



ENGINEERING STUDY
FCC 349 –CP MODIFICATION
W260DQ, BNPFT-20180314AAI

TECHNICAL STATEMENT

This technical statement and attached exhibits were prepared on behalf of Kings Trust, L.L.C. (“Kings”) licensee of W260DQ, Facility ID 201366. This CP-Modification is being filed in order to change channels from channel 260D to 259D, relocate the transmit site 2.7km and improve the facility over that which is currently approved. The primary facility will remain WKTX (AM), 830kHz, Cortland, OH, Facility ID 42365. This is an “AM Revitalization” allotment.

Facilities As Proposed

Location (NAD27) (no change)	41° 03’ 23.2” N Latitude, 80° 38’ 43.7” W Longitude
Channel	259D (99.7MHz)
Tower Overall AGL Height-	436m
Tower ASR	1013678
Proposed Antenna	SCA 2X-CL-FM/VRM/50N- 45DEG SLANT- 355deg T Az
Antenna AGL Height-	223m
Site AMSL Height-	337m
ERP	200 Watts- (directional, Exhibit A)

COMPLIANCE WITH 74.1204(a) [contour overlap]

The translator on channel 259D will be fully compliant with 74.1204(a). A table showing the allocation is attached as Exhibit B and a map depicting the closest pertinent facilities is attached as Exhibit C.

COMPLIANCE WITH 74.1204(d)

The proposed translator on 259D will be compliant with 74.1204(d). There are no 2nd or 3rd adjacent stations affected by the proposed translator.

COMPLIANCE WITH 74.1201(g)

Exhibit F demonstrates that the 60dBu contour of the proposed translator remains entirely contained within the 2mV/m contour of primary station WKTU (AM), 830kHz, Cortland, OH, Facility ID 42365.

The facility is within 320km of the common border between the US and Canada, however, no Canadian allotments are affected.

COMPLIANCE WITH 74.1233 [Minor Change]

Because the 60dBu contour of the proposed translator completely encompasses the 60dBu contour of the current construction permit, this is considered a minor modification.

ENVIRONMENTAL EXHIBIT

The proposed translator facility will utilize a directional antenna located on an existing tower. The attachment of the proposed translator antenna will not alter the existing structure significantly for purposes of the Nationwide Programmatic Agreement and the NHPA Section 106.

The proposed 259D facility will utilize a 2 element, skewed mount log-periodic located at 223m AGL, Based upon the FCC "FM Model for Windows"¹ program using a worst-case ring-stub antenna, the proposed 259D operation will produce .032 $\mu\text{W}/\text{cm}^2$ at a distance of 352m from the base of the tower at ground level or 0.016% of the MPE level. There are multiple non-excluded antennas on

¹ <https://www.fcc.gov/general/fm-model>

the tower. Because the projected MPE is well under 5%, this translator can be considered independently of other RF sources on the tower.

Based upon the information above, it is calculated that the facility will be in compliance with FCC guidelines and is excluded from further Environmental Assessment under 47CFR 1.1306 and 1.1307.

The proposed FM translator along with other users at the site maintain an occupational safety policy and agrees to reduce power or cease operation during periods of maintenance to avoid potentially harmful exposure of personnel to non-ionizing RF radiation.

Respectfully Submitted

A handwritten signature in cursive script that reads "Bert Goldman". The signature is written in black ink and is positioned below the text "Respectfully Submitted".

Bert Goldman

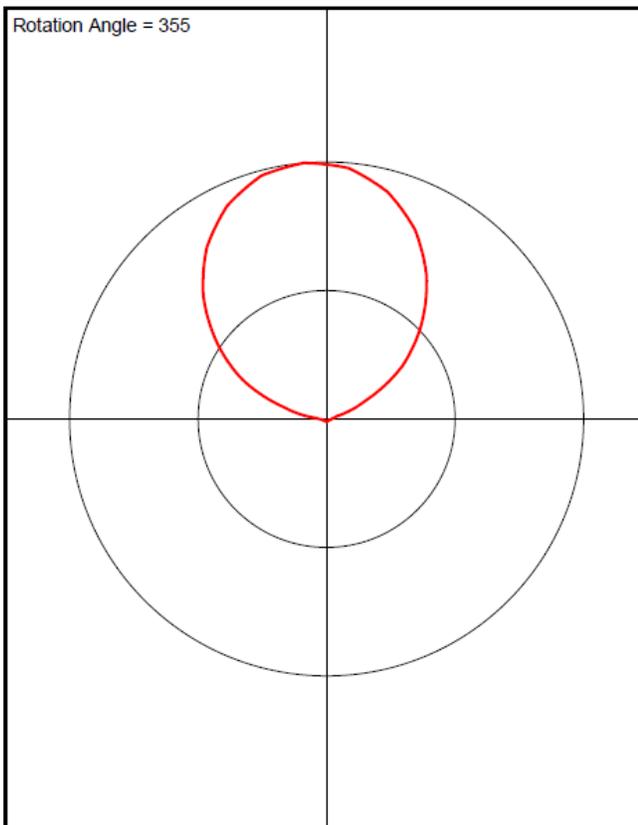
Technical Consultant

EXHIBIT A- ANTENNA PATTERN

W260DQ 259D Antenna Pattern

Pre-Rotation Antenna Pattern...

Azimuth (deg)	Relative Field
0.0	1.0
5.0	0.99
10.0	0.98
15.0	0.9475
20.0	0.915
25.0	0.864
30.0	0.813
35.0	0.7455
40.0	0.678
45.0	0.6
50.0	0.522
55.0	0.441
60.0	0.36
65.0	0.2625
70.0	0.165
75.0	0.1025
80.0	0.04
85.0	0.0305
90.0	0.021
95.0	0.0195
100.0	0.018
105.0	0.0165
110.0	0.015
115.0	0.013
120.0	0.011
125.0	0.0105
130.0	0.01
135.0	0.01
140.0	0.01
145.0	0.01
150.0	0.01
155.0	0.01
160.0	0.01
165.0	0.01
170.0	0.01
175.0	0.01
180.0	0.01
185.0	0.01
190.0	0.01
195.0	0.01
200.0	0.01
205.0	0.01
210.0	0.01
215.0	0.01
220.0	0.01
225.0	0.01
230.0	0.01
235.0	0.0105
240.0	0.011
245.0	0.013
250.0	0.015
255.0	0.015
260.0	0.015
265.0	0.018
270.0	0.021
275.0	0.0305
280.0	0.04
285.0	0.1025
290.0	0.165
295.0	0.2625
300.0	0.36
305.0	0.441
310.0	0.522
315.0	0.6



320.0	0.678
325.0	0.7455
330.0	0.813
335.0	0.864
340.0	0.915
345.0	0.9475
350.0	0.98
355.0	0.99

EXHIBIT B- ALLOCATION STUDY

ComStudy 2.2 search of channel 259 (99.7 MHz Class D) at 41-03-23.2 N, 80-38-43.7 W.

CALL	CITY	ST CHN CL	DIST	SEP	BRNG	CLEARANCE
WGAR-FM	CLEVELAND	OH 258 B	96.50	0.00	291.7	0.72 dB Exhibit C
WGYV	MEADVILLE	PA 262 B	74.93	0.00	31.3	5.26 dB Exhibit C
WSHH	PITTSBURGH	PA 259 B	85.25	0.00	140.5	5.53 dB Exhibit C
W259BW	CANTON	OH 259 D	70.82	0.00	248.7	12.18 dB Exhibit C
WHMJ	FRANKLIN	PA 257 B1	73.78	0.00	54.6	14.09 dB
WXKC	ERIE	PA 260 B	128.49	0.00	26.4	13.71 dB
WWNW	NEW WILMINGTON	PA 205 A	26.45	10.00	76.5	16.5
WNIR	KENT	OH 261 A	59.92	0.00	275.7	16.60 dB
W257EA	BEAVER FALLS	PA 257 D	46.02	0.00	140.2	18.75 dB
W259DC	DUBOIS	PA 259 D	176.00	0.00	88.6	26.19 dB
WTUZ	UHRICHSVILLE	OH 260 A	95.59	0.00	224.3	29.39 dB

(FCC Database as of 9/2/2019)

EXHIBIT C Pertinent Protection Contours, 74.1204(a) Compliance

Proposed W260DQ on 259D, 200 watts, 223m AGL

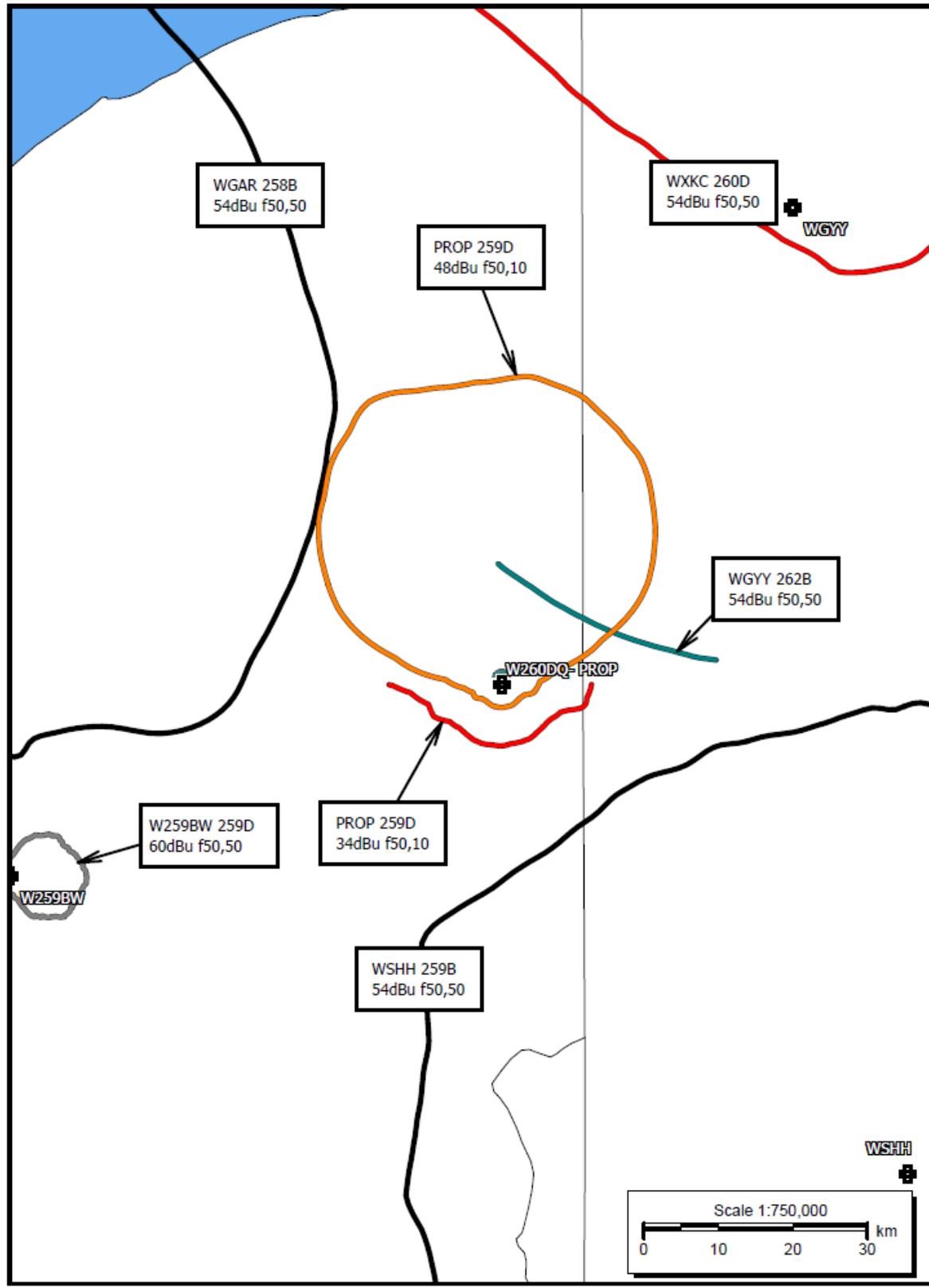


EXHIBIT D- 74.1233 COMPLIANCE

