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Washington Square 1050 Connecticut Avenue, N.W.
Washington, D.C. 20036-5339

RECEIVED

FEB 11 1988

Gerald E. Oberst, Jr.
(202) 857-6036

February 11, 1988

Federal Communications Commission
Office of the Secretary

Mr. H. Walker Feaster
Acting Secretary
Federal Communications Commission
1919 M St., N.W.
Washington, D. C. 20554

Attn: Mass Media Bureau
FM Radio Branch

RECEIVED
FEB 16 1988
FM EXAMINERS

Re: Application for License and Program Test
Authority: Station WPLH, Tifton, GA

Dear Mr. Feaster:

Submitted on behalf of the Georgia Public Telecommunications Commission is an original and two copies of an application for license for Station WPLH, Tifton, GA.

Pursuant to Section 73.1620(a)(2), the applicant requests program test authority because the station is authorized for a directional antenna. Antenna proof of performance and a surveyor certificate are submitted in support of this request.

The applicant's construction was authorized in construction permit File No. BPED-850618MD, with a request for extension of time pending in File No. BPED-871202JE. Because the applicant is a noncommercial educational entity, no fee is applicable.

Arent, Fox, Kintner, Plotkin & Kahn

Mr. H. Walker Feaster
February 11, 1988
Page 2

Please direct any questions to the undersigned
counsel for the applicant.

Sincerely,

Gerald E. Oberst, Jr.

Gerald E. Oberst, Jr.

Enclosures

cc: Ms. Rebecca Brown (w/enc.)

FEB 11 1988

FILED-880211KC

APPLICATION FOR NEW BROADCAST STATION LICENSE
(Carefully read instructions before filling out Form
RETURN ONLY FORM TO-FCC)

For Commission Use Only
File No.

SECTION I: General Data

Legal Name of Applicant

orgia Public Telecommunications Commission

Mailing Address

1540 Stewart Ave S W

City

Atlanta

State

GA

ZIP Code

30310

Telephone No.

(Include Area Code)
404-656-5979

1. Facilities authorized by construction permit

This application is for:

☐

Commercial

☒

Noncommercial

☐

AM

☒

FM

☐

TV

Call Letters

Community of License

Construction Permit

Modification of Construction

Expiration Date of last

WPLH

Tifton, Ga.

File No.

BPED-850618 MD

Permit File No(s).

extension pending on
file

Construction Permit

extension pending

2. Is the station now operating pursuant to automatic program test authority in accordance with Section 73.1620 of the Commission's Rules?

☐

YES

☒

NO

If No, explain. Station has directional antenna, is conducting equipment test (73.1610 a)

3. Have all the terms, conditions, and obligations set forth in the above described construction permit been fully met?

☒

YES

☐

NO

If No, state exceptions.

4. Apart from changes already reported, has any cause or circumstance arisen since the grant of the underlying construction permit which would cause any statement or representation contained in the construction permit application to be now incorrect?

☐

YES

☒

NO

If Yes, explain.

THE APPLICANT hereby waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by licensee or otherwise, and requests an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)
THE APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations, and all exhibits are a material part hereof and are incorporated herein.

CERTIFICATION

I certify that the statements in this application are true, complete and correct to the best of my knowledge and belief, and are made in good faith.

Signed and dated this 10 day of February, 1988

GA Public Telecommunications

Name of Applicant Commission

Frank Bugg

Signature

Deputy Director

Title

WILLFUL FALSE STATEMENTS MADE
ON THIS FORM ARE PUNISHABLE
BY FINE AND IMPRISONMENT, U.S.
CODE, TITLE 18, SECTION 1001.

Section II-B

License Application Engineering Data - FM Broadcast

Name of Applicant

Georgia Public Telecommunications Commission

1. Facilities authorized in construction permit

CH216, 91.1MHz**30Kw, 76M. HAAT.**

Call Sign

WPLHFrequency **91.1MHz**

Effective radiated power in kilowatts

Horizontal **30** Horizontal maximum **30**Vertical **30** Vertical maximum **30**

Antenna height above average terrain

Horizontal **76** metersVertical **76** meters

File No. of construction permit

BPED - 850618-MD

2. Station location

State

Georgia

City or Town

Tifton

3. Transmitter location

State

Georgia

County

Tift

City or town

Tifton

Street Address

(or other identification)

**Zion Hope Church Rd.
near Hwy. IIS 41**

4. Main studio location

State

Georgia

County

Fulton

City or town

Atlanta

Street Address

1540 Stewart Ave., SW

Remote Control point location

State

Georgia

City or town

Pelham

Street Address (or other identification)

Hwy. 93, West of Pelham (WABW-TV)

6. Operating constants:

D.C. plate current in last
radio stage, in amperes**1.35**Transmitter power output,
in kW by indirect method**5Kw**Applied D.C. plate voltage of last
radio stage, in volts**4700**RF transmission line meter
reading**100%**

7. Antenna

Antenna make and type No.

Jampro JSLP-6 (DA)

Number of Sections

6

Power gain

6Height in meters of antenna radiation center above ground and mean sea level: **53 meters AGL,****172 meters****AM SL**

Geographical Coordinates of antenna (to nearest second)

North latitude **31 ° 29 ' 30 "**West longitude **83 ° 31 ' 49 "**

Description of antenna supporting structure

Triangular, guyed, steel towerOverall height in meters above
ground of antenna supporting
structure (without obstruction
lighting)**74 M.**

8. Transmission line

Make

Cablewave

Type

HCC-158-50J

Description

Corrugated, copper, 50 ohm, air Dielectric

Size: (nominal inside transverse dimension) in centimeters

39.67

Length in meters

55Rated efficiency in percent for
this length**92.5**

9. Have equipment performance measurements been taken in accordance with Section 73.1590 of the Commission's Rules, demonstrating compliance with the Commission's transmission standards and transmission system requirements, and are these measurements available for submission to the Commission upon request?

If No, explain.

☒ YES☐ NO

10. In what respect, if any, does the apparatus constructed differ from that described in the application for construction permit or in the permit.

Effective radiated power is 27.7Kw horizontal, 23.3Kw vertical max.

I certify that I represent the applicant in the capacity indicated below and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief.

Date February 9, 1988

404-656-3759
Telephone No. (Include Area Code)

John W. Vance
Name (Please Print or Type)

J. W. Vance
Signature (Check appropriate box below)

1540 Stewart Ave., SW
Address (Include ZIP Code)

Atlanta, Georgia 30310

☐ Technical Director

☐ Registered Professional Engineer

☐ Consulting Engineer

☐ Chief Operator

☒ Other (specify)

Director Special Projects

DATE: 11/25/87

CIRCULARLY POLARIZED DIRECTIONAL
FM CP ANTENNA FOR:

ANTENNA H V
GAIN IN (dB) 7.78 7.02

STATION: WPLH-FM
LOCATION: Tifton, GA
MODEL NUMBER: JSLP-6 (DA)
FREQUENCY AND ERP: 91.1 Mhz 30 KW
INPUT POWER FOR ERP: 5 KW
ANTENNA BOOM HEADING: 30 Degrees

HPOL VPOL

CERTIFICATION

RMS OF PATTERN: 0.53 0.46

THIS CERTIFICATION ALONG WITH THE ACCOMPANYING TECHNICAL SPECIFICATION SHEET, ANTENNA MOUNTING SKETCH, AND AZIMUTH AND ELEVATION PATTERNS CERTIFY THE CONSTRUCTION AND MEASUREMENT OF THE JAMPRO FM CP ANTENNA TO THE STATION'S REQUIREMENTS AS MEASURED AT THE JAMPRO ANTENNAS SITE IN SACRAMENTO, CALIFORNIA. THE FOLLOWING IS AN OUTLINE OF CONSTRUCTION METHODS FOLLOWED, PATTERN MEASUREMENTS, INSTALLATION REQUIREMENTS, RECOMMENDED MAINTENANCE AND EQUIPMENT USED.

CONSTRUCTION

A STANDARD CP FM ANTENNA MODEL WAS USED, AND PARASITIC REFLECTORS WERE ADDED TO EACH BAY TO CREATE THE REQUIRED DIRECTIONAL PATTERN. FROM EXPERIENCE AND BY FURTHER MEASUREMENTS THESE ELEMENTS WERE ADJUSTED AS TO POSITION AND LENGTH UNTIL THE FINAL CONFIGURATION WAS DETERMINED AND THE PATTERN REQUIREMENTS WERE MET. THESE ADDITIONAL ELEMENTS ARE STEEL, HOT DIPPED GALVANIZED, AND EITHER BOLTED OR WELDED IN PLACE. MEASUREMENTS TO ESTABLISH THEIR LOCATION EXACTLY ARE SHOWN IN THE ANTENNA MOUNTING SKETCH.

MEASUREMENT

THE FULL SCALE ANTENNA WAS MOUNTED ON AN EXACT DUPLICATE OF ITS FINAL SUPPORT AT THE STATION. WE WERE CAREFUL TO DUPLICATE CONDUITS, CABLES, AND ANYTHING PECULIAR TO THIS MOUNTING. THIS WAS THEN PLACED ON A TURNTABLE AT THE JAMPRO ANTENNA RANGE. THIS DIRECTIONAL ANTENNA WAS USED FOR RECEIVING THE RADIATION FROM A TRANSMITTING ANTENNA THAT IS ELEVATED 25 FEET ABOVE GROUND AND LOCATED AT A DISTANCE OF 7000 FEET. THIS TRANSMITTING ANTENNA IS CAPABLE OF BEING ROTATED TO EITHER HORIZONTAL OR VERTICAL POLARIZATION. THE SIGNAL GENERATOR FREQUENCY WAS ACCURATELY SET TO STATION FREQUENCY BY USE OF A FREQUENCY COUNTER. A SPECTRUM ANALYZER WAS USED TO CONTINUOUSLY MEASURE FIELD STRENGTH AS THE DIRECTIONAL ANTENNA WAS ROTATED. FIELD STRENGTH AT EACH AZIMUTH WAS THEN PLOTTED USING A SCIENTIFIC ATLANTA PLOTTER.

INSTALLATION

THE ANTENNA MUST BE INSTALLED IN EXACTLY THE MANNER IN WHICH IT WAS MEASURED AT THE FACTORY. THIS IS SHOWN IN DETAIL ON THE ANTENNA MOUNTING SKETCH, INCLUDING THE AZIMUTH BEARING OF THE MAIN BOOM OF THE ELEMENTS. THIS BOOM MUST BE VERIFIED BY A SURVEYOR AT THE SITE WHEN INSTALLATION IS BEING COMPLETED. GOOD ENGINEERING PRATICE SHOULD BE FOLLOWED IN ANY DETAILS NOT COVERED BY SPECIFIC INSTRUCTIONS.

MAINTENANCE

ANNUAL OR REGULAR INSPECTION SHOULD BE MADE OF AN ANTENNA SYSTEM. AT THIS TIME TIGHTNESS OF U-BOLTS OR OTHER FASTENINGS SHOULD BE ROUTINELY CHECKED. ANY DETERIORATION OF THE ANTENNA DUE TO LIGHTNING OR OTHER CAUSES SHOULD BE PROMPTLY REPAIRED. OTHER THAN THESE INSTRUCTIONS, AND MAINTAINING THE PATTERN INITIALLY ACHIEVED.

EQUIPMENT

MODEL: 3000 Wavetec Signal Generator, Serial #66479, Calibrated 5/84

8555B H.P. Spectrum Analyzer, Serial #1829AO4558, Calibrated 3/84

Tuned Cavity Dipole

Scientific Atlanta Plotter 1581-4-7-9, Serial #471229, Calibrated 4/83

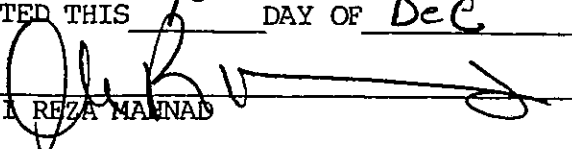
CONCLUSION

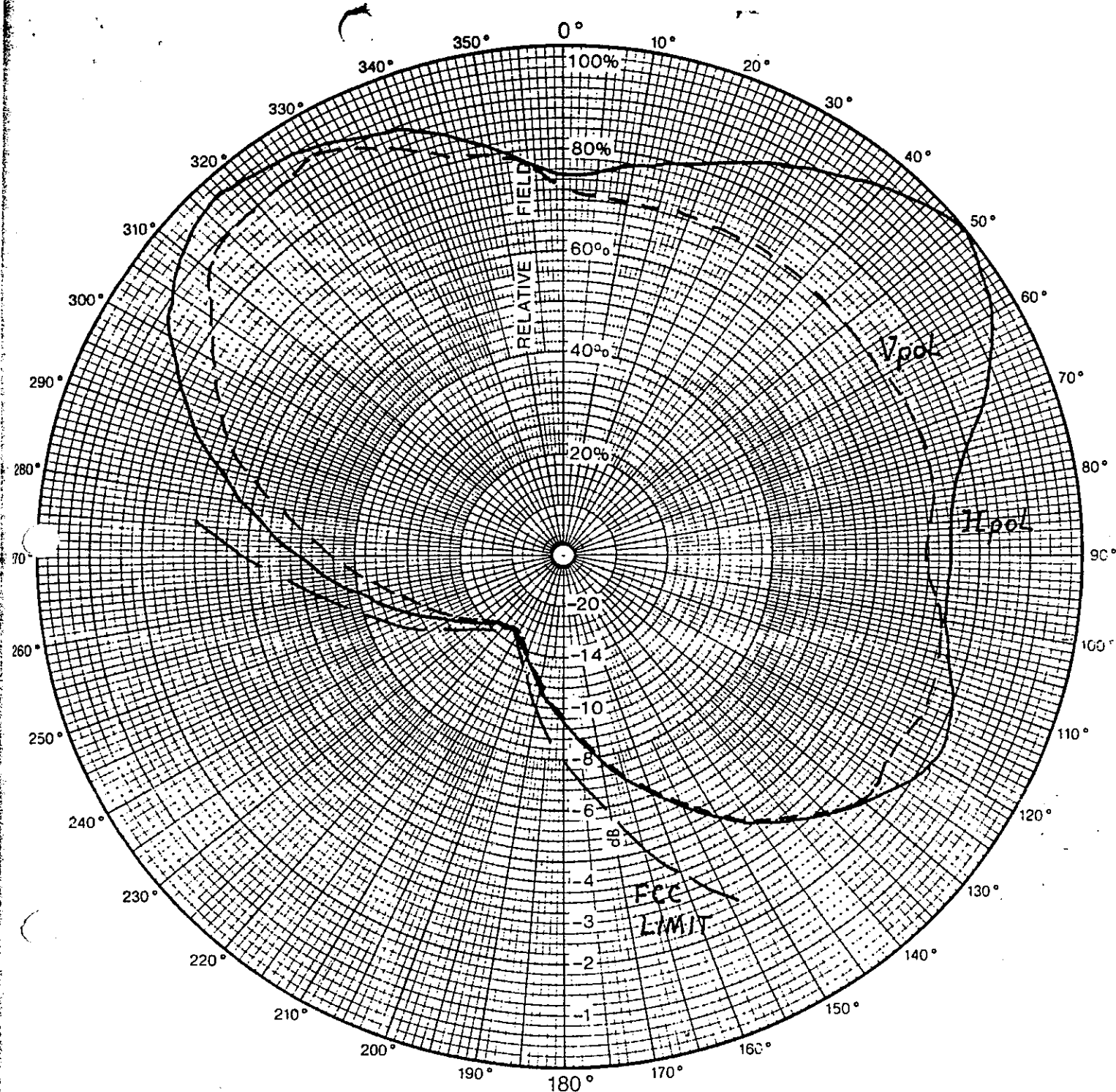
IN THE DEVELOPMENT OF THIS PATTERN JAMPRO ANTENNAS, INC OBSERVED KNOWN REQUIREMENTS OF THE FCC AS STATED ON THE STATION CONSTRUCTION PERMIT. SUCH REQUIREMENTS AS THE MAXIMUM TO MINIMUM RATIO NOT EXCEDDING 15 dB, AND THE RATE OF CHANGE OF RADIATION NOT EXCEDDING .2 PER DEGREE OF AZIMUTH WERE OBSERVED. IN ADDITION, THE RMS OF THE VERTICALLY POLARIZED PATTERN DOES NOT EXCEED THE RMS OF THE HORIZONTALLY POLARIZED PATTERN, AND IF APPLICABLE TO THIS PERMIT, NOWHERE DOES THE VERTICALLY POLARIZED FIELD EXCEED THE HORIZONTALLY POLARIZED FIELD WITHIN THE ACCURACY OF THE CALIBRATED RANGE.

GAIN FIGURES AND REQUIRED INPUT POWER TO ACHIEVE STATION ERP, AS WELL AS OTHER DETAILS, ARE TO BE FOUND ON THE ACCOMPANYING PAGES.

THESE ADJUSTMENTS AND TESTS WERE PERFORMED UNDER THE SUPERVISION OF ALI REZA MAHNAD, DIRECTOR OF ENGINEERING, JAMPRO ANTENNAS, INC.

EXECUTED THIS ^{8th} DAY OF Dec, 19 87

BY 
ALI REZA MAHNAD



Azimuth pattern

Customer	WPLH-FM	Type Number	3802
Date	11/25/87	Frequency	91.1
		Major Lobe Gain	6.0
		RMS Gain	3.0

Notes:



JAMPRO ANTENNAS TABULATION OF AZIMUTH PATTERN

WPLH TIFTON, GA. HPOL

AZIM	REL FIELD	ERP KW	ERP DBK	F.S.FIELD (mv/m)
0	0.750	16.88	+12.27	565.0
10	0.780	18.25	+12.61	587.0
20	0.820	20.17	+13.05	618.0
30	0.880	23.23	+13.66	663.0
40	0.940	26.51	+14.23	708.0
50	1.000	30.00	+14.77	753.0
60	0.950	27.08	+14.33	715.0
70	0.860	22.19	+13.46	648.0
80	0.770	17.79	+12.50	580.0
90	0.750	16.88	+12.27	565.0
100	0.750	16.88	+12.27	565.0
110	0.800	18.25	+12.61	602.0
120	0.820	20.17	+13.05	618.0
130	0.760	17.33	+12.39	572.0
140	0.690	14.18	+11.55	520.0
150	0.600	10.80	+10.33	452.0
160	0.490	7.20	+8.58	369.0
170	0.400	4.80	+6.81	301.0
180	0.320	3.07	+4.87	241.0
190	0.260	2.03	+3.07	195.0
200	0.210	1.32	+1.22	158.0
210	0.180	0.97	-0.12	135.0
220	0.180	0.97	-0.12	135.0
230	0.210	1.32	+1.22	158.0
240	0.260	2.03	+3.07	195.0
250	0.320	3.07	+4.87	241.0
260	0.400	4.80	+6.81	301.0
270	0.500	7.50	+8.75	376.0
280	0.620	11.53	+10.62	487.0
290	0.740	16.43	+12.15	557.0
300	0.860	22.19	+13.46	648.0
310	0.930	25.95	+14.14	700.0
320	0.950	27.08	+14.33	715.0
330	0.930	25.95	+14.14	700.0
340	0.890	23.76	+13.76	670.0
350	0.820	20.17	+13.05	618.0
360	0.750	16.88	+12.27	565.0

DATE: 12-1-87

CALCULATED VALUES AT 45 DEG POINTS:

(45) 0.970 (135) 0.725 (225) 0.195 (315) 0.940

JAMPRO ANTENNAS TABULATION OF AZIMUTH PATTERN

WPLH TIFTON, GA. VPOL

AZIM	REL FIELD	ERP KW	ERP DBK	F.S.FIELD (mv/m)
0	0.730	15.99	+12.04	550.0
10	0.710	15.12	+11.80	535.0
20	0.710	15.12	+11.80	535.0
30	0.710	15.12	+11.80	535.0
40	0.710	15.12	+11.80	535.0
50	0.700	14.70	+11.67	527.0
60	0.710	15.12	+11.80	535.0
70	0.730	15.99	+12.04	550.0
80	0.720	15.55	+11.92	542.0
90	0.700	14.70	+11.67	527.0
100	0.740	16.43	+12.16	557.0
110	0.760	17.33	+12.39	572.0
120	0.740	16.43	+12.16	557.0
130	0.760	17.33	+12.39	572.0
140	0.680	13.87	+11.42	512.0
150	0.600	10.80	+10.33	452.0
160	0.500	7.50	+8.75	376.0
170	0.400	4.80	+6.81	301.0
180	0.320	3.07	+4.87	241.0
190	0.260	2.03	+3.07	195.0
200	0.220	1.45	+1.62	165.0
210	0.180	0.97	-0.12	135.0
220	0.180	0.97	-0.12	135.0
230	0.200	1.20	+0.79	150.0
240	0.240	1.73	+2.38	180.0
250	0.290	2.52	+4.02	218.0
260	0.350	3.67	+5.65	263.0
270	0.440	5.81	+7.64	331.0
280	0.550	9.07	+9.58	414.0
290	0.680	13.87	+11.42	512.0
300	0.750	16.88	+12.27	565.0
310	0.880	23.23	+13.66	663.0
320	0.900	24.30	+13.85	678.0
330	0.910	24.84	+13.95	685.0
340	0.840	21.17	+13.26	633.0
350	0.800	19.20	+12.83	602.0
360	0.730	15.99	+12.04	550.0

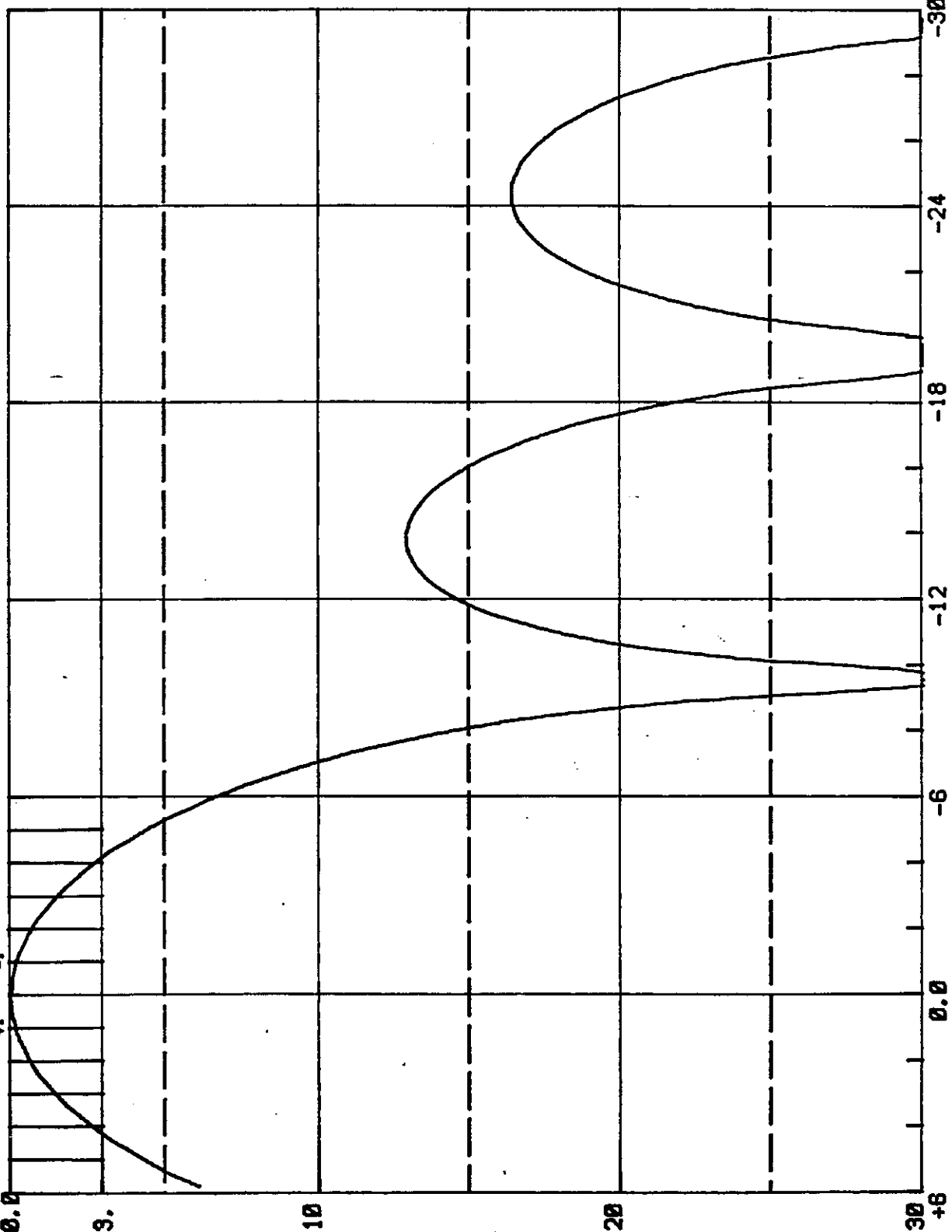
DATE: 12-1-87

CALCULATED VALUES AT 45 DEG POINTS:

(45) 0.705 (135) 0.720 (225) 0.190 (315) 0.890

ELEVATION PATTERN AT ALL AZIMUTH HEADING(S)

(dB)



Station:

.VPLH-FM...

CH./Freq.:

91.1

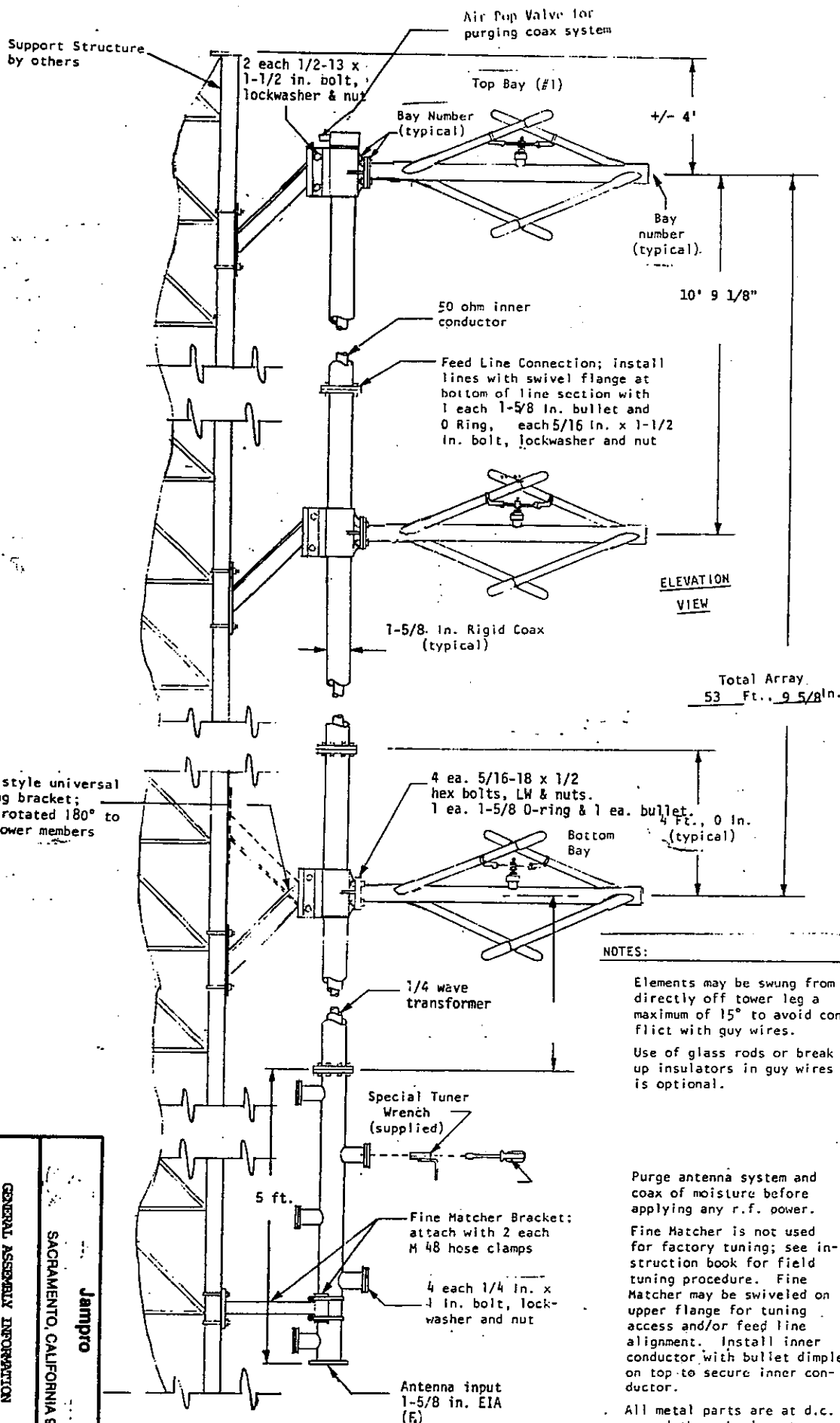
Antenna type:

.JSCP-6....

No. of Bays: 6

Comments:

(DEG.)



NOTES:

Elements may be swung from directly off tower leg a maximum of 15° to avoid conflict with guy wires.

Use of glass rods or break up insulators in guy wires is optional.

Purge antenna system and coax of moisture before applying any r.f. power.

Fine Matcher is not used for factory tuning; see instruction book for field tuning procedure. Fine Matcher may be swiveled on upper flange for tuning access and/or feed line alignment. Install inner conductor with bullet dimple on top to secure inner conductor.

All metal parts are at d.c. ground through element grounding.

GENERAL ASSEMBLY INFORMATION

SACRAMENTO, CALIFORNIA 95828

Jampro

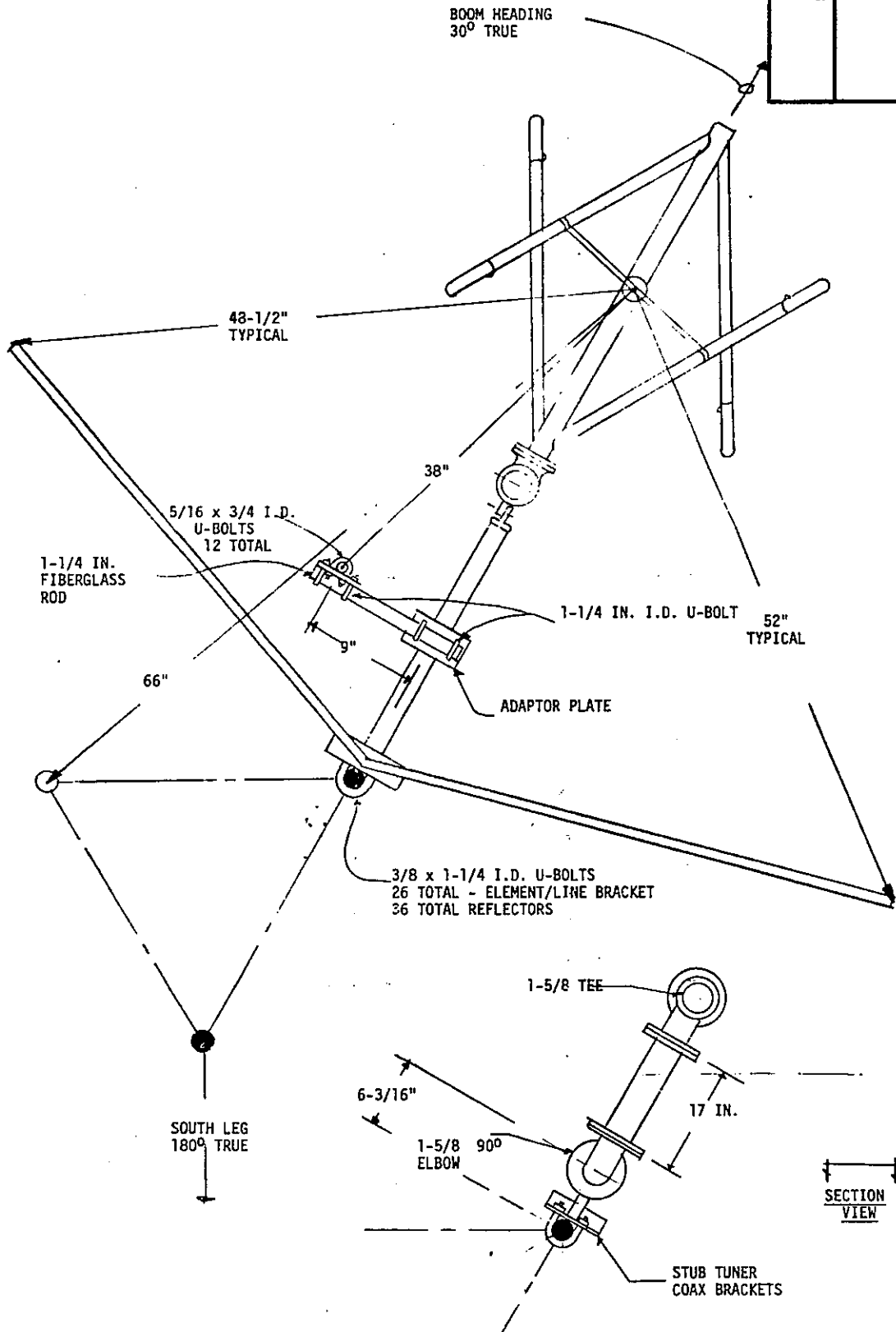
CUSTOMER	WFLH-FM	PROJ. NO.	91.9
LOCATION	TIFFIN, GA	DATE	12-3-8
SCALE	APPROVED BY:	DRAWN BY:	JBO
			FIRST MADE FOR

Jampro

SACRAMENTO, CALIFORNIA 95828

TOP VIEW

CUSTOMER	WPLH-EN	INFO	91.1
LOCATION	TIFTON, GA	PROPOSAL	CALL WPLH
SCALE		APPROVED BY	DATE 12-1-82
DRAWN BY	OLVER	TEST MADE FOR	

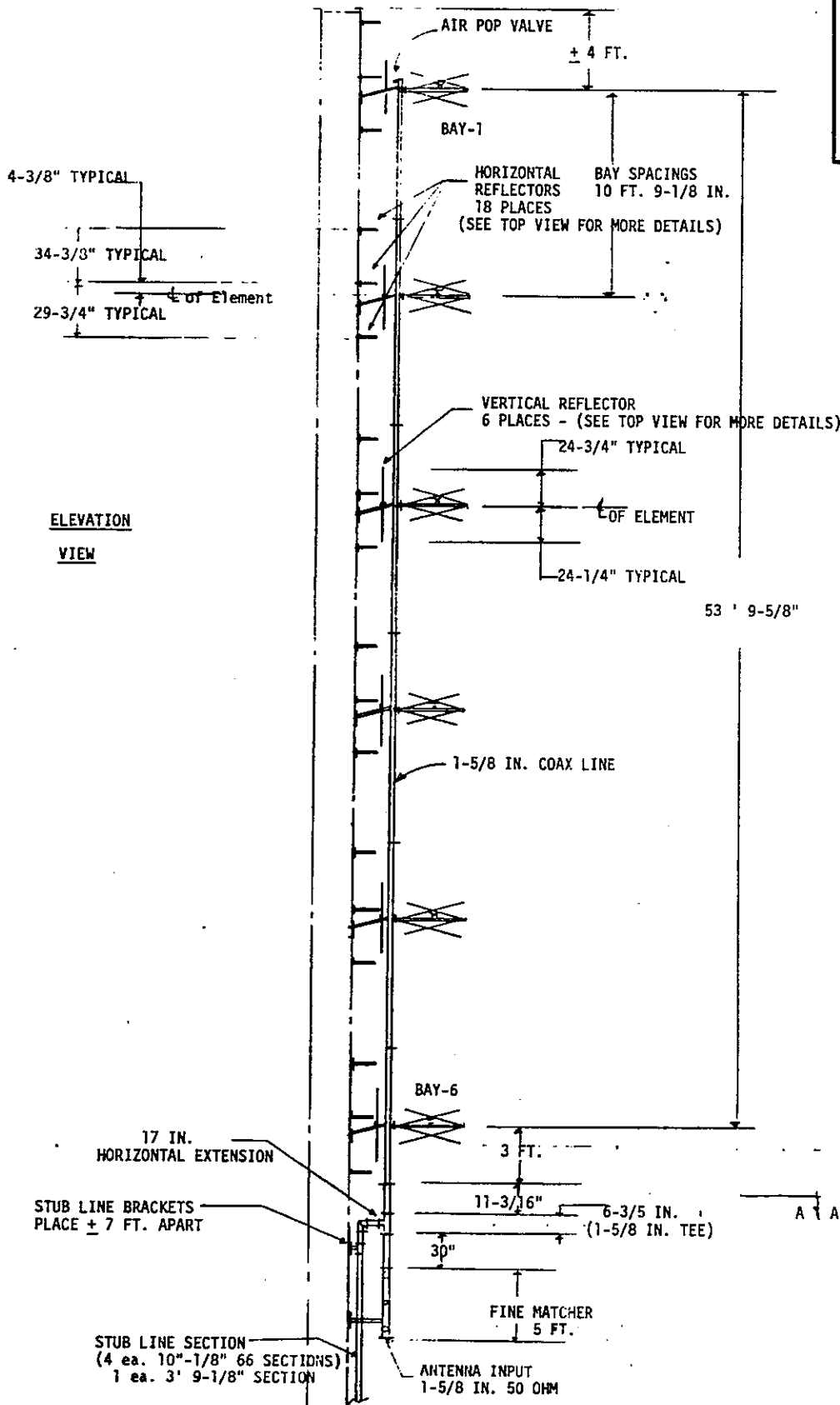


Jampro

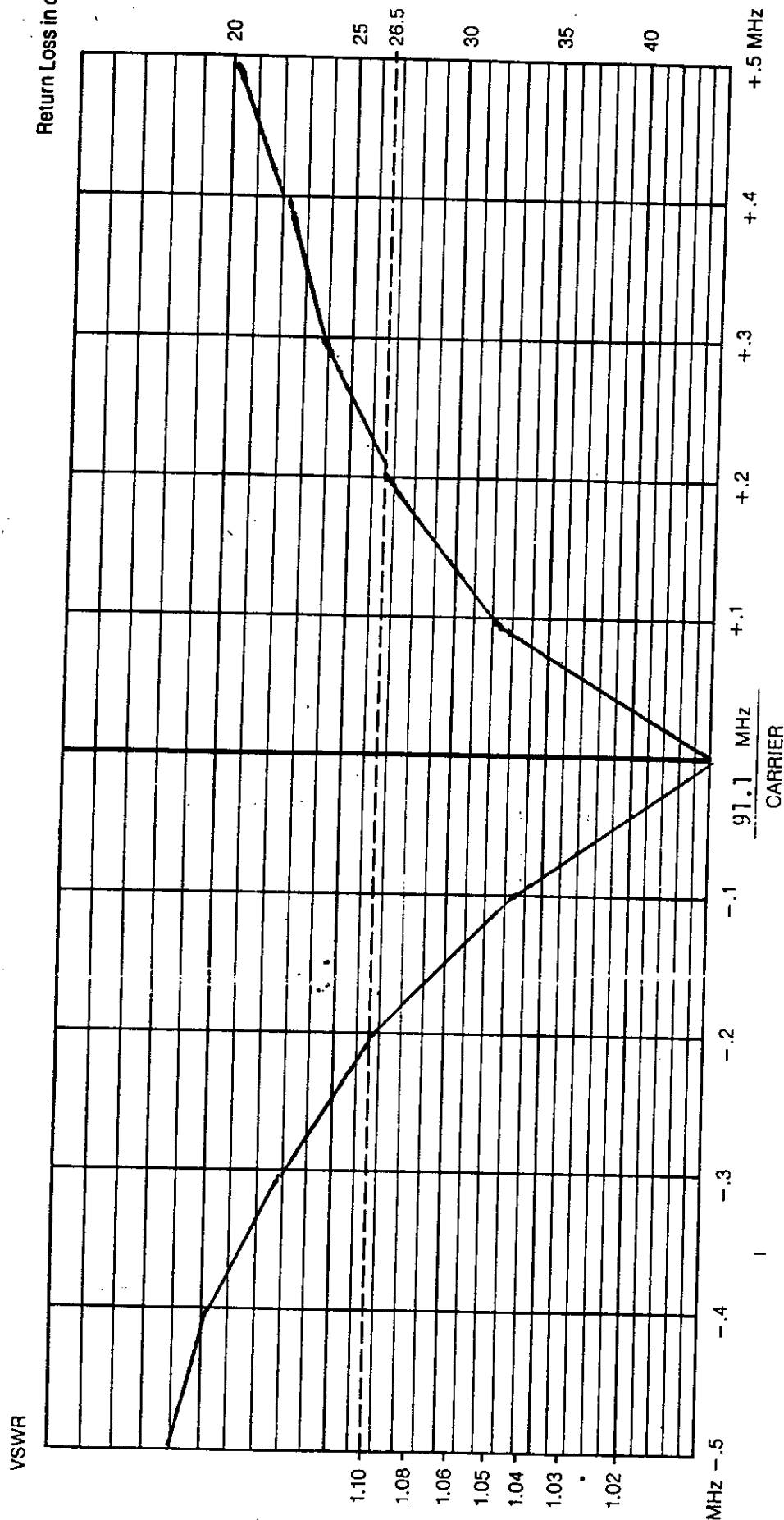
SACRAMENTO, CALIFORNIA 95828

ANTENNA MOUNTING DRAWING

CUSTOMER	NPLH-FM	PROJ. NO.	97.1
LOCATION	TIFFIN, GA	CALL	NPLH
SCALE		APPROVED BY	Part 12-1-87
DRAWN BY	OLVER	DIST. MADE FOR	



Measured VSWR



Customer **WPLH-FM**

Date **12-3-87**

Type Number **3802**

Test Tower _____ Mounting _____

Engineer _____

Test Conditions **COMPLETE ANTENNA MOUNTED ON TEST TOWER**



AMERICOM TOWER SERVICE CORPORATION

LETTER OF CERTIFICATION

Mr. John Vance
Georgia Public TV
1540 Stuart S.W.
Atlanta GA 30310

December 30, 1987
RE:TEL FM Azimuth

REFERENCE: FM ANTENNAE..TIFTON GEORGIA

Dear Mr. Vance:

The Americom tower crew..at the Tifton GA site..mechanically set the FM antennae in line with the University's designated azimuth. The approximate date of the alignment was December 10, 1987.

Cordially,



John Teachman
Pres.

LEROY R. HALL

P. O. BOX 406
CAMILLA, GA. 31730
PHONE 912-336-0700

February 1, 1988

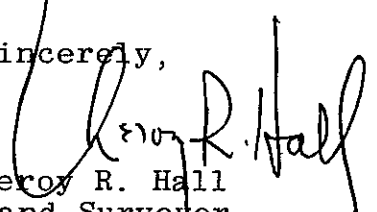
Mr. John Vance
Georgia Public Television
1540 Stuart Ave. SW
Atlanta, Georgia 30310

Dear Mr. Vance:

This letter is a certification that I located two (2) reference points for antenna alignment on the site of WPLH-FM (tower) , Tifton, Georgia, in December of 1987.

The two (2) reference points are approximately two hundred (200) feet from the base of the tower with true azimuths of 30 degrees 00 minutes 00 seconds and 234 degrees 00 minutes 00 seconds. These were determined by solar observations with a Dietzgen Ten Second Theodolite.

Sincerely,



Leroy R. Hall
Land Surveyor

LRH/nw