JOHN J. MULLANEY
JOHN H. MULLANEY, P.E. (1994)
ALAN E. GEARING, P.E.
TIMOTHY Z. SAWYER

301 921-0115 Voice
301 590-9757 Fax
mullengr@aol.com E-mail

MULLANEY ENGINEERING, INC.
9049 SHADY GROVE COURT
GAITHERSBURG, MD 20877

ENGINEERING EXHIBIT EE-1:

MULTIMEDIA NETWORK OF NORTH CAROLINA, INC.

CLASS-A TELEVISION STATION
WYBE-CA
PINEHURST, NORTH CAROLINA

DIGITAL TELEVISION CHANNEL 44
"FLASH-CUT" APPLICATION

APRIL 2013

FCC FACILITY NUMBER
40211

ENGINEERING EXHIBIT

IN SUPPORT OF

AN APPLICATION FOR AUTHORITY TO CONSTRUCT

OR MAKE CHANGES IN A

CLASS A TELEVISION BROADCAST STATION

WYBE-CA

PINEHURST, NORTH CAROLINA

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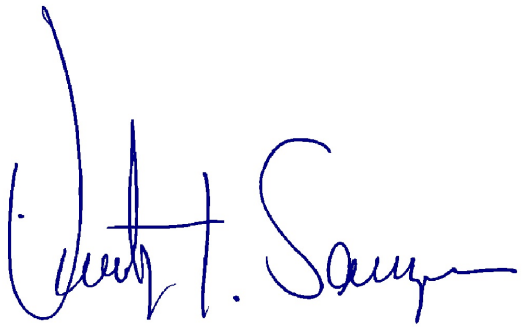
TABLE OF CONTENTS:

DECLARATION

I, Timothy Z. Sawyer, declare and that I have provided engineering services in the area of telecommunications since 1969. My qualifications are a matter of record with the Federal Communications Commission. I am a senior engineer with the firm of Mullaney Engineering, Inc., consulting radio telecommunications engineers with offices in Gaithersburg, Maryland.

The firm of Mullaney Engineering, Inc., has been retained by MULTIMEDIA NETWORK OF NORTH CAROLINA, INC. to prepare the instant engineering exhibit in support of ***an application for Authority to Construct or Make Changes in a Class A Television Broadcast Station, WYBE- CA) FCC Facility ID Number 40211.***

All facts contained herein are true of my own knowledge except those stated to be on information and belief, and as to those facts, I believe them to be true. I declare under the penalty of perjury that the foregoing is true and correct.



Timothy Z. Sawyer

Executed on the 30th day of April 2013

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NARRATIVE ENGINEERING STATEMENT

I. GENERAL:

This engineering statement and the instant engineering exhibit of which it is part has been prepared on behalf of MULTIMEDIA NETWORK OF NORTH CAROLINA, INC.,

This engineering exhibit supports a digital "flash-cut" application for Class A Television Station WYBE-CA, Pinehurst, North Carolina. FCC facility number 40211.

Station WYBE-CA is licensed to operate on analog channel 44 with a directional antenna system and a maximum (visual) effective radiated power (ERP) of 0.826 kilowatts, and an antenna center of radiation height above mean sea level (RCAMSL) of 207 meters.

The proposed digital "flash-cut" facilities will operate on channel 44 with a maximum effective radiated “digital” power of 0.110 kilowatt (110 watts) and an antenna height above mean sea level of 207 meters. This proposal uses the identical antenna system as currently authorized for analog service.[1]

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[1] This is an on-channel digital flash cut application with no changes proposed to the authorized antenna system, site location, or operating channel.

The proposed facilities will be built to comply with the *FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields* and the instant proposal is categorically excluded from environmental processing pursuant to the provisions of Section 1.1306 of the Commission's Rules. A more detailed discussion of environmental factors is included under the heading Environmental Considerations below.

Information requested by exhibits in response to questions on Section III of FCC Form 301-CA is incorporated in the following paragraphs, figures and/or tables.

Processing of this application is requested under the rules currently in effect at the time of filing.

ENGINEERING DISCUSSION:

TV (DA 13-618) FREEZE COMPLIANCE

This application can be accepted for filing as it does not request a change which is consider "frozen" by the FCC's Public Notice (DA 13-618) released April 5, 2013. "Limitations on the Filing and Processing of Full Power and Class A Television Station Modification Applications." Specifically, the proposal is exempt as it proposes a "digital flash-cut." [2]

PROPOSED FACILITIES

This application proposes digital operation on the current analog channel assignment (TV Channel 44), at the current transmitter site and with the same

[2] "Class A minor change applications to implement the digital transition (flash cut and digital companion channel) may continue to be filed and will be processed subject to the current limitations in Sections 73.3572(a)(2) and 74.787(a)(2) of the Commission's rules."

antenna system. Only a reduction in station ERP and a change from analog to digital transmission service will be required.

Figure 1 is a map showing the licensed 74 dBu (analog) and the proposed 51 dBu (digital) coverage contours. As can be seen on this map the 51 dBu digital contour overlaps the existing 74 dBu analog contour, therefore, this is a minor change application.

Figure 2 contains a horizontal radiation (relative field) pattern of the currently authorized analog directional horizontal radiation pattern. This antenna will be used for digital service. No changes are proposed.

ALLOCATION CONSIDERATIONS

A study has been conducted to assure that the proposal will not create prohibited interference with other licensed, authorized or pending analog or digital full-service TV, LPTV/translator and/or Class A TV stations.

Using the procedures outlined in the FCC's OET-69 Bulletin, and a 1-kilometer cell size resolution and the population centroid utilized by the 2000 U.S. Census, the proposal complies with the current FCC policy (i.e., less than 0.5% new interference caused to other pertinent full-service or Class-A assignments and less than 2% to secondary LPTV services.

Each station of concern has been analyzed using the methods described in OET Bulletin No. 69, and the results indicate that no interference (unmasked) or interference above 0.5% of the service population of the station studied will occur.

The results of the OET Bulletin No. 69 styled study are contained with Figure 3.

ENVIRONMENTAL CONSIDERATIONS

The applicant believes its proposal will not significantly affect the environment for the following reasons.

The proposal does not meet any of the criteria specified in Section 1.1307 of the FCC Rules. More specifically, the proposed facilities are not known to fall within any of the categories enumerated in Sections 1.1307(a)(1)-(7) and will not involve the use of high intensity white lights.

This is an existing communications site with no new construction of towers, support buildings or other environmental sensitive items required. The site and this proposal are exempt from NHPA Section 106 review as no construction will occur that would trigger a review under NHPA Section 106.

Furthermore, operation of the proposed facility will not involve the exposure of workers or the general public to levels of radio frequency electromagnetic fields exceeding guidelines adopted by the Federal Communications Commission. (The current FCC guidelines are based upon criteria contained in the National Council of Radiation Protection and Measurements (NCRP) Report No.86 (1986) and ANSI/IEEE C95.1-1992.)

Based upon a worst case downward field value of 0.5 for all angles 20 degrees and greater below the horizon, and a digital power of 110 Watts, and an antenna height of 61 meters above ground. The power density level 2-meters above ground is predicted to be 0.0001 mW/cm^2 or less. The computed power density is 0.0046% of the Commission's guidelines for a controlled area and 0.023% for an uncontrolled area. This level is well below the Commission's guidelines for maximum exposure levels to electromagnetic fields and no further study is required.

The applicant will fully-cooperate and coordinate with all site users as required by the Commission's rules.

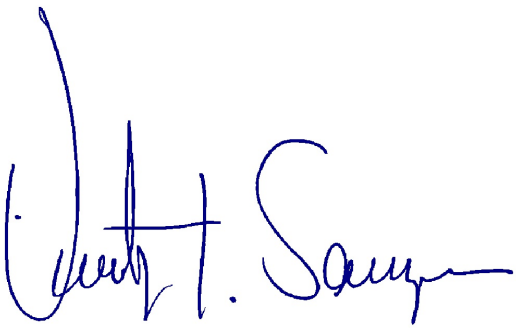
II SUMMARY:

The proposed digital "flash-cut" will operate on Digital Television Channel 44 with a maximum ERP 110 Watts, utilizing a DIRECTIONAL antenna system. The estimated digital transmitter power output (TPO) is 18 Watts.

Operation as proposed herein would not cause/increase any normally prohibited contour overlap using a terrain dependant - OET Bulletin No. 69 review, and would not have any significant impact on the environment. The proposed operation will not create any new prohibited interference.

The proposed operation is fully in compliance with all other areas of the Commission's rules and applicable international agreements.

30 April 2013



Timothy Z. Sawyer, Consulting Engineer

MULLANEY ENGINEERING, INC.
9049 SHADY GROVE COURT
GAITHERSBURG, MARYLAND USA
TEL.: (301) 921-0115

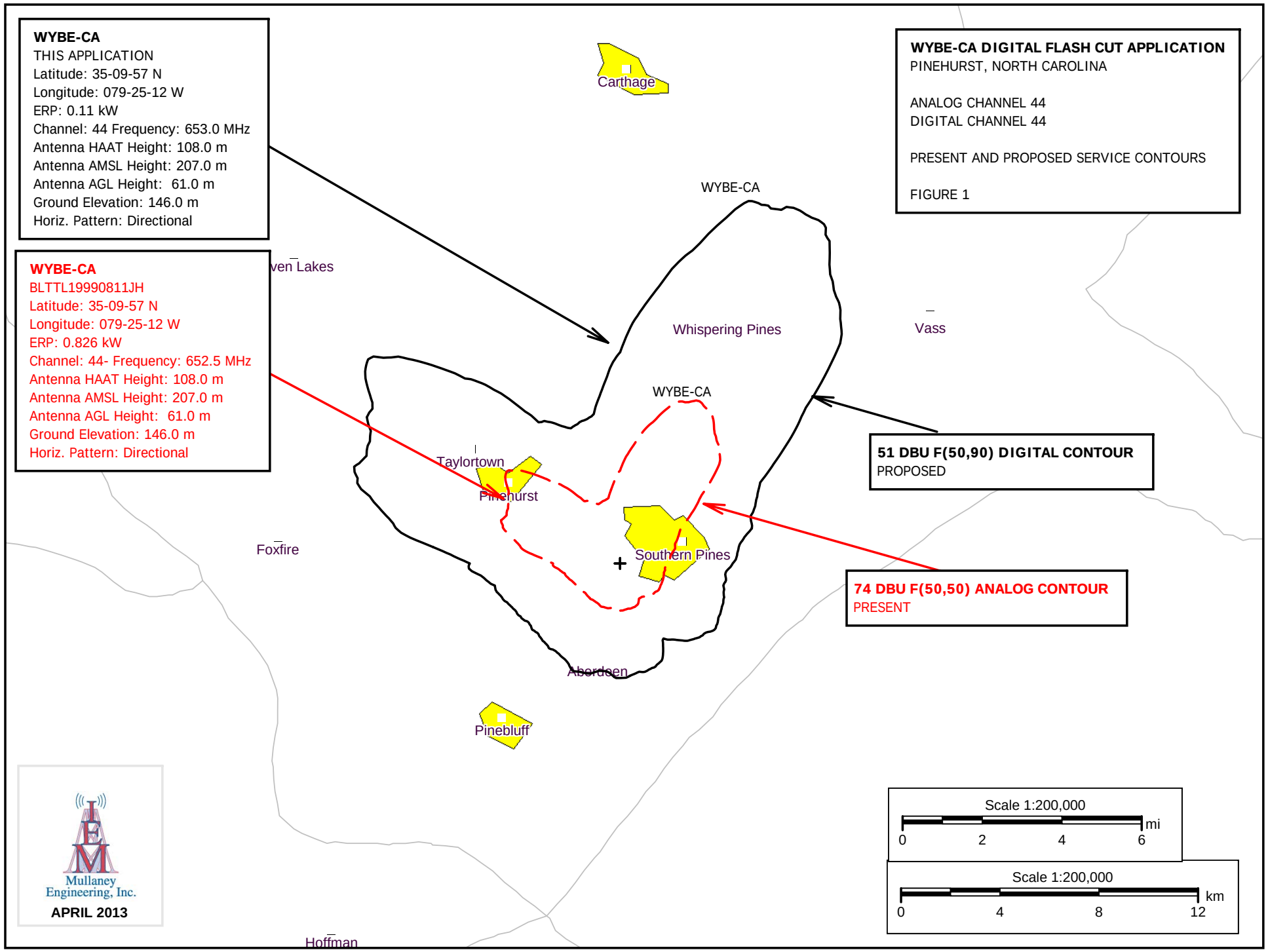
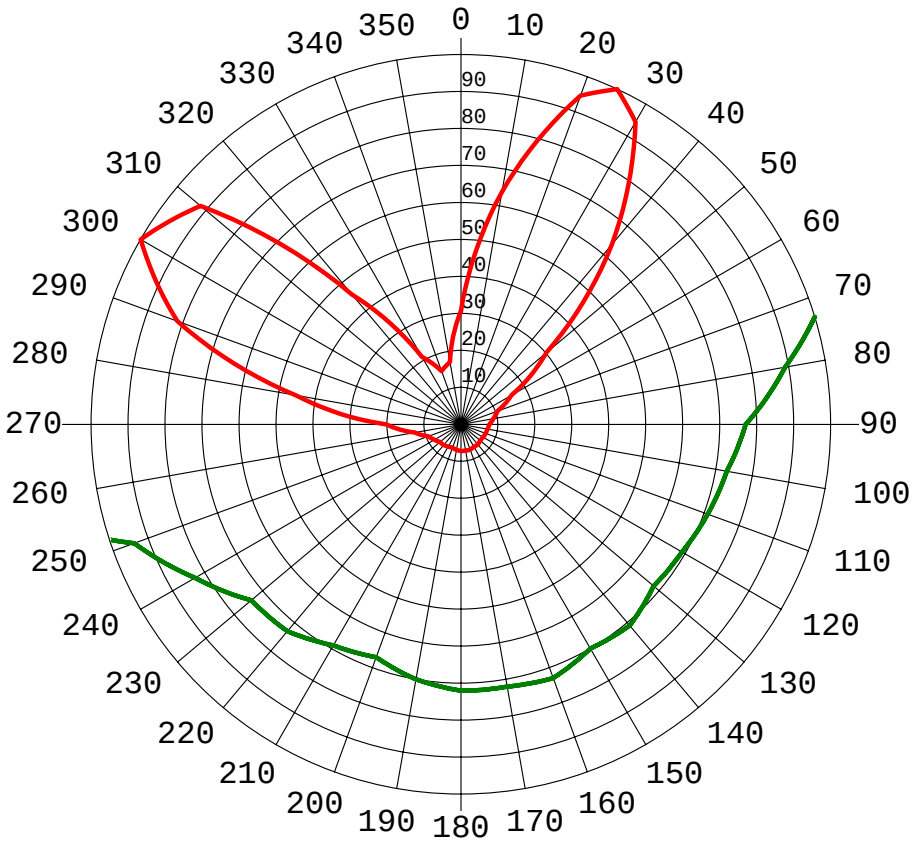

WYBE-CA
THIS APPLICATION
Latitude: 35-09-57 N
Longitude: 079-25-12 W
ERP: 0.11 kW
Channel: 44 Frequency: 653.0 MHz
Antenna HAAT Height: 108.0 m
Antenna AMSL Height: 207.0 m
Antenna AGL Height: 61.0 m
Ground Elevation: 146.0 m
Horiz. Pattern: Directional
WYBE-CA
BLTTL19990811JH
Latitude: 35-09-57 N
Longitude: 079-25-12 W
ERP: 0.826 kW
Channel: 44- Frequency: 652.5 MHz
Antenna HAAT Height: 108.0 m
Antenna AMSL Height: 207.0 m
Antenna AGL Height: 61.0 m
Ground Elevation: 146.0 m
Horiz. Pattern: Directional
WYBE-CA DIGITAL FLASH CUT APPLICATION
PINEHURST, NORTH CAROLINA
ANALOG CHANNEL 44
DIGITAL CHANNEL 44
PRESENT AND PROPOSED SERVICE CONTOURS
FIGURE 1
51 DBU F(50,90) DIGITAL CONTOUR
PROPOSED
74 DBU F(50,50) ANALOG CONTOUR
PRESENT
Carthage
WYBE-CA
Whispering Pines
Vass
WYBE-CA
Taylortown
Pinehurst
Southern Pines
Foxfire
Aberdeen
Pinebluff
Hoffman
Mullaney
Engineering, Inc.
APRIL 2013
Scale 1:200,000
mi
0
2
4
6
Scale 1:200,000
km
0
4
8
12

FIGURE 2 - DIRECTIONAL ANTENNA PATTERN



Azi	Rel	kW	dB
0	0.307	0.010	-10.26
10	0.638	0.045	-3.90
20	0.946	0.098	-0.48
30	0.944	0.098	-0.50
40	0.635	0.044	-3.94
50	0.302	0.010	-10.40
60	0.158	0.003	-16.03
70	0.105	0.001	-19.58
80	0.089	0.001	-21.01
90	0.077	0.001	-22.27
100	0.073	0.001	-22.73
110	0.071	0.001	-22.97
120	0.069	0.001	-23.22
130	0.068	0.001	-23.35
140	0.071	0.001	-22.97
150	0.070	0.001	-23.10
160	0.073	0.001	-22.73
170	0.072	0.001	-22.85

Azi	Rel	kW	dB
180	0.072	0.001	-22.85
190	0.070	0.001	-23.10
200	0.067	0.000	-23.48
210	0.069	0.001	-23.22
220	0.073	0.001	-22.73
230	0.074	0.001	-22.62
240	0.083	0.001	-21.62
250	0.094	0.001	-20.54
260	0.127	0.002	-17.92
270	0.202	0.004	-13.89
280	0.453	0.023	-6.88
290	0.816	0.073	-1.77
300	1.000	0.110	0.00
310	0.919	0.093	-0.73
320	0.459	0.023	-6.76
330	0.210	0.005	-13.56
340	0.153	0.003	-16.31
350	0.171	0.003	-15.34

Additional Points

Azi	Rel	kW	dB
25	1.000	0.110	0.00

FIGURE 3 OET BULLETIN NUMBER 69 - OUTGOING INTERFERENCE STUDY - SUMMARY

Outgoing Interference Population Report

WYBE-CA (44) Pinehurst, NC - DIGITAL FLASH CUT APPLICATION
Broadcast Type: Digital Service: F [Simple Emission Mask]
Lat: 35-09-57 N Lng: 079-25-12 W ERP: 0.11 kW AMSL: 207.0 m
Signal Resolution: 1.0 km Consider NTSC Taboo: Yes
Default # of radials computed for contours: 360
Contours calculated using 8 radial HAAT. LR Profile Spacing Increment: 1.0 km
Masked interference points are being counted as interference.
Using LPTV/translator D/U rules.
Pop Centroid DB: 2000 US Census (SF1)
Primary Terrain: NED 3 Second US Terrain
Population Database: 2000 US Census (SF1)

Stations Considered:

Call Letters	City	State	Dist	Azi
WBFT-CA (46Z)	Sanford	NC	41.2	31.8
WDRN-LP (45+)	Fayetteville	NC	47.6	100.6
WLXI-D (43)	Greensboro	NC	86.0	334.9
WZGS-CA (44+)	Raleigh	NC	93.3	42.2
WZGS-CA-D.C (44)	Raleigh	NC	93.3	42.2
WWIW-LD-D (45)	Raleigh	NC	97.8	46.1
WACN-LD-D.C (45)	Raleigh	NC	98.7	54.9
W44CU-D.C (44)	Florence	SC	102.6	196.8
WJPM-TV-D (45)	Florence	SC	102.6	196.9
W43CU-D.C (43)	Florence	SC	108.0	196.2
WUNG-TV.C (44)	Concord	NC	110.4	281.5
WUNG-TV-D (44)	Concord	NC	110.4	281.5

Study Results:

Call	Area	HUnits	Contour	Masked Ix	Unmasked Ix	%
WBFT-CA (46Z)	0.0	0	22,837	0	0	0.00
WDRN-LP (45+)	0.0	0	271,667	0	0	0.00
WLXI-D (43)	4.0	2	2,328,421	0	4	0.00
WZGS-CA (44+)	0.0	0	599,606	0	0	0.00
WZGS-CA-D.C (44)	0.0	0	846,742	0	0	0.00
WWIW-LD-D (45)	0.0	0	900,209	0	0	0.00
WACN-LD-D.C (45)	0.0	0	775,822	0	0	0.00
W44CU-D.C (44)	0.0	0	184,824	0	0	0.00
WJPM-D (45)	0.0	0	490,658	0	0	0.00
WJPM-TV-D (45)	0.0	0	576,554	0	0	0.00
W43CU-D.C (43)	0.0	0	263,571	0	0	0.00
WUNG-TV.C (44)	0.0	0	1,193,518	0	0	0.00
WUNG-TV-D (44)	75.8	524	2,656,926	0	1,426	0.05

********** NO PROBLEMS FOUND **********