

# **ENGINEERING REPORT**

## **FM Translator Minor Change Application**

for

**W246CE – Athens, OH  
Facility ID: 140090**

as a fill-in FM Translator for  
**WATH(AM) – Athens, OH**

October 2022

***MUNN-REESE***

Broadcast Engineering Consultants  
Coldwater, MI 49036

## **Discussion**

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This firm has been retained to prepare the required engineering report in support of a Construction Permit Application for an FM Translator W246CE. This translator is currently authorized to operate with an AMSL of 337 meters and an ERP of 0.013 kW (H&V) on CH246D. Proposed operation is with an AMSL of 346 meters with an ERP of 0.25 kW (H&V) on CH247. The Translator will continue to rebroadcast Primary Station WATH(AM) – Athens, OH.

The present and proposed service contours and as a fill-in translator for WATH(AM) are shown in **Exhibit 1.0**

It has been determined the Translator may be used in the area without interference to any existing FM broadcast station or facility. The proposed allocation is included in **Exhibit 2.0**.

The distances to 34 dBu FCC(50:10) contour are less than 60 km as shown in **Exhibit 3.0**.

The NED 03 second terrain database was utilized for terrain-based showings contained here-in.

# Exhibit 1.0 - W246CE Present and Proposed as a Fill-In for WATH(AM)

## WATH.L

Latitude: 39-20-40 N  
Longitude: 082-06-21 W  
ERP: 0.10 kW

Frequency: 970 kHz

## W246CE

BLFT20111128CQB  
Latitude: 39-21-17.94 N  
Longitude: 082-05-31.98 W  
ERP: 0.013 kW  
Channel: 246  
Frequency: 97.1 MHz  
AMSL Height: 337.0 m  
Elevation: 316.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: None

## W246CE.P

BLFT20111128CQB  
Latitude: 39-21-17.94 N  
Longitude: 082-05-31.98 W  
ERP: 0.25 kW  
Channel: 247  
Frequency: 97.3 MHz  
AMSL Height: 346.0 m  
Elevation: 316.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: None

Belle Valley

Munn-Reese.com

- W246CE (246)
- WATH.L
- W246CE.P (247)

Circle R = 40.0 km

2.0 mV/m  
FCC F(50-50) 60.00 dBu (FCC HAAT)

FCC F(50-50) 60.00 dBu (FCC HAAT)

Scale 1:500,000

0 7 14 21 km

V-Soft Communications LLC ©

# Exhibit 2.0 Proposed Allocation

REFERENCE  
39 21 18.20 N.  
82 05 31.50 W.

CH# 247D - 97.3 MHz, Pwr= 0.25 kW, HAAT= 99.7 M, COR= 346 M  
Average Protected F(50-50)= 12.84 km  
Omni-directional

DISPLAY DATES  
DATA 10-17-22  
SEARCH 10-21-22

CH CITY	CALL	TYPE ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap	*OUT* in km)
246D Athens	W246CE	LIC _CN OH	0.0 0.0	0.00 BLFT20111128CQB	39 21 18.20 82 05 31.50	0.013 94	337	---Reference--- Wath, Inc.		
247B Wheeling	WKWK-FM	LIC _CN WV	54.8 235.7	144.72 BLH19801203AF	40 05 49.20 80 42 05.20	50.000 128	139.9 456	67.1 Ihm Licenses, LLC	-8.0	17.6
246B Columbus	WBNS-FM	LIC _CN OH	310.8 130.2	105.37 BLH19850125LM	39 58 16.20 83 01 39.60	20.500 238	78.8 484	66.6 Radiohio, Incorporated	12.6	8.8
244B1 Oak Hill	WKOV-FM	LIC _CN OH	230.4 50.1	56.63 BMLH20160201AFT	39 01 45.30 82 35 50.60	16.000 129	4.0 364	44.9 Jackson County Broadcastin	38.8	10.2
248B Charleston	WQBE-FM	LIC _CN WV	163.1 343.3	110.20 BLH7326	38 24 22.30 81 43 25.40	50.000 152	78.8 402	65.6 Bristol Broadcasting Compa	19.8	20.0
245A Williamstown	WVVV	LIC _CN WV	91.9 272.3	51.03 BLH20150209AAC	39 20 17.70 81 29 56.00	3.500 128	2.7 361	28.9 Seven Ranges Radio Co., In	35.9	21.0
250B Columbus	WNCI	LIC DEN OH	311.5 130.9	103.63 BMLH20080128AAW	39 58 10.20 83 00 09.70	175.000 171	7.4 418	73.7 Ihm Licenses, LLC	82.1	28.3
249A Jackson	WCJO	LIC NCN OH	230.4 50.1	56.63 BLH20050831AAY	39 01 45.30 82 35 50.60	3.000 91	2.2 326	22.8 Jackson County Broadcastin	40.6	32.8
244B1 Chillicothe	WKOV-FM1	CP DCN OH	263.4 83.0	62.06 0000190769	39 17 21.00 82 48 31.00	0.240	1.1 374	16.3 Jackson County Broadcastin	48.1	44.2
248A Greenfield	WVNU	LIC _CN OH	273.5 92.7	108.58 BMLH20120430ACD	39 24 26.80 83 21 13.70	2.300 164	43.6 450	28.9 Southern Ohio Broadcasting	52.6	61.3
246A Coal Grove	WBVB	LIC NCN OH	200.4 20.2	110.33 BLH19901119KD	38 25 27.20 82 32 03.50	3.000 144	42.0 362	27.6 Ihm Licenses, LLC	55.0	62.6
249A Byesville	WILE-FM	LIC _CN OH	26.5 206.7	85.11 BLH20150617AAR	40 02 22.30 81 38 47.40	1.500 142	2.1 427	24.9 Avc Communications, Inc.	71.1	59.1
244A Cambridge	WCMJ	LIC NCN OH	26.5 206.7	85.11 BLH20150617AAU	40 02 22.30 81 38 47.40	1.350 148	2.0 433	24.8 Avc Communications, Inc.	71.2	59.2
246B Sutton	WDBS	LIC NCN WV	124.8 305.8	173.64 BLH20160726AAI	38 27 09.10 80 27 14.60	22.000 226	89.7 988	75.3 Summit Media Broadcasting,	70.1	68.8
247C2 Jackson	AL0663	RSV-A ____ KY	211.8 31.0	219.24 RM9802	37 40 19.32 83 24 20.64	50.000 150	134.0 465	48.4 From CDBS	71.0	122.7
247C2 Jackson	WJSN-FM	LIC _CN KY	211.8 31.0	219.25 BLH20051014AEA	37 40 19.30 83 24 20.70	19.000 248	125.1 564	50.4 Intermountain Broadcasting	79.9	120.8
250A Kenova	WMGA	LIC NCN WV	200.5 20.2	110.39 BLH20060313ABM	38 25 26.30 82 32 07.60	3.500 133	2.5 350	27.4 Fifth Avenue Broadcasting	94.5	81.9
300B Huntington	WEMM-FM	LIC _CN WV	188.3 8.2	98.49 BLH19980304KE	38 28 37.30 82 15 19.50	50.000 152	0.0 380	0.0 Bristol Broadcasting Compa	14.5R	84.0M
248D Westerville	WOBN	LIC _HN OH	320.2 139.6	111.84 BLED20081021ABB	40 07 28.20 82 56 05.60	0.029 20	5.8 296	4.1 Otterbein University	92.3	87.2

Terrain database is NED 03 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM  
Contour distances are on direct line to and from reference station. 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.  
« = Station meets FCC minimum distance spacing for its class.