

B. W. St. Clair

COMPREHENSIVE TECHNICAL EXHIBIT

Long Form Application for FM Translator Auction Window 83
NEW, Facility ID 141727, Dickson, TN
FCC File Number BNPFT-20030317HOK
Singleton deriving from Auction 83 MX Group 427

Clearance of MX situation in Group 427. The within long form application is filed in response to DA-13-1675, which lists the within applicant's Techbox application as a singleton. Previously, an MX situation existed between the instant application and cochannel application BNPFT-20030317MGQ, filed by Edgewater Broadcasting, Inc. at Clarksville, TN. In its long form application BNPFT-20130820ABI, Edgewater specifies a modified antenna pattern which eliminates the prohibited contour overlap between BNPFT-20030317MGQ and the within applicant's BNPFT-20030317HOK. This avoids prohibited overlap between the either application's 40 dBu F50,10 contour and the other application's 60 dBu F50,50 contour. This clears all facilities listed in MX group 427 and leaves BNPFT-20030317HOK as a singleton.

Details of long form application. The within application remains identical to the underlying Techbox application and is so filed in response to its new singleton status.

Use of unregistered antenna structure. The application is on a 24 meter tall communications tower to be constructed by it on behalf of the proponent on his own rural property. The proposal was subjected to the FCC's Towair analysis and does not require registration thanks to being more than 8 km from any airport.

Allocation study with respect to cochannel and adjacency relationships. An allocation listing is attached for the amended application. Listed facilities are clear of prohibited overlaps.

Proximity of 53/54 channel (IF) relationships. The Effective Radiated Power (ERP) of the within proposal is limited to less than 0.099 kW in order to be considered a Class D station exempt from the distance limitations of the respective rulepart(s).

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Non-ionizing Electromagnetic Radiation (NIEP). The application was subjected the FCC checklist attached to the within application form 349. It is the sole facility to be located at the site. Calculations pursuant to the FCC worksheet #1 yielded an answer of less than 0.1% of the upper human exposure limit for this service; accordingly, the uncontrolled NIEP exposure is well within the ground level limits for the general population and complies with FCC requirements.

As always with RF radiating sites, there are normal safety concerns in the area of the site; accordingly, the general site area is entirely contained within the private property of the applicant. Signage and fences, together with a posted site management SOP will guide all use of the site, including turning down or off the RF power as required for workmen at the site or on the tower.

Engineer's Statement. I am a broadcast field and consulting engineer with over fifty years' experience, having prepared for filing numerous FM and TV broadcast applications. All findings and representations made herein are true and correct to the best of my knowledge and belief. Supporting studies and documentation used in this application that may not be included herein are kept on file in this office and are available to the Commission upon request.

A handwritten signature in black ink, appearing to read 'James R. McDonald', with a long horizontal flourish extending to the right.

James R. McDonald
August 28, 2013

Attachments:

1. *Allocation study, adjacencies and map*

APPLICATION FOR MINOR CHANGE; NEW/AMENDED, FI 141727, DICKSON, TN

ALLOCATION STUDY/WITHIN 100 KM OF PROPOSED SITE - ADJACENT 1,2,3 FACILITIES
ALL SHOW CLEAR.

Call FacilityID	Channel ID	Class ERP	Service HAAT	Frequency Dist(km)	Status Dist(mi)	City Azimuth	State Licensee/Permittee	Country File Number	Docket
WHOP-FM - kW	254 - m	C1 68.72 km	FA 42.70 mi	98.7 MHz 341.15°	USE -	HOPKINSVILLE	KY US	---	- 27633
WHOP-FM 100. kW	254 189.1 m	C1 74.62 km	FM 46.36 mi	98.7 MHz 340.18°	LIC HOP BROADCASTING, INC.	HOPKINSVILLE	KY US	BLH-20041018ACH	- 27633
WHOP-FM 0.121 kW	254 90. m	C1 68.72 km	FS 42.70 mi	98.7 MHz 341.15°	LIC HOP BROADCASTING, INC.	HOPKINSVILLE	KY US	BXMLH-20070216AAP	- 27633
WHOP-FM 2. kW	254 83. m	C1 68.72 km	FS 42.70 mi	98.7 MHz 341.15°	LIC HOP BROADCASTING, INC.	HOPKINSVILLE	KY US	BXLH-20100902AEB	- 27633
970829TG 0.08 kW	254 21. m	D 36.34 km	FX 22.58 mi	98.7 MHz 105.40°	APP GREAT SOUTHERN BROADCASTING COMPANY, INC.	NASHVILLE	TN US	BNPFT-19970829TG	- 88416
NEW 0.02 kW	254 0. m	D 33.95 km	FX 21.10 mi	98.7 MHz 92.06°	APP R & L NON-COM	HENDERSONVILLE	TN US	BNPFT-20030317MNB	- 158326
WCRT-FM1 0.075 kW	254 83. m	D 51.30 km	FB 31.88 mi	98.7 MHz 106.56°	STA BOTT COMMUNICATIONS, INC.	DONELSON	TN US	BSTA-20050803ADU	- 166220
970829TG 0.08 kW	254 0. m	D 36.34 km	FX 22.58 mi	98.7 MHz 105.40°	APP GREAT SOUTHERN BROADCASTING COMPANY, INC.	NASHVILLE	TN US	BNPFT-19970829TG	- 88416
W255AP 0.023 kW	255 49.6 m	D 21.67 km	FX 13.46 mi	98.9 MHz 201.66°	LIC PENNYRILE CHRISTIAN COMMUNITY, INC.	DICKSON	TN US	BLFT-20040120ABI	- 52225
NEW 0.055 kW	256 55.4 m	D 0.00 km	FX 0.00 mi	99.1 MHz 0.00°	APP THOMAS MACH D/B/A DICKSON OMEGA RADIO	DICKSON	TN US	BNPFT-20030317HOK	- 141727
NEW 0.02 kWDA	256 0. m	D 48.07 km	FX 29.87 mi	99.1 MHz 112.97°	APP CARON BROADCASTING, INC.	NASHVILLE	TN US	BNPFT-20130827AAX	- 142519
NEW 0.01 kWDA	256 0. m	D 33.57 km	FX 20.86 mi	99.1 MHz 347.05°	APP EDGEWATER BROADCASTING, INC.	CLARKSVILLE	TN US	BNPFT-20130820ABI	- 154860
W257AR 0.003 kW	257 90. m	D 55.00 km	FX 34.17 mi	99.3 MHz 104.09°	LIC GREAT SOUTHERN BROADCASTING COMPANY	DONELSON	TN US	BLFT-19890915TB	- 25032
W258AD 0.02 kW	258 93. m	D 31.05 km	FX 19.29 mi	99.5 MHz 332.47°	LIC COMMUNITY BROADCASTING, INC.	CLARKSVILLE	TN US	BLFT-19941103TA	- 63446

633391.A

BNPFT20030317HOK

Latitude: 36-17-46 N

Longitude: 087-15-44 W

ERP: 0.055 kW

Channel: 256

Frequency: 99.1 MHz

AMSL Height: 233.0 m

Elevation: 211.0 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: 10.0 m

Receiver Gain: 0 dB

Time Variability: 50.0%

Sit. Variability: 50.0%

ITM Mode: Broadcast

 > 51.0 dBu 48.0 - 51.0 41.0 - 48.0