

Technical Report WKYH(AM) New Translator

This technical report is submitted for a new fill-in translator at channel 257 to serve as a fill-in facility to rebroadcast WKYH(AM) 600 kHz at Paintsville, KY, FCC facility I.D. 3430.

New 257D Translator Analysis:

An overlap study in exhibit E-1 shows the new 257D translator is co-located with the WSIP-FM 255C1 second adjacent protect contour. As a result, the +40 dBu F(50-10) interfering contour = zero, and does not reach any population, buildings or roads. The 60 dBu F(50-50) contour is contained within the WKYH(AM) 2.0 mV/m daytime contour (exhibit E-2).

Antenna System:

The new 257D translator is to be located on the existing 106.4 meter tower, ASR 1276597, at coordinates:

37 51 30N 82 47 41W NAD 27

An ERI 100A single bay, nondirectional antenna will be mounted at a COR AGL of 76 meters, 434 meters AMSL and operate at 0.250 kW ERP.

RF Exposure Calculation:

The RF contribution was calculated using the formula from the OET Bulletin 65:

$$S \text{ (RF in microwatts/cm}^2\text{)} = \frac{33.4 \times F^2 \times (H \text{ ERP} + V \text{ ERP in watts})}{R^2 \text{ (height of radiation center in meters -2m)}}$$

Using a worst-case vertical (F) factor of 1.000, the RF is calculated to be $3.05 \mu\text{W}/\text{cm}^2$ to the ground, which is well below 5% of the $200 \mu\text{W}/\text{cm}^2$ maximum permissible for controlled exposure, allowing exclusion from consideration.

Conclusion:

It is concluded that the application for a new 257D translator facility for the WKYH(AM) complies with all Commission rules and policies.



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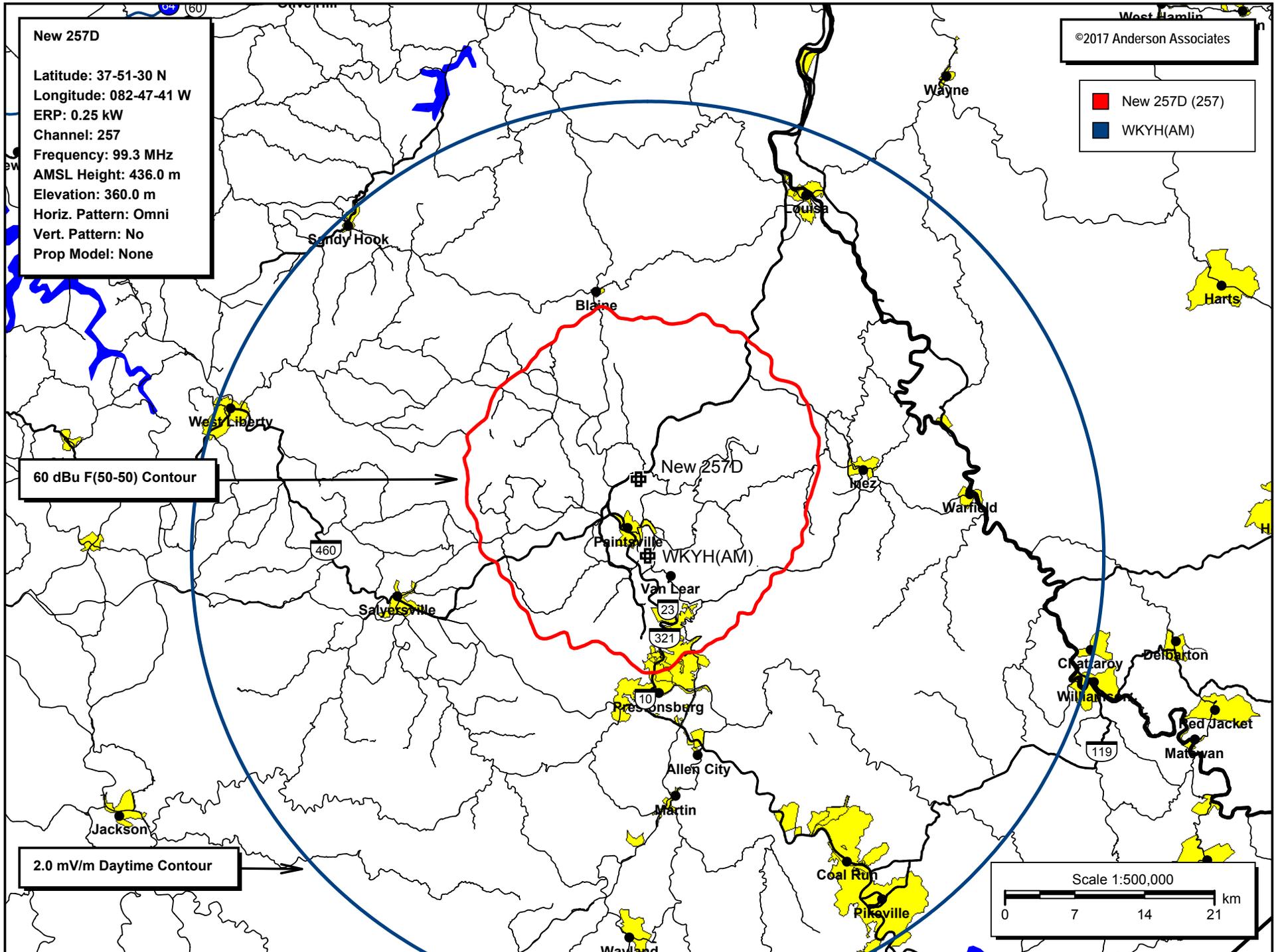
E-1 New 257D Overlap Study

CH	CALL	TYPE	ANT	AZI	DIST	LAT	PWR(kW)	INT(km)	PRO(km)	*IN*	*OUT*
CITY		STATE		<--	FILE #	LNG	HAAT(M)	COR(M)	LICENSEE	(Overlap in km)	
255C1	WSIP-FM	LIC NCX		0.0	0.00	37 51 30.0	100.000	7.6	61.1	-23.8*	-62.2*
Paintsville		KY		0.0	BLH20110725AFB	82 47 41.0	191	454	S.i.p.	Broadcasting Compan	
257A	WNXT-FM	LIC _CN		349.6	97.74	38 43 22.0	2.550	79.6	26.8	0.6	15.5
Portsmouth		OH		169.4	BLH19940111KE	82 59 56.0	156	378	Hometown Broadcasting Of P		
259A	WUGO	LIC _CX		343.2	54.66	38 19 44.0	4.800	2.7	27.9	34.3	24.2
Grayson		KY		163.1	BLH20130402ABE	82 58 33.0	111	351	Carter County Broadcasting		
257D	W257DP	LIC _C_		258.5	104.29	37 39 54.0	0.250	56.2	17.6	31.2	32.3
Irvine		KY		77.8	BLFT20160830ABS	83 57 21.0		446	Kentucky River Broadcastin		
260A	WMTC-FM	LIC _CN		244.2	63.80	37 36 23.0	6.000	2.7	28.4	43.7	31.5
Vanl eve		KY		63.8	BLH19920821KC	83 26 48.0	100	400	Kentucky Mountain Bible Co		
258B	WJLS-FM	LIC _CN		100.9	150.77	37 35 23.0	34.000	98.2	78.2	35.8	32.6
Beckl ey		WV		281.9	BLH5592	81 06 51.0	320	1110	West Virginia Radio Compan		
257C3	WEXX	LIC NCX		161.9	170.19	36 24 07.0	4.400	109.7	44.3	41.7	68.6
El izabethton		TN		342.2	BLH20130715ADX	82 12 12.0	244	802	Bristol Broadcasting Compa		
259C3	WGCK-FM	LIC _CX		171.4	90.40	37 03 15.0	1.950	2.8	42.3	68.2	46.5
Coeburn		VA		351.5	BLH20050624AA0	82 38 34.0	356	1007	Letcher County Broadcastin		

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.
 All separation margins (if shown) include rounding.
 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 restricted contour.

- (1) The New 257D +40 dBu F(50-10) contour inside the co-located WSIP-FM 255C1 second-adjacent protected contour = zero.

E-2 New 257D WKYH(AM) 60 dBu Contour Plot



ASR Registration 1276597

Registration Detail

Reg Number	1276597	Status	Constructed
File Number	A0719963	Constructed	03/31/2011
EMI	No	Dismantled	
NEPA	No		

Antenna Structure

Structure Type TOWER - Free standing or Guyed Structure used for Commu

Location (in NAD83 Coordinates)

Lat/Long	37-51-30.3 N 082-47-40.7 W	Address	150 Bonita Lane and .6 km south of state highway 1559
City, State	Wittenville , KY		
Zip	41240	County	JOHNSON
Center of AM Array		Position of Tower in Array	

Heights (meters)

Elevation of Site Above Mean Sea Level	359.7	Overall Height Above Ground (AGL)	106.4
Overall Height Above Mean Sea Level	466.1	Overall Height Above Ground w/o Appurtenances	105.8

Painting and Lighting Specifications

FAA Chapters 4, 6, 12
Paint and Light in Accordance with FAA Circular Number 70/7460-1K

FAA Notification

FAA Study	2010-ASO-3387-OE	FAA Issue Date	08/06/2010
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Owner & Contact Information

FRN	0001791482	Owner Entity Type	
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Owner

S.I.P. Broadcasting Company, Inc. Attention To: Mike Tarter 200 South Kentucky Avenue P.O. Box 1450 Corbin , KY 40702	P: (606)528-9600 F: E: mitarter@forchtbroadcasting.com
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Contact

P:
F:
E:

Last Action Status

Status	Constructed	Received	03/31/2011
Purpose	Notification	Entered	03/31/2011