

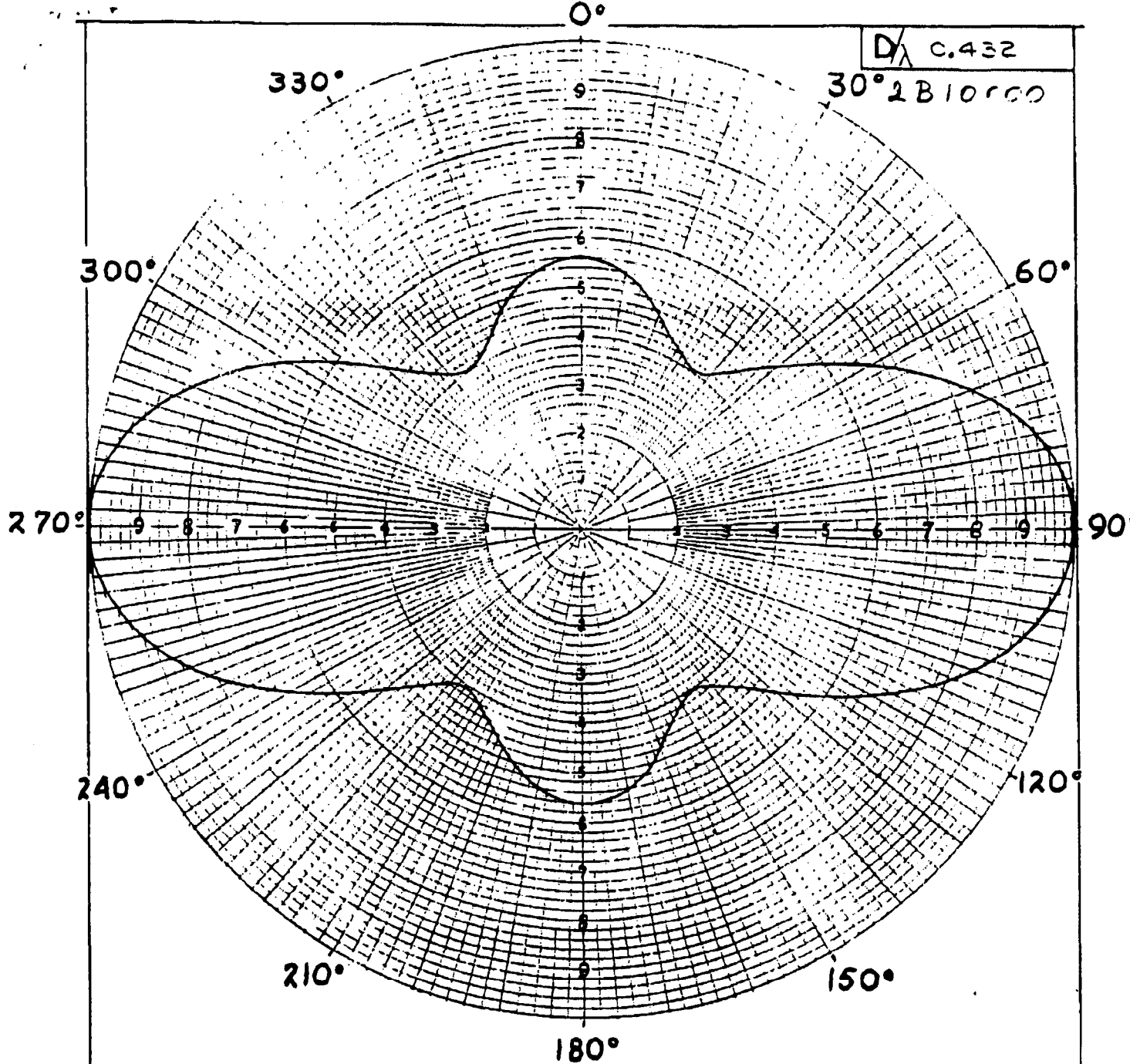
BROADCAST ANTENNA SPECIFICATION SUMMARY

RCAProposal No. #82-309-506 Date March 24, 1982 Revision 1Station WVAH Channel 23 Type TFU-28DAS PeanutCustomer Meridian Corp. Location Charleston, West Virginia

ELECTRICAL SPECIFICATIONS	VALUE	DB	UNITS	REMARKS
Vertical Power Gain: Main Lobe (Same as RMS Gain)	28.0	14.47	Ratio Over Dipole	
Vertical Power Gain at Horizontal	17.0	12.30	"	
Horizontal Gain, Main Lobe	2.31	3.63	Area Ratio	D/λ _____
Directional Gain	64.6	18.10	Ratio Over Dipole	
Circularity		-	± From Avg. Circle	
Peak TV Power Capability (20% Aural)	110		KW	Harness Diameter <u>2.33</u> Inches
Beam Tilt	0.75		Degree(s)	
Vertical Pattern Dwg. No.				#8005186
Horizontal Pattern Dwg. No.				#2810000
Input Line Size and MI No.	8-3/16		Inches	MI-561671
Input Characteristic Impedance	75		Ohms	
Antenna Input Specification	1.05:1.0	Maximum	VSWR	525.25 MHz to 525.75 MHz
(1.08 to 1.0 at 528.83 MHz)	1.1:1.0	Maximum	VSWR	524.5 MHz to 529.5 MHz
	1.2:1.0	Maximum	VSWR	524.0 & 530.0 MHz
MECHANICAL SPECIFICATIONS				
Height with Lightning Protector (H4)	66.1		Feet	
Height Over Tower Top (H2)	62.1		Feet	
Height Center of Radiation (H3)	31.05		Feet	
R ₁ Reaction at Wind Pressure <u>50</u> PSF	2,047		Pounds	
D ₁ (Moment Arm Above Base)	33.1		Feet	
Overturn Moment at Wind Pressure <u>50/33.3</u> PSF	67,756		Foot Pounds	
Weight	3.1		Ton(s)	
Antenna Outer Diameter	9-5/8		Inches	No. of Sections <u>1</u>
Disicer Power (Maximum)	25		KW	@ 460 V - 3φ

Prepared By: WFS W-F. SchachtAntenna Engineering Center
Gibbsboro, New Jersey
Commercial Electronic Systems DivisionApproved By: NN K. Chikodiyah

Form No. 8009499



D/c.432
30° 2B10000

#79

HORIZONTAL GAIN	2.31	
NO. SLOTS	2	
MIN.	- 7.9 db	
	COMPUTED	8-17-60 <i>[Signature]</i>
	MEASURED	
HORIZONTAL PATTERN		DWG NO.
RCA ENGINEERING DEPT.		2B10000

RCA

VERTICAL PATTERN

ANT. TYPE TFU28 DAS

CHANNEL _____ STATION _____

FREQUENCY _____ MHz BEAM TILT 0.75

GAIN _____ Power _____ db

Main Lobe 28.0 14.47

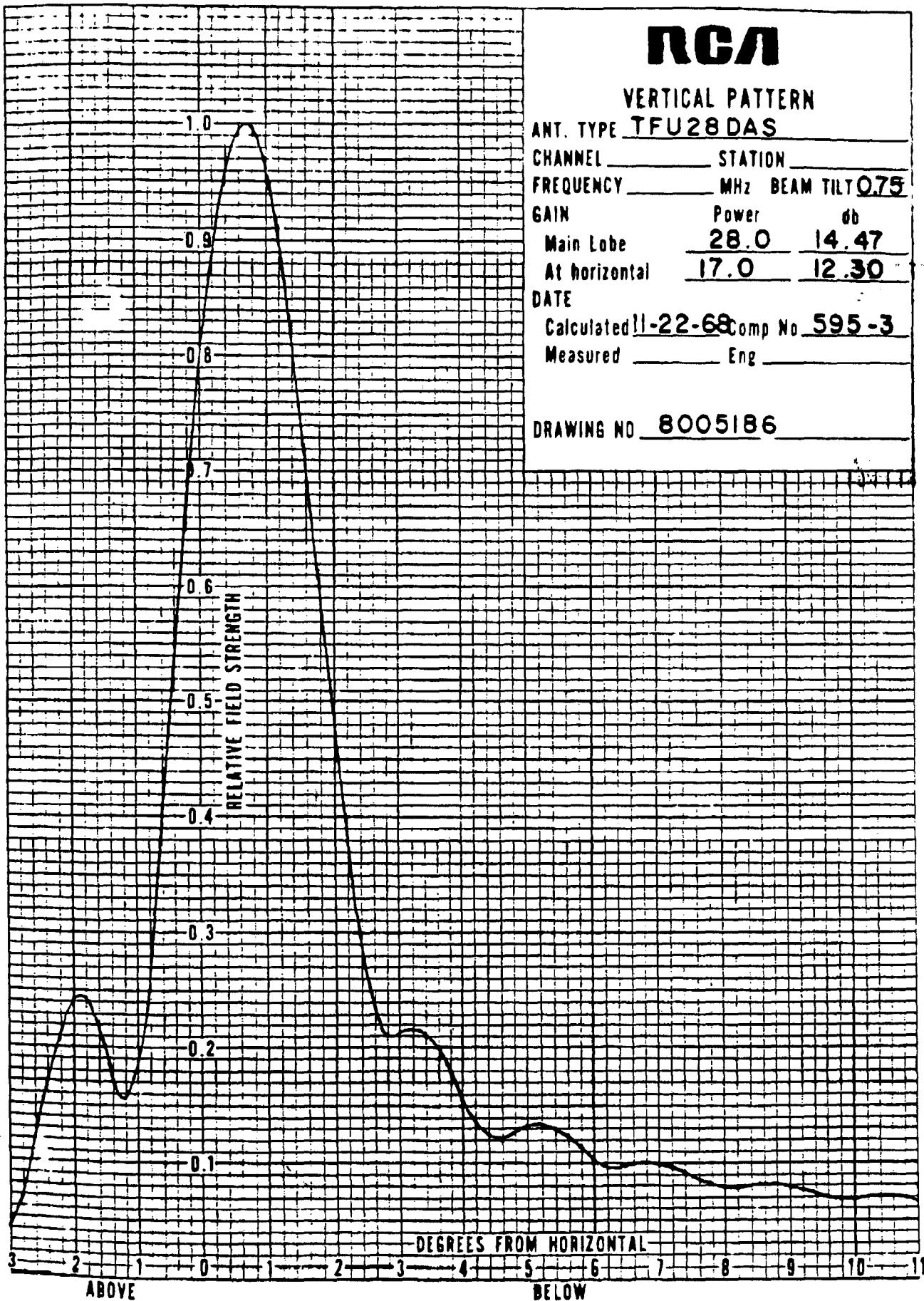
At horizontal 17.0 12.30

DATE

Calculated 11-22-68 Comp No 595-3

Measured _____ Eng _____

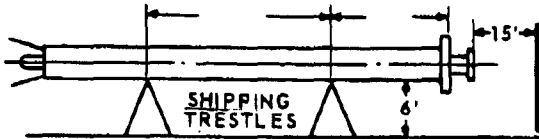
DRAWING NO 8005186



DWG. NO. 8005186

RCA

Proposal No. #82-309-506 Type TFU-28DAS Peanut Date March 25, 1982
 Station WVAH Channel 23 Customer Charleston, West Virginia

GROUND CHECK DATA

Antenna should be located 20' from tower, fences, buildings, etc. A clear area is required for 15' beyond antenna input location for testing.

TRANSMISSION LINE DATA

MI No. _____ Size _____

Hangers Qty. Type

Fixed _____

Vertical Expansion _____

Horizontal Expansion _____

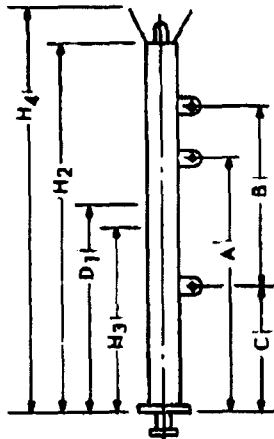
Complex Dwg. No. _____

ERECTING DATA**ANTENNA MUST BE ERECTED IN ONE PIECE****Shackle Pin Diameter**

Unloading 1 inch(es)
 Erecting 1-1/8 inch(es)

H₂ 62.1 ft. (Pole Height)
 H₄ 66.1 ft. (Antenna Height)
 A 38.7 ft. (Erecting Lug)
 B 27.6 ft. (Unloading Lugs)
 C 16.3 ft.

Antenna Weight 3.1 Ton(s)

**DEICER DATA**

Power 25.2 KW
 Voltage 460 V
 Phase 3 ϕ

Line Current DC Line Resistance

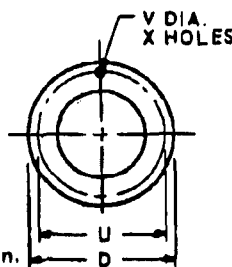
A 31.2 Amps AB _____ Ohms
 B 33.5 Amps BC _____ Ohms
 C 31.2 Amps CA _____ Ohms

Deicer Schematic No. 8044292

NOTE: Power Contactor Not Supplied.

SPECIAL NOTES:**MOUNTING DATA****Flange:**

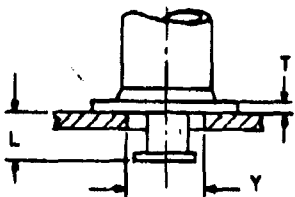
Diameter (D) 17-1/2 in.
 Thickness (T) 2-1/4 in.
 Bolt Circle Diameter (U) 15-1/4 in.
 Bolt Hole Diameter (V) 1-1/4 in.
 Number of Bolt Holes (X) 16
 Tower Top Hole Diameter (Y) 12 in.

**Size of Bolts Supplied:**

Diameter 1-1/8 in.
 Length 6-1/2 in.

Harness Clearance Data:

Diameter (8x8 Tee) in.
 Length Below Antenna (L) _____ ± 3 inches
 Tower Top Installation Dwg. No. 8040020



ADDITIONS

NAME

DATE

712 252 2803