

Engineering Statement  
**PROPOSED DIRECTIONAL ANTENNA SYSTEM - AMENDED**  
prepared for

**Polnet Communications, Ltd.**  
WKTA(AM) Evanston, Illinois  
Facility Id 52909  
1330 kHz 0.052 kW – 5.0 kW DA-2

The instant Engineering Statement was prepared on behalf of *Polnet Communications, Ltd.* (“*Polnet*”). The required FAA notification and Antenna Structure Registration has been completed for the towers specified in *Polnet’s* Application for Construction Permit, file number BP-20050718AFH, as requested in the letter from Son Nguyen dated November 29, 2005. The instant amendment serves to notify the FCC of the Structure Registration numbers, to update the structure heights with recently obtained survey data, and to correct typographical errors also mentioned in the November letter.

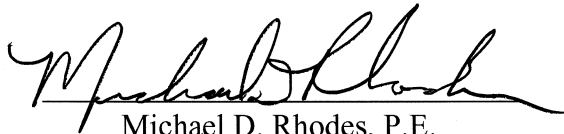
In the course the tower registration process a survey was conducted. The results of this survey revealed that the overall heights of the existing towers were slightly different than previously reported. Specifically, the surveyor determined that three of the existing towers are 161’ (49.1 m) overall height above ground level and the fourth is 162’ (49.4 m). There is no change in height of the radiator above the base insulator for the existing towers and no physical change in the existing towers is proposed herein.

As noted in the Commission’s letter, the physical height of the two new nighttime towers did not agree with the electrical height of the radiating structure. The instant amendment specifies the corrected height of 33.0 m, which corresponds to the 52.6° electrical height specified in the original application. The overall height of the new towers is also corrected to 34.5 m. Since the electrical height of the towers has not changed, the minor corrections do not affect the underlying pattern calculations, allocation studies, or engineering conclusions. Therefore, since the original application was prepared and certified by another engineer, the Preparer’s Certification on Section III has not been changed. For completeness, the pertinent antenna parameters are summarized in **Exhibit 1 - Table I** and **Table IA** and the modified values are highlighted therein in bold type.

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**Certification**

Under the penalty of perjury, the undersigned hereby certifies that the foregoing statement was prepared by him or under his direction and that it is true and correct to the best of his knowledge and belief. Mr. Rhodes holds a Bachelor of Science degree in Electrical Engineering from Virginia Polytechnic Institute and State University and is a registered Professional Engineer in the Commonwealth of Virginia. He is employed as a senior engineer with the firm of Cavell, Mertz & Davis, Inc. He has submitted numerous engineering exhibits to the Federal Communications Commission and his qualifications are a matter of record with that agency.



Michael D. Rhodes, P.E.

June 6, 2006

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Exhibit 1 - Table I  
**PROPOSED DAYTIME**  
**DIRECTIONAL ANTENNA PARAMETERS - AMENDED**  
 prepared for  
**Polnet Communications, Ltd.**  
 WKTA(AM) Evanston, Illinois  
 Facility Id 52909  
 1330 kHz 0.052 kW – 5.0 kW DA-2

Tower Number	Field Ratio	Phase (deg)	Spacing (deg)	Bearing (deg)	Height (deg)
1	1.000	0.0	0.0	0.0	76.9
3	1.000	0.0	187.0	5.0	76.9
4	1.020	-122.5	60.0	100.0	76.9
6	1.000	-124.0	195.0	22.5	76.9

Input Power (kW)	Loop Loss (ohms)	Theoretical		Q Factor (mV/m)	Standard RMS (mV/m)	Augmented RMS (mV/m)
		RMS (mV/m)	RSS (mV/m)			
5.0	1.0	635.7	947.9	21.5	667.9	669.7

Tower Number	Overall Height Above Ground	Height of Radiator	Antenna Structure Registration
1	<b>49.1 m</b>	48.2 m	<b>1253376</b>
3	<b>49.1 m</b>	48.2 m	<b>1253385</b>
4	<b>49.1 m</b>	48.2 m	<b>1253380</b>
6	<b>49.4 m</b>	48.2 m	<b>1253382</b>

**Bold** values are corrections from original application.

Exhibit 1 - Table IA  
**PROPOSED NIGHTTIME**  
**DIRECTIONAL ANTENNA PARAMETERS - AMENDED**  
 prepared for  
**Polnet Communications, Ltd.**  
 WKTA(AM) Evanston, Illinois  
 Facility Id 52909  
 1330 kHz 0.052 kW – 5.0 kW DA-2

Tower Number	Field Ratio	Phase (deg)	Spacing (deg)	Bearing (deg)	Height (deg)
1	1.000	0.0	0.0	0.0	76.9
2	0.600	100.0	93.5	5.0	52.6
3	0.300	200.0	187.0	5.0	76.9
4	0.500	-180.0	60.0	100.0	76.9
5	0.300	-80.0	106.6	39.1	52.6
6	0.150	20.0	195.0	22.5	76.9

Input Power (kW)	Loop Loss (ohms)	Theoretical		Q Factor (mV/m)	Standard RMS (mV/m)
		RMS (mV/m)	RSS (mV/m)		
0.052	1.0	69.7	113.5	10.0	73.9

Tower Number	Overall Height Above Ground	Height of Radiator	Antenna Structure Registration
1	<b>49.1 m</b>	48.2 m	<b>1253376</b>
2	<b>34.5 m</b>	<b>33.0 m</b>	<b>1253736</b>
3	<b>49.1 m</b>	48.2 m	<b>1253385</b>
4	<b>49.1 m</b>	48.2 m	<b>1253380</b>
5	<b>34.5 m</b>	<b>33.0 m</b>	<b>1253738</b>
6	<b>49.4 m</b>	48.2 m	<b>1253382</b>

**Bold** values are corrections from original application.