BC-208
June 1980

CP File No. BP-850509AA **File No.** BL-861002AG

SPECS. FOR DIRECTIONAL OPERATION OF WRNA, CHINA GROVE, NORTH CAROLINA

FREQ. 1140 **KHz** **Nominal Power:** 1 Kw, DA-D (250 watts ND, CH) **Date:** 10/6/86

Antenna Input Power: .250 KW CH
1.08 Kw Day **DA-** D

1. DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

No. and Type of Elements: Two(2), uniform cross-section, guyed, steel, vertical radiators. Theoretical RMS= 322.24 mV/m/km. Standard RMS = 338.528 mV/m/km.

Height above Insulators: #1 215.7' (90°), #2 143.8' (60°)

Overall Height: #1 219', #2: 147'

Spacing and Orientation: Using tower #1(West) as a reference, tower #2(East) is spaced 215.7' (90°) on a line bearing of 125° T.

Non-Directional Antenna: Theoretical RMS = 305.78 mV/m/km (critical hours)

Ground System consists of 120-215' equally spaced buried radials about the base of each tower and extending to the property or to intersection with transverse copper strap. In addition 120-50' copper radials are interspersed with the longer radials.

2. THEORETICAL SPECIFICATIONS

	Tower	#1(W)	#2(E)
Phasing:	Day	0°	164°
Field Ratio:	Day	1.00	0.60

3. OPERATING SPECIFICATIONS

Phase Indication*:	Day	0°	163°
Antenna Base Current Ratio:	Day	1.00	0.574
Antenna Monitor Sample Current Ratio:	Day	1.00	0.60

*** As indicated by** Potomac Instruments AM-19(204) Antenna Monitor.

The field strength in mV/m measured at the described monitoring points is not to exceed the following values:

Daytime Operation
45° T = 18.2 mV/m
125° T = 53 mV/m