

**AUCTION 83
LONG FORM AMENDMENT
FRANKFORT, IN #155842
BNPFT-20130822AEI**

This long form application on channel 252 is amended to lower the overall tower height and the radiation center height. The coordinates were corrected in the long form by 10 seconds in latitude and longitude resulting in a 0.38 km *deminimis* change and the height AGL is decreased 11 meters when compared to the short form. These changes do not represent a significant change in LPFM impact and it is requested that this application remain protected from LPFM conflicts in the October 15th window.

The translator will rebroadcast station WSHW(FM)'s HD2 at Frankfort, IN (facility #33466).

The proposal is within 39 km of the Indianapolis, IN spectrum limited market, but does not preclude any protected LPFM channel point in that grid (see LPFM non-preclusion showing in exhibit 1). The proposed site is in Logan County Indiana and is not in the Indianapolis ARB metro market. Therefore, no site test is required.

Allocation discussion:

All exhibits were developed utilizing the FCC 30 second terrain database.

- E1 Channel study
- E2 Contours
- E3 Towerair

A channel study is included as E1 demonstrating compliance with §74.1204. A plot of the proposed and short form 60 dBu contours is provided as E2 showing overlap with the short form 60 dBu and containment of the proposed 54 dBu within the WSHW HD2 54 dBu.

RF Exposure Calculation:

The RF contribution of the proposed translator using a Bext TFC2K-2 half-wave spaced circularly polarized antenna was calculated using FMMODEL based on a worst case ring-stub design mounted at 32 meters AGL to be 4.10 μ Watts/cm² or 2.05% of the maximum permissible 200

Anderson Associates

$\mu\text{Watts/cm}^2$ exposure for general population/uncontrolled exposure, and less than the 5% requiring consideration.

It is noted that the existing tower was constructed in the 1980s. It now fails the Towerair slope test. Therefore, the applicant will remove sufficient tower to achieve 25 meters overall twenty to achieve compliance with the slope test.



Charles M. Anderson August 25, 2013

E1 CHANNEL STUDY

REFERENCE
40 17 09.0 N.
86 31 38.0 W.

CH# 252D - 98.3 MHz, Pwr= 0.25 kw, HAAT= 27.2 M, COR= 283 M
Average Protected F(50-50)= 7.09 km
Omni-directional

DISPLAY DATES
DATA 08-24-13
SEARCH 08-25-13

| CH CITY | CALL | TYPE ANT STATE | AZI <-- | DIST FILE # | LAT LNG | PWR(kw) HAAT(M) | INT(km) COR(M) | PRO(km) LICENSEE | *IN* (Overlap in km) | *OUT* |
|-----------------------|---------|-------------------|----------------|---------------------------|--------------------------|--------------------|-------------------|------------------------------------|-------------------------|--------|
| 252D Frankfort | 1569508 | APP _C_ IN | 0.0 0.0 | 0.00 BNPFT20130822AEI | 40 17 09.0 86 31 38.0 | 0.250 | 30.0 291 | 9.1 Kaspar Broadcasting Co, In | -38.2* | -36.3* |
| 252D Frankfort | 1548798 | APP _C_ IN | 322.7 142.7 | 0.38 BNPFT20030317GYL | 40 17 19.0 86 31 48.0 | 0.250 | 23.8 294 | 7.1 Kaspar Broadcasting Co, In | -32.4* | -36.5* |
| 252A Plainfield | WRDZ-FM | LIC _CN IN | 167.5 347.6 | 59.97 BLH19830131IAS | 39 45 33.0 86 22 30.0 | 3.000 91 | 69.8 341 | 20.5 Radio Disney Group, Llc | -16.9* | 15.7 |
| 254A Battle Ground | WASK-FM | LIC _CN IN | 292.3 112.0 | 30.88 BLH19930323KF | 40 23 26.0 86 51 53.0 | 4.400 117 | 2.6 317 | 27.0 Wask, Inc. | 19.3 | 2.8 |
| 249D Cofax | 1550262 | APP _C_ IN | 221.6 41.5 | 13.74 BNPFT20030314ATH | 40 11 36.0 86 38 05.0 | 0.007 | 0.2 326 | 4.3 Friends Of Christian Radio | 6.5 | 8.3 |
| 253A Peru | WMYK | LIC _CX IN | 46.9 227.2 | 56.09 BMLH20111012ABX | 40 37 46.0 86 02 30.0 | 6.000 100 | 41.9 339 | 27.1 Hoosier Am/fm, Llc | 7.1 | 18.7 |
| 250B Anderson | WGNR-FM | LIC _C_ IN | 109.4 290.0 | 73.79 BMLD20030908ADX | 40 03 43.0 85 42 34.0 | 50.000 149 | 5.9 405 | 64.8 The Moody Bible Institute | 60.8 | 7.4 |
| 251B1 Earl Park | WIBN | LIC _CX IN | 292.4 111.8 | 84.62 BMLH20100810ABA | 40 34 22.0 87 27 12.0 | 25.000 100 | 58.8 329 | 43.5 Brothers Broadcasting Corp | 16.8 | 26.1 |
| 252A Culver | NEW | CP ZCX IN | 356.8 176.7 | 115.41 BNPH20120514AAI | 41 19 20.0 86 36 17.0 | 6.000 95 | 85.9 306 | 27.6 Kankakee Valley Broadcasti | 20.9 | 60.1 |
| 253B Paris | WIBQ | LIC _C_ IL | 233.9 53.1 | 127.09 BMLH20110215AEO | 39 36 20.0 87 43 32.0 | 50.000 152 | 79.6 360 | 66.4 Midwest Communications, In | 40.4 | 46.4 |
| 254A Anderson | WQME | LIC _CN IN | 115.6 296.2 | 77.08 BLH19970512KF | 39 58 59.0 85 42 41.0 | 4.500 117 | 2.8 390 | 29.3 Anderson University, Inc. | 67.3 | 46.7 |

Terrain database is FCC NGDC 30 Sec , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
In & Out distances between contours are shown at closest points. Reference zone= East Zone, Co to 3rd adjacent.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
"*"affixed to 'IN' or 'OUT' values = site inside protected contour.

EXHIBIT E2

BNPFT20130822AEI
Latitude: 40-17-09 N
Longitude: 086-31-38 W
ERP: 0.25 kW
Channel: 252
Frequency: 98.3 MHz
AMSL Height: 283.0 m
Elevation: 259.0 m
Horiz. Pattern: Omni

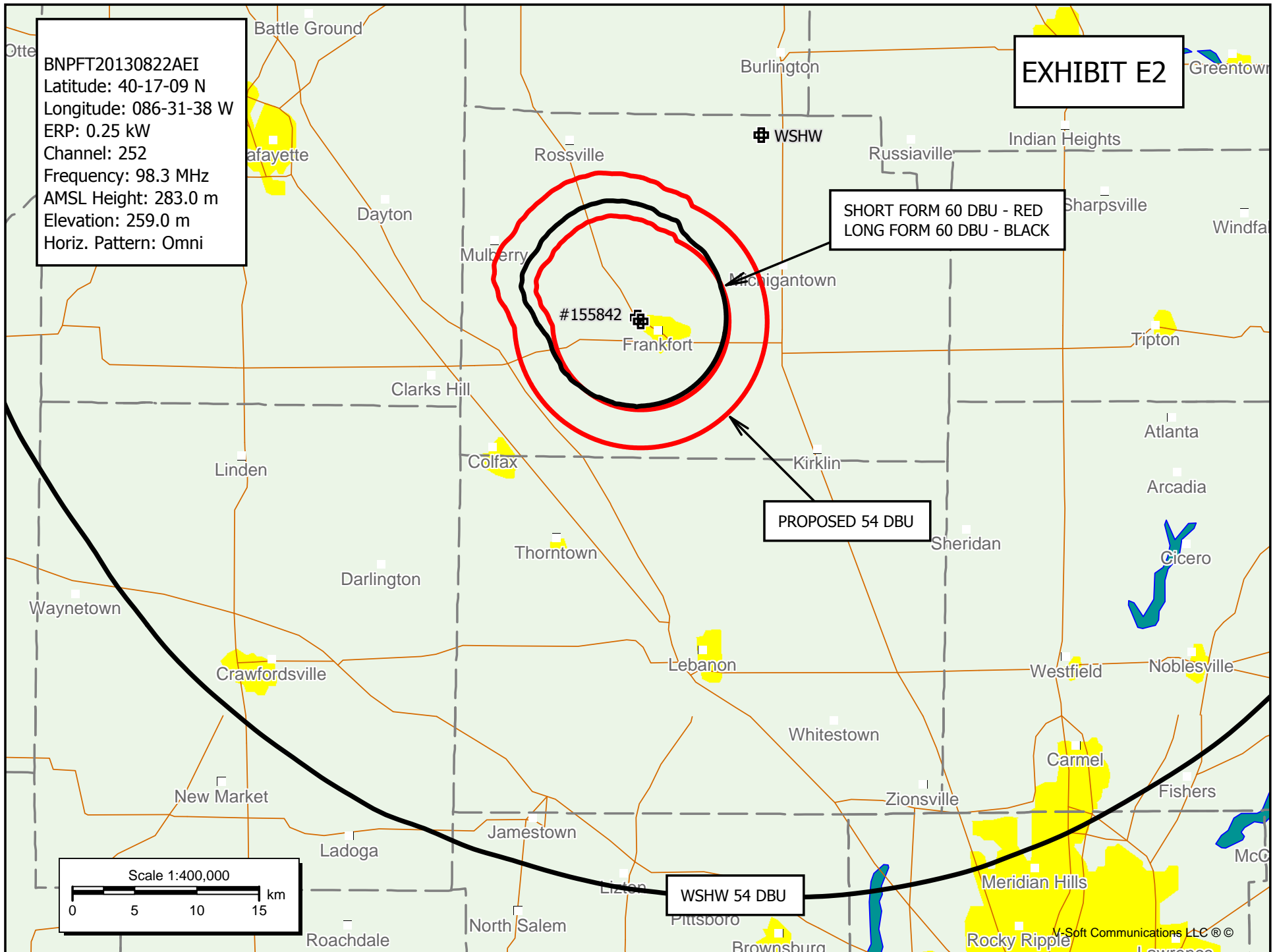
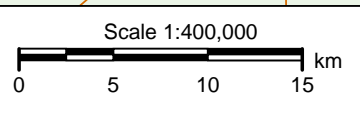
SHORT FORM 60 DBU - RED
LONG FORM 60 DBU - BLACK

PROPOSED 54 DBU

WSHW 54 DBU

#155842

Frankfort



TOWAIR Determination Results

A routine check of the coordinates, heights, and structure type you provided indicates that this structure does not require registration.

*** NOTICE ***

TOWAIR's findings are not definitive or binding, and we cannot guarantee that the data in TOWAIR are fully current and accurate. In some instances, TOWAIR may yield results that differ from application of the criteria set out in 47 C.F.R. Section 17.7 and 14 C.F.R. Section 77.13. A positive finding by TOWAIR recommending notification should be given considerable weight. On the other hand, a finding by TOWAIR recommending either for or against notification is not conclusive. It is the responsibility of each ASR participant to exercise due diligence to determine if it must coordinate its structure with the FAA. TOWAIR is only one tool designed to assist ASR participants in exercising this due diligence, and further investigation may be necessary to determine if FAA coordination is appropriate.

DETERMINATION Results

PASS SLOPE(100:1)NO FAA REQ - 3266.0 Meters (10715.0 Feet)away & below slope by 9.0 Meters (29.5300 Feet)

| Type | C/R | Latitude | Longitude | Name | Address | Lowest Elevation (m) | Runway Length (m) |
|------|-----|--------------|---------------|----------------|-----------------------|----------------------|-------------------|
| AIRP | R | 40-16-40.00N | 086-33-51.00W | FRANKFORT MUNI | CLINTON FRANKFORT, IN | 261.0 | 1524.0 |

PASS SLOPE(100:1)NO FAA REQ - 2494.0 Meters (8182.31 Feet)away & below slope by 1.0 Meters (3.27999 Feet)

| Type | C/R | Latitude | Longitude | Name | Address | Lowest Elevation (m) | Runway Length (m) |
|------|-----|--------------|--------------|----------------|-----------------------|----------------------|-------------------|
| AIRP | R | 40-16-21.00N | 086-33-3.00W | FRANKFORT MUNI | CLINTON FRANKFORT, IN | 261.0 | 1524.0 |

Your Specifications

NAD83 Coordinates

| | |
|-----------|------------------|
| Latitude | 40-17-09.0 north |
| Longitude | 086-31-38.0 west |

Measurements (Meters)

| | |
|--------------------------------|-----|
| Overall Structure Height (AGL) | 25 |
| Support Structure Height (AGL) | 0 |
| Site Elevation (AMSL) | 259 |

Structure Type

LTOWER - Lattice Tower
