54 24.0 W. — Current Spacings to 3rd Adj. — SEARCH 02-17-22
Channel 292 - 106.3 MHz

Call	Channel	Location		Azi	Dist	FCC	Margin
Lat.	Lng.	Ant	Power		HAAT		
NEW	**APP-N 292A**	**Maplesville**		**AL 72.3**	**6.2**	**114.5**	**-108.3**
32 43 56.8	**86 50 37.0**	**NCN**	**1.500 kW**		**58 M**		
Wklf LLC			**0000159093**				
DW292FX	APP-D 292D	Montgomery		AL 127.4	74.6	84.5	-9.9
32 18 22.3	86 16 34.4	DCN	0.250 kW		0 M		
Cumulus Licensing LLC			BNPFT20180426ABE				
W292DU	LIC 292D	Tuscaloosa		AL 315.7	77.7	84.5	-6.8
33 12 51.0	87 29 23.9	CN	0.250 kW		0 M		
Tti, Inc.			0000177239				
W292DU	CP 292D	Tuscaloosa		AL 315.7	77.7	84.5	-6.8
33 12 51.0	87 29 23.9	CN	0.250 kW		0 M		
Tti, Inc.			BPFT20190807AAL				
WBPT	LIC-N 295C0	Homewood		AL 6.2	85.8	85.5	0.29
33 29 04.4	86 48 25.0	NCN	100.000 kW		404 M		
Sm-Wbpt, LLC			BLH20130207ABS				
WZNJ	LIC 293C3	Demopolis		AL 254.7	88.8	88.5	0.30
32 30 08.5	87 49 07.0	CN	25.000 kW		93 M		
Westburg Broadcasting Alab			BMLH20100205ABH				
WPHH Ref	**RSV-D 293A**	**Hull Hope**		**AL 125.9**	**71.8**	**71.5**	**0.33**
32 20 07.0	**86 17 16.0**	**D**	**0.000 kW**		**100 M**		
Radio Training Network, In			**0000148048**				
WSTH-FM	LIC 291C1	Alexander City		AL 87.6	134.5	132.5	2.0
32 45 30.4	85 28 19.8	CN	86.000 kW		319 M		
Ihm Licenses, LLC			BLH19950410KB				
W238CS	CP 238D	Clanton		AL 62.7	22.7	9.5	13.2
32 48 31.1	86 41 28.4	VN	0.250 kW		0 M		
Wklf LLC			0000176893				
WZHT	LIC-N 289C	Troy		AL 139.5	108.0	94.5	13.5
31 58 28.5	86 09 43.9	NCN	100.000 kW		558 M		
Ihm Licenses, LLC			BLH20050210AHX				
W238CS	LIC 238D	Clanton		AL 56.9	23.8	9.5	14.3
32 49 55.5	86 41 35.9	CN	0.250 kW		0 M		
Wklf LLC			BLFT20180611AAP				
W238CS	CP -D 238D	Clanton		AL 69.2	25.9	9.5	16.4
32 47 52.5	86 38 51.9	DCN	0.250 kW		0 M		
Wklf LLC			BPFT20190918AAF				
WRTR	LIC-Z 290C3	Brookwood		AL 315.7	77.7	41.5	36.2
33 12 52.2	87 29 22.2	ZCN	25.000 kW		82 M		
Ihm Licenses, LLC			BLH20150813AAJ				

Call	Channel	Location		Azi	Dist	FCC	Margin
Lat.	Lng.	Ant	Power		HAAT		
W292EI	LIC-D 292D	Warrior		AL 13.4	120.9	84.5	36.4
33 46 31.0	86 36 10.0	DCN	0.250 kW	0 M			
Way Media , Inc.			0000130572				
W293CQ	LIC-D 293D	Sylacauga		AL 51.3	73.9	33.5	40.4
33 07 47.5	86 17 14.5	DCN	0.250 kW	0 M			
Marble City Media, LLC			BLFT20180709AAK				
W293CM	LIC 293D	Graysville		AL 1.8	80.8	33.5	47.3
33 26 38.0	86 52 47.0	CN	0.065 kW	0 M			
Educational Media Foundati			BLFT20150430ADQ				
W292HL	LIC-D 292D	Troy		AL 139.5	132.1	84.5	47.6
31 48 32.0	85 59 50.0	DCN	0.250 kW	0 M			
Autaugaville Radio, Inc.			0000106564				
W291DC	LIC-D 291D	Birmingham		AL 6.6	86.3	33.5	52.8
33 29 19.4	86 47 58.0	DCN	0.099 kW	0 M			
Board Of Trustees Of Univ			BLFT20170130ABI				
WBMH	LIC-N 291C3	Grove Hill		AL 221.0	145.3	88.5	56.8
31 43 30.6	87 54 58.0	NCN	12.000 kW		144 M		
Pine City Radio, LLC			BLH19991129AAE				

Ref. Site
Maplesville, AL
Latitude: 32-42-45 N
Longitude: 086-54-24 W
ERP: 6.00 kW
HAAT: 100 m
Channel: 292
Frequency: 106.3 MHz
AMSL Height: 220.22 m
Elevation: 88.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None



WPHH Appl. Site Channel Study

REFERENCE					DISPLAY DATES
32 24 13.0 N.	CLASS = A Int = AA				DATA 02-17-22
86 11 47.0 W.	Current Spacings to 3rd Adj.				SEARCH 02-17-22

Channel 293 - 106.5 MHz

Call	Channel	Location		Azi	Dist	FCC	Margin
Lat.	Lng.	Ant	Power		HAAT		
W293BK	CP	293D	Tallassee	AL	55.9	31.0	84.5	-53.5
32 33 34.6	85 55 21.0	CN	0.250 kW	0 M			
Michael Butler Broadcastin			0000177347				
W293BK	LIC-D	293D	Tallassee	AL	55.9	31.0	84.5	-53.5
32 33 34.5	85 55 20.9	DCN	0.250 kW		154 M		
Michael Butler Broadcastin			BLFT20111121FIO				
DW292FX	APP-D	292D	Montgomery	AL	214.7	13.2	33.5	-20.3
32 18 22.3	86 16 34.4	DCN	0.250 kW	0 M			
Cumulus Licensing LLC			BNPFT20180426ABE				
W296AI	LIC	296D	Montgomery	AL	237.0	7.3	25.5	-18.2
32 22 04.1	86 15 42.0	CN	0.099 kW	0 M			
Katherine Timmerman Hagler			BLFT20150928ACV				
			0000148037				
NEW	APP-N	292A	Maplesville	AL	301.3	70.9	71.5	-0.6
32 43 56.8	86 50 37.0	NCN	1.500 kW		58 M		
Wklf LLC			0000159093				

NOTE: Adopt Section 73.215 Contour Protection with respect to CH292A App.

WKMX	LIC-N	294C1	Enterprise	AL	154.6	135.3	132.5	2.8
31 18 02.6	85 35 04.8	NCN	100.000 kW		214 M		
Gulf South Communications,			BLH20161107AAP				
WSTH-FM	LIC	291C1	Alexander City	AL	59.6	78.6	74.5	4.1
32 45 30.4	85 28 19.8	CN	86.000 kW		319 M		
Ihm Licenses, LLC			BLH19950410KB				
WZNJ	LIC	293C3	Demopolis	AL	274.6	152.9	141.5	11.4
32 30 08.5	87 49 07.0	CN	25.000 kW		93 M		
Westburg Broadcasting Alab			BMLH20100205ABH				
W294AR	APP-D	294D	Auburn	AL	64.0	67.4	33.5	33.9
32 40 03.5	85 33 00.8	DCN	0.250 kW	0 M			
Auburn Network, Inc.			BMPFT20170717ACX				
W292HL	LIC-D	292D	Troy	AL	164.1	68.6	33.5	35.1
31 48 32.0	85 59 50.0	DCN	0.250 kW	0 M			
Autaugaville Radio, Inc.			0000106564				
W293BV	LIC-D	293D	Columbus	GA	86.8	123.4	84.5	38.9
32 27 28.5	84 53 07.7	DCN	0.250 kW	0 M			
Pmb Broadcasting, LLC			BLFT20160804ADC				
W294AR	LIC-D	294D	Auburn	AL	76.7	79.7	33.5	46.2
32 33 54.5	85 22 12.8	DCN	0.165 kW	0 M			
Auburn Network, Inc.			BLFT20160715ABD				

Call	Channel	Location		Azi	Dist	FCC	Margin
Lat.	Lng.	Ant	Power		HAAT		
WBPT	LIC-N	295C0	Homewood	AL	334.8	132.8	85.5	47.3
33 29 04.4	86 48 25.0	NCN	100.000 kW		404 M		
Sm-Wbpt, LLC			BLH20130207ABS				
W293CM	LIC	293D	Graysville	AL	331.3	131.9	84.5	47.4
33 26 38.0	86 52 47.0	CN	0.065 kW	0 M			
Educational Media Foundati			BLFT20150430ADQ				
WTGZ	LIC	240A	Tuskegee	AL	82.5	59.0	9.5	49.5
32 28 17.4	85 34 27.8	CN	4.300 kW		115 M		
New World Communications,			BLH19920803KD				

WPHH Section 73.315 Supplemental Showing
City Grade Coverage of Hull Hope, Alabama

This Supplemental Showing is based in part on the standards established in the FCC DA-10-1760 Skytower Communications decision. A supplemental showing using the Longley-Rice methodology is used to show city coverage of Hull Hope, AL. The Longley-Rice 70 dBu contour mean occurrence distance was calculated using the standard settings established in OET Bulletin No. 69. Longley-Rice signal strength shading is also used to establish that Hull Hope receives a city grade signal strength. The FCC FM Longley-Rice maps were created using V-Soft Probe Version 4.117 Professional. The specific software settings are listed on the coverage map in the upper left hand corner of each map. The NED 3 second terrain database was used for all calculations.

Map One shows the FCC F(50,50) 60 dBu reaches 100 percent of the total area of Hull Hope. Map One also shows the Longley-Rice 74 dBu signal strength shading (70 dBu with 4 dB of Urban Clutter) as well as the Longley-Rice 70 dBu mean occurrence contour. 100 percent of Hull Hope receives a Longley-Rice signal strength of 74 dBu or greater. The Longley-Rice 70 dBu mean occurrence contour extends well beyond the Hull Hope corporate limits.

Table One, "Comparison of FCC F(50,50) 70 dBu contour distance vs. the FM Longley-Rice mean occurrence shows the distances to the FCC 70 dBu contour and FM PTP v2 70 dBu contour for eight of the twenty radials that cross over Hull Hope (approx. every three degrees azimuth). This table clearly establishes that the 70 dBu Longley-Rice contours along the radials that cross the estimated boundaries of Hull Hope extend more than 10% farther than the FCC F(50,50) 70 dBu contours.

Therefore, it is believed that this WPHH proposed modification is in compliance with the Section 73.315 of the Commission's Community Coverage rules.

WPHH
Hull Hope, AL
Latitude: 32-24-13 N
Longitude: 086-11-47 W
ERP: 1.20 kW
HAAT: 222.53 m
Channel: 293
Frequency: 106.5 MHz
AMSL Height: 293.0 m
Elevation: 55.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: Longley-Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 311.0
Receiver Ht AG: 9.1 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast

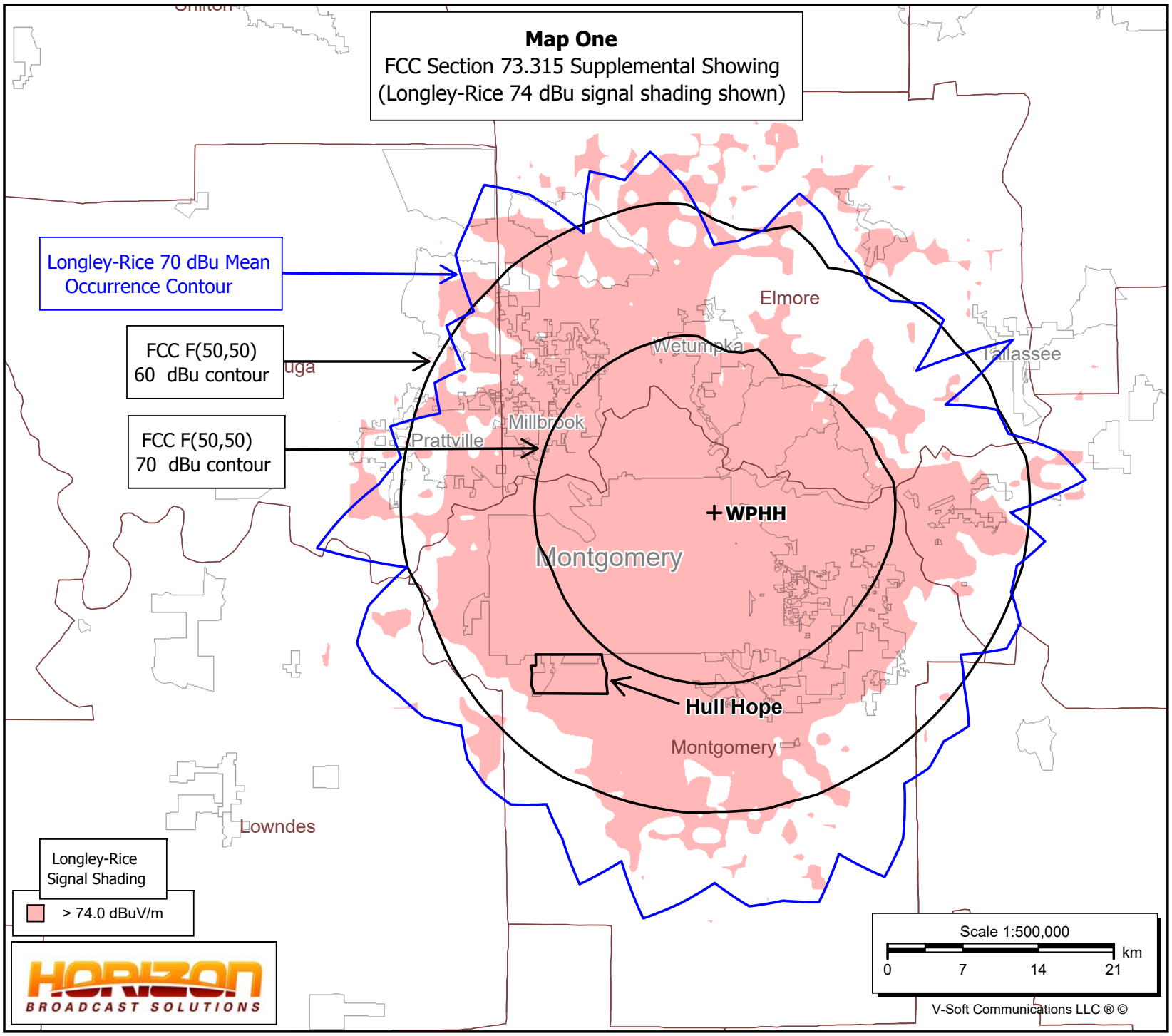


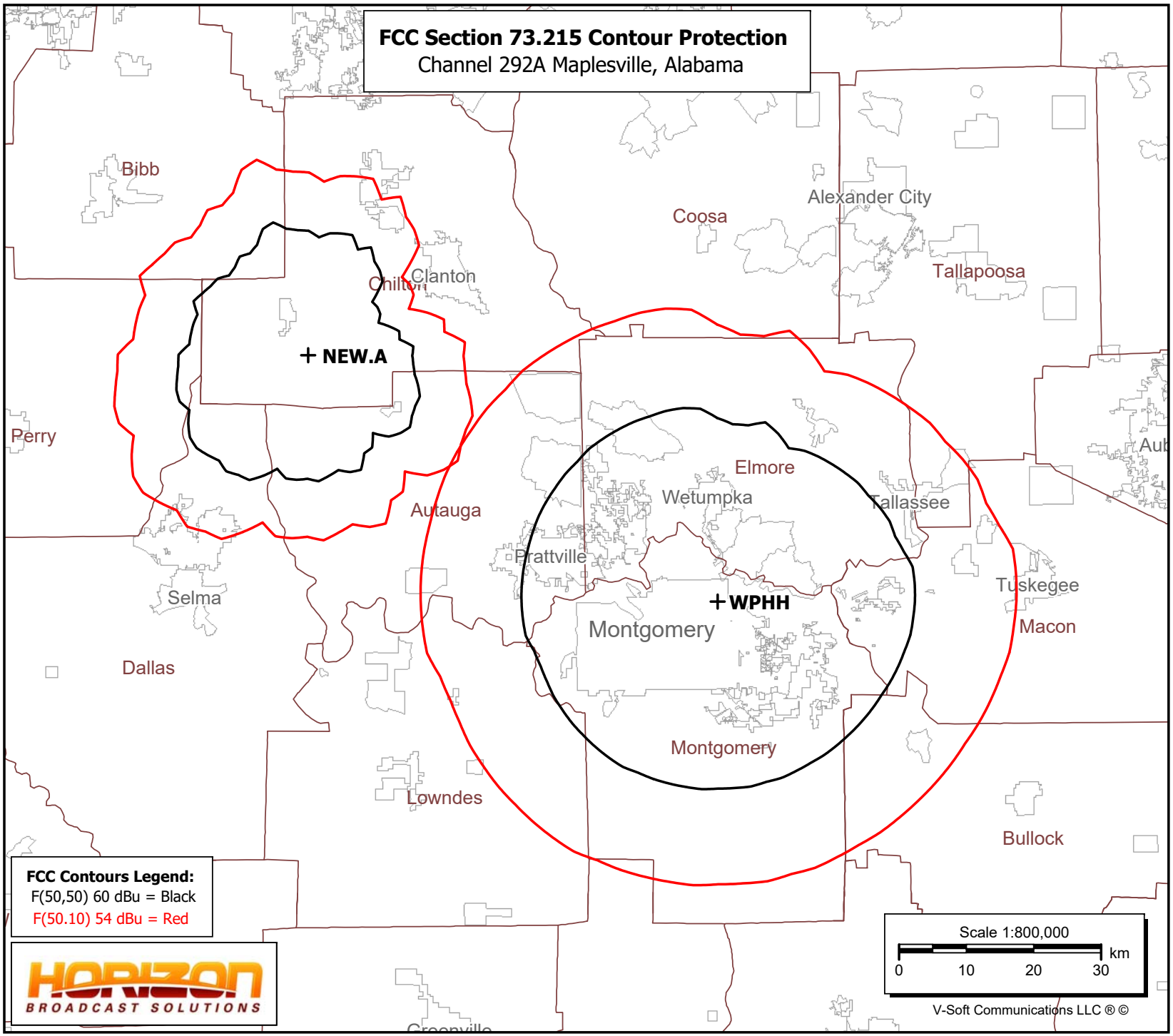
TABLE ONE
WPHH Supplemental Coverage Showing:
Comparison of FCC F(50,50) 70 dBu contour distance
vs.
Longley-Rice median occurrence 70 dBu contour distance
(8 of 20 radials which cross Hull Hope are shown)

Site:	WPHH
Coordinates: NAD 83	32-20-07 N
	86-17-16 W
Freq:	106.5 MHz
ERP:	1.2 kW
HAAT:	222.5 m

Bearing (degrees)	ERP kW	HAAT (m)	FCC 70 dBu Distance (km)	Longley-Rice 70 dBu contour distance (km)	Percentage Increase
211	1.2	222	16.1	32.00	99.4
214	1.2	222	16.1	28.60	88.7
217	1.2	220	16.0	30.90	96.6
220	1.2	220	16.0	33.00	103.1
223	1.2	219	16.0	33.40	104.4
226	1.2	221	16.0	32.40	101.3
229	1.2	222	16.1	33.30	103.4
231	1.2	222	16.1	31.60	98.1
Average	**1.2**	**221.00**	**16.05**	**31.90**	**99.4**

WPHH
Hull Hope, AL
Latitude: 32-24-13 N
Longitude: 086-11-47 W
ERP: 1.20 kW
HAAT: 222.53 m
Channel: 293
Frequency: 106.5 MHz
AMSL Height: 293.0 m
Elevation: 55.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: FCC Model
Loc. Variability: 50.0%
Time Variability: 50.0%
HAAT Mthd: FCC

NEW.A
Maplesville, AL
0000159093
Latitude: 32-43-56.81 N
Longitude: 086-50-37.02 W
ERP: 1.50 kW
HAAT: 58 m
Channel: 292
Frequency: 106.3 MHz
AMSL Height: 209.1 m
Elevation: 150.3 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: FCC Model
Loc. Variability: 50.0%
Time Variability: 50.0%
HAAT Mthd: FCC



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. Radio Training Network, Inc., ("RTN") is the licensee of WPHH, Channel 228A, Facility ID No. 62206, Hull Hope, Alabama. RTN proposes to relocate WPHH to operate on CH293A from a new transmit location. The existing tower site is registered with Antenna Structure Registration (ASR) number 1042484 and is located at 32° 24' 13" N ~ 86° 11' 47" W (NAD 27). The transmit antenna will be a side mounted ERI Model LP-2 two bay full wave spaced circularly polarized antenna with a center of radiation of 238 meters AGL. WPHH will operate with 1.2 kW ERP non-directional at 222.5 meters HAAT. Because WPHH proposes to operate from an existing tower and no changes are being made to the tower or antenna, 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 center of radiation is 238 meters above ground level. The ERI antenna is included in the updated OET FM Model for Windows Program under Type 2 Opposed "V" dipole. Using EPA Element Type 2, the maximum calculated signal density near the tower at two meters above ground level attributable to the proposed facility is 0.270 μW/cm at 133.6 meters, which is 0.135 percent of the general population/uncontrolled maximum permitted exposure limit. This is well below the five percent threshold limit described in 1.1307(b) regarding sites with multiple emitters, which excludes applicant from responsibility for taking any corrective action in areas where the proposal's contribution is less than five percent.

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

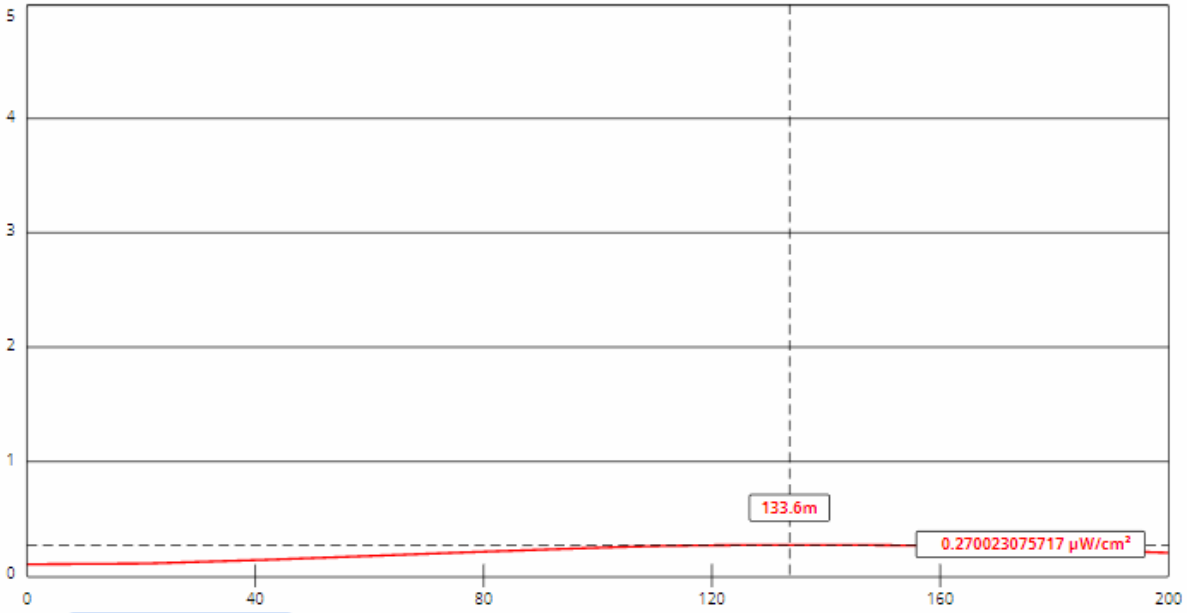
RF Safety FAQ

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 293 (106.5 MHz)		
Antenna Type +	EPA Type 2: Opposed V Dipole		
Height (m)	238	Distance (m)	200
ERP-H (W)	1200	ERP-V (W)	1200
Num of Elements	2	Element Spacing (?)	1
Num of Points	500	Apply	

Bureau/Office:
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