

DIRECTIONAL ANTENNA PARTIAL PROOF

W S K N

630 Khz DA-1 5 KW

SAN JUAN, PUERTO RICO

AUGUST 2001

G. A. BONET, P. E.

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CERTIFICATION

Guillermo A. Bonet, certify that:

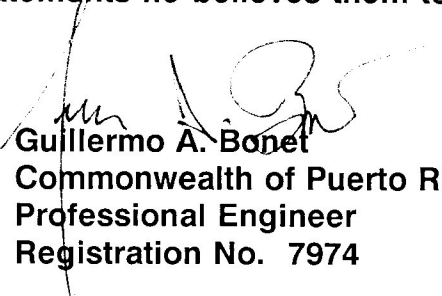
1. He is a graduate Electrical Engineer, and a Registered Professional Engineer in the Commonwealth of Puerto Rico, with offices in Mayagüez, P.R.

2. His qualifications are a matter of record with the Federal Communications Commission.

3. He was retained by Cadena Estereotempo, Inc. , San Juan, Puerto Rico to do a Directional Partial Proof to station WSKN and prepare an engineering report in support of an application for the Stations license (FCC form 302FM) before the Federal Communications Commission

4. He has prepared or caused to be prepared under immediate supervision the engineering report and the related exhibits in support of the application.

5. The foregoing statement and accompanying exhibits are true and correct to the best of his knowledge, excepts as to such statements as are herein stated to be based on information and belief, and such statements he believes them to be true.


Guillermo A. Bonet
Commonwealth of Puerto Rico
Professional Engineer
Registration No. 7974

November 28, 2001
Mayaguez, Puerto Rico

CERTIFICATION

Ivan A. Feliu, certify that:

- 1. He is a graduate Electronic Technician and Technical consultant.**
- 2. His qualifications are the followings:**
 - a. He holds an ADEE degree from the University of Puerto Rico**
 - b. He has more than 15 years of professional experience in Radio, Broadcast and Electronics.**
 - C. He has been working under the supervision of Mr. Guillermo A. Bonet, P. E. For more than 15 years.**
- 3. He assisted Mr. Guillermo A. Bonet in the Directional Antenna Partial Proof field intensity measurements analysis of WSKN.**
- 4. He make the Directional Antenna Partial Proof field intensity measurements to station WSKN.**
- 5. The field intensity data taken are true and correct to the best of his knowledge.**



Ivan A, Feliu

**November 28, 2001
Mayaguez, Puerto Rico**

DIRECTIONAL ANTENNA PARTIAL PROOF

RADIO STATION WSKN

SAN JUAN, PUERTO RICO

ENGINEERING STATEMENT

This report is in support of a Directional Pattern Proof Performance of WSKN as a requirement to comply with the construction permit of Cadena Estereotempo, Stations to verify the effects of the new tower installation on Amelia Site in Guaynabo, P.R. to WSKN Directional Antenna Pattern.

Two Partial Proofs were made one before the new Cadena Estereotempo's tower installation and other after the Cadena Estereotempo's tower installation.

Mr. Jesus Gomez WSKN's Chief Operator was contacted before the measurements to verify the Directional Antenna operating parameters. The operating parameters were found within tolerance.

The measurements were done following the FCC Rules and Regulation procedures.

The obtained data was tabulated for each radial with both informations (see Figures no. 1-8) before and after Cadena Estereotempo, Inc.'s tower installation. Ten points between two and ten miles in 8 radials were analyzed against the January, 1978 original Directional Antenna Proof.

The measurements were analyzed using the log ratio and linear ratio method and as shown in the analyses the WSKN 's Directional Antenna Partial Proof antenna pattern shape was not effected by the installation of the Cadena Estereotempo, Inc.'s tower.

TABULATED
DA PROOF AND PARTIAL PROOF DATA
WSKN / 5 KW
RADIAL 41.5T

1978 ORIGINAL DA PROOF DATA OP = ORIGINAL PROOF				PARTIAL PROOF (1) MADE BEFORE THE SBS TOWER INSTALLATION PP (1) = PARTIAL PROOF (1)					PARTIAL PROOF (2) MADE AFTER THE SBS TOWER INSTALLATION PP (2) = PARTIAL PROOF (2)					MEASUREMENTS ANALYSIS BETWEEN PARTIAL PROOFS (1) AND(2)		MEASURED POINTS COORDINATES
POINT NO.	DISTANCE MILES	DISTANCE KM	OP READINGS MV/M	LOCAL TIME	DATE	PP (1) READINGS MV/M	PP(1) / OP RATIO	PP(1) / OP LOG RATIO	LOCAL TIME	DATE	PP (2) READINGS MV/M	PP(2) / OP RATIO	PP (2) / OP LOG RATIO	PP (2) / PP (1) RATIO	PP (2) / PP (1) LOG RATIO	
11	2.03	3.267	267.0	10:48	000817	300.0	1.1235955	0.05060999	15:11	010405	310.0	1.16104869	0.0648504	1.033333333	0.0142404	PUERTO RICO NAD 27 COORDINATES NORTH LATITUDE WEST LONGITUDE
13	2.18	3.5084	233.0	11:55	000817	230.0	0.9871245	-0.0056281	15:06	010405	228.0	0.97854077	-0.009421	0.99130435	-0.003793	
14	2.43	3.9108	250.0	11:48	000817	250.0	1	0	14:55	010405	250.0	1	0	1	0	
15	2.83	4.5545	235.0	12:24	000817	220.0	0.9361702	-0.0286452	14:43	010405	225.0	0.95744681	-0.018885	1.02272727	0.0097598	
16	2.89	4.6511	188.0	12:32	000817	162.0	0.8617021	-0.0646428	14:40	010405	160.0	0.85106383	-0.070038	0.98765432	-0.005395	
17	2.95	4.7476	172.0	12:40	000817	135.0	0.7848837	-0.1051947	14:36	010405	130.0	0.75581395	-0.121585	0.96296296	-0.01639	
18	3.06	4.9247	293.0	12:54	000817	310.0	1.0580205	0.02449407	14:30	010405	310.0	1.05802048	0.0244941	1	0	
19	3.16	5.0856	268.0	13:06	000817	210.0	0.7835821	-0.1059155	14:26	010405	200.0	0.74626866	-0.127105	0.95238095	-0.021189	182804 / 660534
20	3.20	5.15	228.0	13:11	000817	225.0	0.9868421	-0.0057523	14:18	010405	225.0	0.9868421	-0.005752	1	0	182805 / 660534
21	3.26	5.2465	243.0	13:15	000817	200.0	0.8230453	-0.0845763	14:12	010405	210.0	0.8641975	-0.063387	1.05	0.0211893	182805 / 660533
							0.9344966	-0.0325251				0.93592428	-0.032683	1.00003632	-0.000158	

RATIO AVERAGE OF PP (1) / OP READINGS		0.934496
LOGARITHMIC RATIO AVERAGE OF PP(1) / OP READINGS		0.927844
RATIO AVERAGE OF PP(2)/ OP READINGS		0.9359428
LOGARITHMIC RATIO AVERAGE OF PP(2)/OP READINGS		0.922750658
RATIO AVERAGE OF PP2/PP1 READINGS		1.00003652
LOGARITHMIC RATIO AVERAGE OF PP2/PP1READINGS		0.99963626

FIGURE NO.1
PARTIAL PROOF FIELD INTENSITY MEASUREMENTS AND ANALYSIS DATA STATION WSKN
G. A. BONET, P.E.

TABULATED
DA PROOF AND PARTIAL PROOF DATA
WSKN / 5 KW
RADIAL 100° T

1978 ORIGINAL DA PROOF DATA OP = ORIGINAL PROOF				PARTIAL PROOF (1) MADE BEFORE THE SBS TOWER INSTALLATION PP (1) = PARTIAL PROOF (1)					PARTIAL PROOF (2) MADE AFTER THE SBS TOWER INSTALLATION PP (2) = PARTIAL PROOF (2)					MEASUREMENTS ANALYSIS BETWEEN PARTIAL PROOFS (1) AND(2)	MEASURED POINTS COORDINATES	
POINT NO.	DISTANCE MILES	DISTANCE KM	OP READINGS MV/M	LOCAL TIME	DATE	PP (1) READING MV/M	PP(1) / OP RATIO	PP (1) / OP LOG RATIO	LOCAL TIME	DATE	PP (2) READINGS MV/M	PP(2) / OP RATIO	PP (2) / OP LOG RATIO	PP (2) / PP (1) RATIO	PP (2) / PP (1) LOG RATIO	PUERTO RICO NAD 27 COORDINATES NORTH LATITUDE WEST LONGITUDE
6	3.26	5.2465	180.0	14:07	000817	215.0	1.1944444	0.07716595	12:30	010504	220.0	1.2222222	0.0871502	1.0232558	0.0099842	182350 / 660542
7	3.95	6.357	112.0	16:13	000817	70.0-	0.625	-0.20412	12:15	010504	73.0	0.6517857	-0.185895	1.0428571	0.0182248	182524 / 660356
8	4.30	6.9203	86.0	16:24	000817	95.0	1.1046512	0.04322515	11:56	010504	95.0	1.1046512	0.0432252	1	0	182521 / 660337
9	4.85	7.8054	71.5	16:50	000817	78.8	1.1020979	0.04222018	11:45	010504	80.0	1.1188811	0.0487839	1.0152284	0.0065638	182526 / 660307
10	5.40	8.6906	79.0	17:05	000817	85.0	1.0759494	0.03179183	11:33	010504	85.0	1.0759494	0.0317918	1	0	182511 / 660237
11	5.81	9.3504	64.5	17:10	000817	62.0	0.9612403	-0.017168	11:29	010504	62.0	0.9612403	-0.017168	1	0	182507 / 660215
12	6.22	10.01	59.5	17:26	000817	55.0	0.9243697	-0.0341543	11:21	010504	55.0	0.9243697	-0.034154	1	0	182503 / 660153
13	7.13	11.475	61.5	9:38	000818	60.0	0.9756098	-0.0107239	10:51	010504	62.0	1.0081301	0.0035166	1.0333333	0.0142404	182455 / 660104
14	8.27	13.309	66.5	9:50	000818	61.0	0.9172932	-0.0374918	10:35	010504	60.0	0.9022556	-0.04467	0.9836086	-0.007179	182445 / 660002
15	9.20	14.806	58.0	10:00	000818	56.0	0.9655172	-0.01524	10:19	010504	58.0	1	0	1.0357143	0.01524	182436 / 655912
							0.9846173	-0.0124495				0.9969485	-0.006742	1.0133996	0.0057075	

RATIO AVERAGE OF OP/PP (1) READINGS	0.9846173
LOGARITHMIC RATIO AVERAGE OF PP(1) / OP READINGS	0.9717409
RATIO AVERAGE OF OP(2)/OP READINGS	0.9606427
LOGARITHMIC RATIO AVERAGE OF PP(2)/OP READINGS	0.8994458
RATIO AVERAGE OF PP1/PP2 READINGS	0.9941121
LOGARITHMIC RATIO AVERAGE OF PP1/PP2 READINGS	0.99476729

FIGURE NO.2
PARTIAL PROOF FIELD INTENSITY MEASUREMENTS AND ANALYSIS DATA STATION WSKN
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