

Banner Elk, North Carolina
Application for Minor Modification for
FM Station WZJS
On Channel 264
by
High Country Adventures, LLC

Technical Exhibit

September 2022

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Timothy L. Warner, P.E.
Post Office Box 8045
Asheville, North Carolina 28814-8045
(828) 258-1238
twarner@tlwinc.net

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Declaration

I declare, under penalty of perjury, that I am a technical consultant to broadcasting and other communications systems, that I have over twenty-five years of experience in the engineering of broadcast and other communications systems, that I am familiar with the Federal Communications Commission's Rules found in the Code of Federal Regulations Title 47, that I am a Professional Engineer registered in North Carolina, that I have prepared or supervised the preparation of the attached Technical Exhibit for High Country Adventures, LLC, and that all of the facts therein, except for facts of which the Federal Communications Commission may take official notice, are true to the best of my knowledge and belief.



Timothy L. Warner, P.E.
Post Office Box 8045
Asheville, North Carolina 28801
(828) 258-1238
twarner@tlwinc.net
8 September 2022

Narrative

This Exhibit supports a minor modification application for FM station WZJS, on Channel 264 in Banner Elk, North Carolina. Allocation details are provided in this exhibit. This proposal complies fully with the requirements of 47 C.F.R. §73.207 and other applicable sections.

Figure 1 shows the proposed 60 dBu F(50,50) coverage area, the 70 dBu F(50,50) coverage area, and the community of license.

Allocations

This application proposes service to Banner Elk, North Carolina, on channel 264. An updated Table 1: Allocations is included in this exhibit with a list of the stations, construction permits, allocations, and applications studied. All are protected under §73.207 distance separations.

Table 1: Allocations

Allocation Study High Country Adventures, LLC							DISPLAY DATES	
REFERENCE	CLASS = A					DATA	09-08-22	
36 11 05.80 N.	Current Spacings to 3rd Adj.					SEARCH	09-08-22	
----- Channel 264 - 100.7 MHz -----								
Call	Channel	Location		Azi	Dist	FCC	Margin	
WZJS	STA	264A	Banner Elk	NC	350.8	0.01	114.5	-114.5
WZJS	LIC	264A	Banner Elk	NC	202.0	0.08	114.5	-114.4
AL5370	RSV-A	263A	Glade Spring	VA	19.1	71.98	71.5	0.48
WBGQ	LIC-N	264A	Bulls Gap	TN	280.9	118.79	114.5	4.3
WZQY	LIC-N	263A	Glade Spring	VA	16.0	76.72	71.5	5.2
W265CI	LIC-D	265D	Piney Grove	TN	283.0	42.26	35.5	6.8
W261CK	LIC-D	261D	Boone	NC	70.7	16.94	7.5	9.4
W265DY	LIC-D	265D	Morganton	NC	161.6	45.64	35.5	10.1
W263CP	LIC-D	263D	Lenoir	NC	131.3	46.76	35.5	11.3
WMJD	LIC	264A	Grundy	VA	350.4	125.80	114.5	11.3
WIFM-FM	LIC-N	265A	Elkin	NC	88.8	93.80	71.5	22.3
W211CD	LIC-D	211D	Johnson City	TN	320.4	35.95	9.5	26.5
W264BY	LIC-D	264D	Kingsport	TN	301.2	73.92	46.5	27.4
WSSL-FM	LIC-N	263C0	Gray Court	SC	186.8	180.21	151.5	28.7
W266DO	LIC-D	266D	Spruce Pine	NC	210.9	39.42	7.5	31.9
765388	APP-D	210A	Bristol	VA	333.7	48.64	9.5	39.1
W265CT	LIC	265D	Hickory	NC	133.3	74.75	35.5	39.3

 RSV-R = reserved - needs protection, RSV-A = allocation.
 All separation margins include rounding

Source of Data

Transmitter location, effective radiated power, directional antenna pattern, and elevation data are extracted from the Commission's CDBS (converted to NAD 83) or LMS. All contours for existing and proposed facilities are calculated using height above average terrain calculated at one degree horizontal increments.

The contours were evaluated using terrain extracted from the FCC 30 Meter Terrain database, high resolution 1 arc-second terrain data covering the United States, formatted by V-Soft Communications to work with its allocation and mapping programs.

Timothy L. Warner, P.E.

WZJSm
Proposed
Latitude: 36-11-05.80 N
Longitude: 081-52-46.40 W
ERP: 0.15 kW
Channel: 264 100.7 MHz
AMSL Height: 1671.7 m
Elevation: 1658.7 m
Horiz. Pattern: Omni

WZJS
BLH20080422AAN
Latitude: 36-11-03.40 N
Longitude: 081-52-47.40 W
ERP: 0.15 kW
Channel: 264 100.7 MHz
AMSL Height: 1661.0 m
Elevation: 1648.0 m
Horiz. Pattern: Omni

WZJS
Licensed and Proposed Contours
September 2022
Figure 1

