

**Goldman Engineering Management  
Auburn, CA**

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**MINOR CP MODIFICATION APPLICATION**  
**W236CF, Homewood, IL**

CPMOD to Change Antenna to different model

**TECHNICAL STATEMENT**

This technical statement and attached exhibits have been prepared on behalf of Windy City Broadcasting, LLC (“Windy City”), Permittee of translator station W236CF, Facility ID number 140658. The applicant proposes to modify the W236CF antenna. No other changes are anticipated. This translator will continue to rebroadcast Facility ID 6377, WTMX (FM), Skokie, IL as a fill-in translator in compliance with 47 CFR 74.1203. The translator community of license will remain Chicago, IL.

**Facilities Proposed**

Location (NAD27)	41° 52' 44" N Latitude, 87° 38' 08" W Longitude
Channel	236D (95.1MHz)
Tower Overall AGL Height-	525m
Tower ASR	1032960
Proposed Antenna	Shively Dual 6025 slant
Antenna AGL Height-	432m
Site AMSL Height-	181m
COR AMSL Height	309m
HAAT	613m
ERP	80w DIRECTIONAL (SEE EXHIBIT A)

## Interference Study

ComStudy 2.2 search of channel 236 (95.1 MHz Class D) at 41-52-44.0 N, 87-38-08.0 W.

WLS-FM	CHICAGO	IL 234 B	0.00	0.00	90.0	-79.35 dB *
WEBG	CHICAGO	IL 238 B	0.00	0.00	90.0	-77.69 dB *
W236CF	HOMEWOOD	IL 236 D	28.92	0.00	187.7	-27.74 dB MX to original
WCFS-FM	ELMWOOD PARK	IL 290 B	0.00	15.00	90.0	-15.0 km IF 99w limit
WIIL	UNION GROVE	WI 236 B	77.83	0.00	344.2	2.03 dB
W236CG	BOWLINGBROOK	IL 236 D	37.28	0.00	238.2	4.90 dB
WFAV	KANKAKEE	IL 236 A	89.57	0.00	186.5	1.89 dB
WVUR-FM	VALPARAISO	IN 236 D	67.48	0.00	132.7	3.29 dB
880421MY	KANKAKEE	IL 236 A	89.92	0.00	192.4	7.70 dB
W236BD	MICHIGAN CITY	IN 236 D	72.83	0.00	108.5	10.79 dB
WJHV-LP	FAIRBURY	IL 236 LP100	145.69	24.00	210.6	23.70 dB
WRIT-FM	MILWAUKEE	WI 239 B	136.48	0.00	350.4	24.69 dB
WKTI	MILWAUKEE	WI 233 B	136.46	0.00	350.9	25.74 dB
WAJI	FORT WAYNE	IN 236 B	221.55	0.00	112.1	27.50 dB
WKTI	MILWAUKEE	WI 233 B	136.46	0.00	350.9	27.02 dB
WDZQ	DECATUR	IL 236 B	278.19	0.00	206.4	31.66 dB

\*- Because the proposed translator will be transmitting from the same site there is no location where the translator will be more than 40dB above either WLS-FM or WEBG

### COMPLIANCE, 74.1201(g), 74.1203(d), 74.1233(a)(1), and 74.1204(d)

Exhibit B demonstrates compliance with 74.1201(g) governing the use of a translator as a fill-in for an FM station. The 60dBu contour of the proposed W236CF will be completely contained within the 1mV/m contour of WTMX (FM).

Because the proposed W236CF will be co-located with WLS-FM and WEBG, there will be no location where the signal of W236CF will be in excess of 40dBu above the WLS-FM or WEBG 2<sup>nd</sup> adjacent signals.

As demonstrated in Exhibit B, this application remains compliant with FCC rule 74.1233(a)(1) requiring any minor change of a translator's facilities to continue to provide 1mV/m service to some portion of its previously authorized service area.

Exhibits C demonstrates compliance with 74.1204(a). There are no impermissible contour overlaps to any other facilities.

### **Environmental Exhibit**

The proposed W236CF facility as proposed on channel 236D will utilize a directional antenna located on an existing ASR registered building, (ASR 1032960). The ASR for the tower is attached as Exhibit E. The RF density near the tower was calculated using a 2-level half-wave spaced antenna setting at 80 watts horizontal and vertical and 9m above the roof of the building.

Because the facility will be operating at less than 100 watts ERP, it is believed the impact of the proposed operation should not be considered to be a factor at rooftop level as defined under §1.1307(b)(3), therefore the proposed W236CF operation is categorically excluded from further environmental review under §1.1306 of the FCC rules and regulations.

Respectfully Submitted

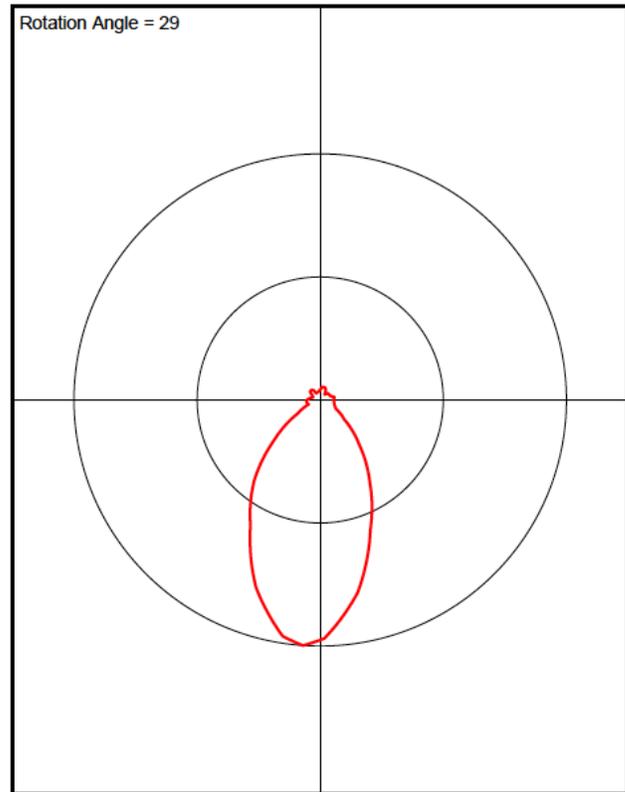


Bert Goldman  
Goldman Engineering Mgmt.  
1511 Radcliffe Way  
Auburn, CA 95603  
(214) 395-5067  
[bert@bgoldman.net](mailto:bert@bgoldman.net)

# EXHIBIT A: Dual Shively 6025 slant

W236CF PROP SHIVELY DUAL 6025  
Pre-Rotation Antenna Pattern....

Azimuth (deg)	Relative Field
0.0	0.046
5.0	0.037
10.0	0.028
15.0	0.035
20.0	0.042
25.0	0.042
30.0	0.042
35.0	0.043
40.0	0.044
45.0	0.0515
50.0	0.059
55.0	0.0565
60.0	0.054
65.0	0.0555
70.0	0.057
75.0	0.059
80.0	0.061
85.0	0.066
90.0	0.071
95.0	0.0985
100.0	0.126
105.0	0.1845
110.0	0.243
115.0	0.317
120.0	0.391
125.0	0.4795
130.0	0.568
135.0	0.6825
140.0	0.797
145.0	0.883
150.0	0.969
155.0	1.0
160.0	0.972
165.0	0.8875
170.0	0.803
175.0	0.6935
180.0	0.584
185.0	0.506
190.0	0.428
195.0	0.337
200.0	0.246
205.0	0.176
210.0	0.106
215.0	0.078
220.0	0.05
225.0	0.053
230.0	0.056
235.0	0.0555
240.0	0.055
245.0	0.049
250.0	0.043
255.0	0.037
260.0	0.031
265.0	0.033
270.0	0.035
275.0	0.0435
280.0	0.052
285.0	0.054
290.0	0.0539
295.0	0.0492
300.0	0.031
305.0	0.0324
310.0	0.0321
315.0	0.0336



320.0	0.0348
325.0	0.0374
330.0	0.0396
335.0	0.0464
340.0	0.0531
345.0	0.052
350.0	0.055
355.0	0.052

EXHIBIT B-

Proposed W236CF, 80 watts, 432m AGL 74.1201(g), 74.1233(a)(1) Compliance

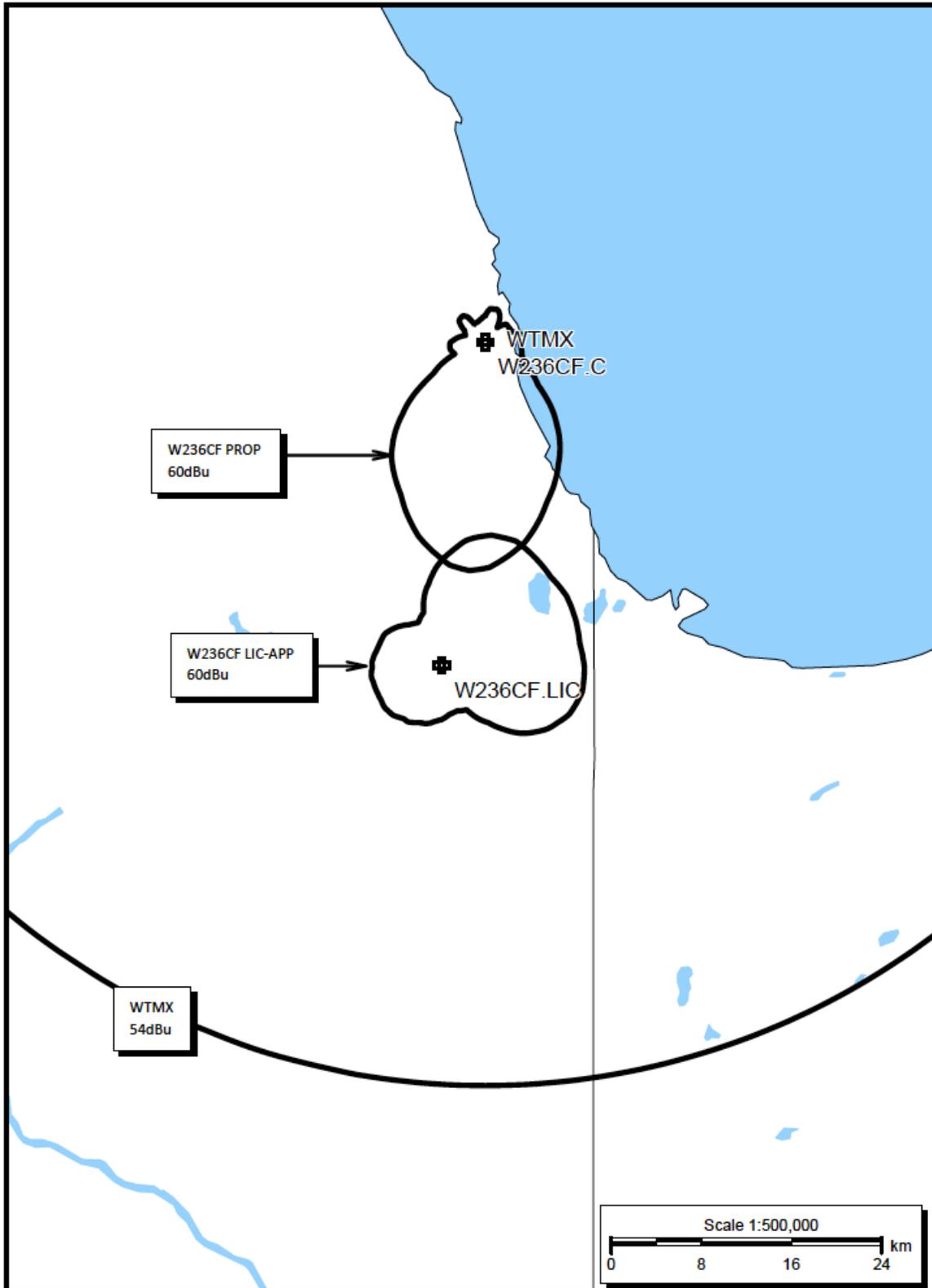


EXHIBIT C- 74.1204(a) Compliance

Proposed W236CF, 80 watts, 432m AGL 74.1204(a) Compliance

