United States of America
FEDERAL COMMUNICATIONS COMMISSION

File No. BP-20,451

Call Sign: W T N J

AM BROADCAST STATION CONSTRUCTION PERMIT

1. Permittee:

PROGRESSIVE COMMUNICATIONS, INC.

2. Station location ..... : Ewing, New Jersey

3. Transmitter location ..... : Adj. to Penna. Canal, 0.25 mi. SE of Washington Crossing, Pa.

North Latitude ..... : 40 17 16

West Longitude ..... : 74 52 23

4. Main studio location ..... : Adj. to Penna. Canal, 0.25 mi. SE of Washington Crossing, Pa.

5. Remote control location : ---

Average hours of sunrise and sunset:
Standard Time (Non-Advanced)

Same as present license

6. Transmitter ..... : Type accepted,
(See Section 73.1660, 73.1665 and 73.1670 of the Commission's Rules.)

7. Antenna and ground system : See page 2

8. Obstruction marking and lighting specifications ..... : FCC Form 715, paragraphs: 1-3-12-21

9. Operating Assignment
Frequency ..... : 1300 KHz.
Power - Night ..... : 2.5 kW (directional antenna)
Day ..... : 5 kW (directional antenna)
Hours of Operation ..... : Unlimited

10. Conditions ..... : See page 3

11. Date of required completion of construction: MAY 4, 1980

Subject to the provisions of the Communications Act of 1934, as amended, treaties, and Commission Rules, and further subject to conditions set forth in this permit,1/ authority is hereby granted to construct an AM broadcast station located and described as above.

Equipment and program tests shall be conducted only pursuant to Sections 73.95 and 73.96 of the Commission Rules.

This permit shall be forfeited if the station is not ready for operation within the time specified or within such further time as the Commission may allow unless completion of the station is prevented by causes not under the control of the permittee.

1/ This construction permit consists of this page and page(s) 2 & 3

Dated: MAY 4, 1979

FEDERAL COMMUNICATIONS COMMISSION

FCC Form 351

FCC Form 353
July 1977

File No. BP-20,451 Call Letters W T N J Date 5-4-79

1. DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM DA 2

No. and Type of Elements: Four (4) uniform cross-section, guyed, series excited vertical radiators, top-loaded with 150' sections of top-most guy wires. Theoretical RMS: 284 mV/m, night. Standard RMS: 296 mV/m, night.

Height above Insulators: 300' (142.68°) plus 71.32° of top loading.

Overall Height: 303'

Spacing and Orientation: Towers located at the vertices of a parallelogram, long sides spaced 387.5' (184°) on a line bearing 232.5° True, short sides spaced 189.5' (90°) on a line bearing 312.5° True.

Ground System 120-190' equally spaced copper wire radials plus a 48' by 48' expanded copper ground screen about base of each tower. Intersecting radials shortened and bonded to transverse copper straps between towers.

2. THEORETICAL SPECIFICATIONS

	Tower:	NE#1	SE#2	NW#3	SW#4
Phasing:	Night:	0°	+79°	+164°	+243°
	Day:	0°	+10°	+98°	+108°
Field Ratio:	Night:	1.00	0.90	0.90	0.81
	Day:	1.00	0.90	0.95	0.855

3. The inverse distance field intensity at a distance of one mile from the above antenna in the directions specified shall not exceed the following values:

Daytime			Nighttime		
52.5°T	-	78.4 mV/m	32.5°T	-	30.26 mV/m
212.5	-	64 "	176	-	29.05 "
232.5	-	98.6 "	232.5	-	29.43 "
272.5	-	46.4 "	289.0	-	25.06 "
312.5	-	94.6 "			
338	-	40.0 "			

A monitoring point in each of the above directions in which a field intensity is specified shall be designated with complete detail including a description of the point, directions for proceeding thereto and the field intensity measured at the point after final adjustment of the antenna system in exact accordance with the terms of this authorization and the Rules and Regulations and Standards of Good Engineering Practice Governing Standard Broadcast Stations. The points shall be in the clear so as to permit the taking of unobstructed field intensity measurements and shall be located not less than one mile nor more than four miles from the antenna in the direction specified.

No operation shall occur other than during the experimental period until data has been submitted showing that operation is in accordance with the above specifications and that the field intensity pattern is in substantial agreement with the theoretical pattern specified in the application

F.C.C. - Washington, D. C.

File No. BP-20,451 Call Letters W T N J Date 5-4-79 DA 2

Field Measureing equipment shall be available at all times and, after commencement of operation, the field strength at each of the monitoring points shall be measured at least once every (seven)(~~thirty~~) days and an appropriate record kept of all measurements so made.

A complete non-directional proof of performance, in addition to a complete proof on the (day)(night) directional antenna system, shall be submitted before program tests are authorized. The non-directional and directional field strength measurements must be made under similar environmental conditions.

An antenna monitor of sufficient accuracy and repeatability, and having a manimum resolution of 0.1 degrees pahe and 0.1 percent sample current ratio deviation shall be installed and continuously available to indicate the relavtive phase and magnitude of the sample currents of each element in the array to insure maintenance of the radiated fields within the standard pattern values of radiation.

Upon receipt of operating specifications and before issuance of a license, permittee shall submit the results of observations made daily of the base currents and their ratios, relative phase, sample currents and their ratios, and sample current ratio deviations for each element of the array along with the final amplifier plate voltage and current, the common point current, and the field intensities at each monitoring point for both the nondirectional and directional (nighttime) operations for maintained within the specified tolerances.

Before program tests are authorized, permittee shall submit sufficient current distribution measurement data to establish clearly that the current distribution approximates that of an antenna with an elecrical height of 214^{o}, as proposed.

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