



Propagation Systems, Inc.

Quality Broadcast Antenna Systems

Directional FM Antenna

KGSF

Calvary Chapel of Twin Falls, Inc.

Green Forest, AR

A modified PSIFMV antenna element was used in conjunction with the customer's 36" triangular face tower to create the necessary directional radiation pattern. The final antenna consists of two vertically polarized radiating elements each secured to the tower with a custom-mounting bracket. The antenna bays are half-wave spaced and are fed from a 1-5/8" rigid inter-bay connection. Each radiating element receives equal power and phase.

Pattern testing was performed using a 1/3 scale model element and tower. The azimuth plane measurements were taken on a ground reflection test range. This type of test range utilizes the reflected signal and direct signal from the source antenna to form an interference pattern on the antenna under test. The antenna and tower under test was mounted to a turntable that allowed the structure to be rotated 360° in the azimuth plane. The source antenna was located approximately 75 ft. from the antenna under test. The source height above ground was adjusted to peak the first lobe of the interference pattern at the antenna under test.

The test antenna was mounted in the center of rotation of the turntable. The antenna and mounting structure were rotated clockwise while data was recorded in a counter clockwise direction. All feed cables to the antenna were secured and grounded during pattern measurements. A Hewlett Packard 8753A-network analyzer operating at 266.1 MHz was used as both the source and receiver. The level of the received signal was compared with a standard dipole to establish the directivity of the final pattern. The final pattern measured does not exceed the envelope pattern and is 90% of the envelope RMS.

The antenna is to be mounted with the center of radiation at 70.1 meters (230 ft) above ground level on the southeast tower face. At this elevation the antenna will be within the allowed +2m/-4m tolerance allowed by the FCC and will have sufficient clearance above the existing antenna mounted below the 220 ft. elevation and below the antennas mounted above the tower top. The antenna will be positioned at 170° True when installed according to the enclosed instructions. It is recommended that a broadcast engineer be present to supervise the installation of the antenna and that he or she certifies the antenna

has been installed according to the enclosed instructions. It is also recommended any metallic guy wire that passes with 25 ft. of any radiating element be replaced with the appropriate non-metallic guy substitute.

An input power level of 1.62 kW will be required at the antenna input in order to reach the licensed 3.55 kW ERP. The transmitter output power requirements are dependent upon the transmission line size and length used to feed the antenna. The final length of transmission line must be determined after installation.

Antenna Specifications

Antenna Model	PSIFMV-2-HWS-DA
Type	2-bay directional FM antenna
Bay Spacing	half wave spaced elements
Frequency	88.7 MHz
Polarization	Vertical
Envelope RMS	.824
Measured RMS	.740
Gain	2.19 (3.4 dB)
ERP	3.55 kW (5.50 dBk)
Input Power	1.62 kW
Input Type	1-5/8" EIA end fed
Power Rating	6 kW
Length	17.8 ft.
Weight	160.2 lbs.
Wind Area	14.97 sq. ft.

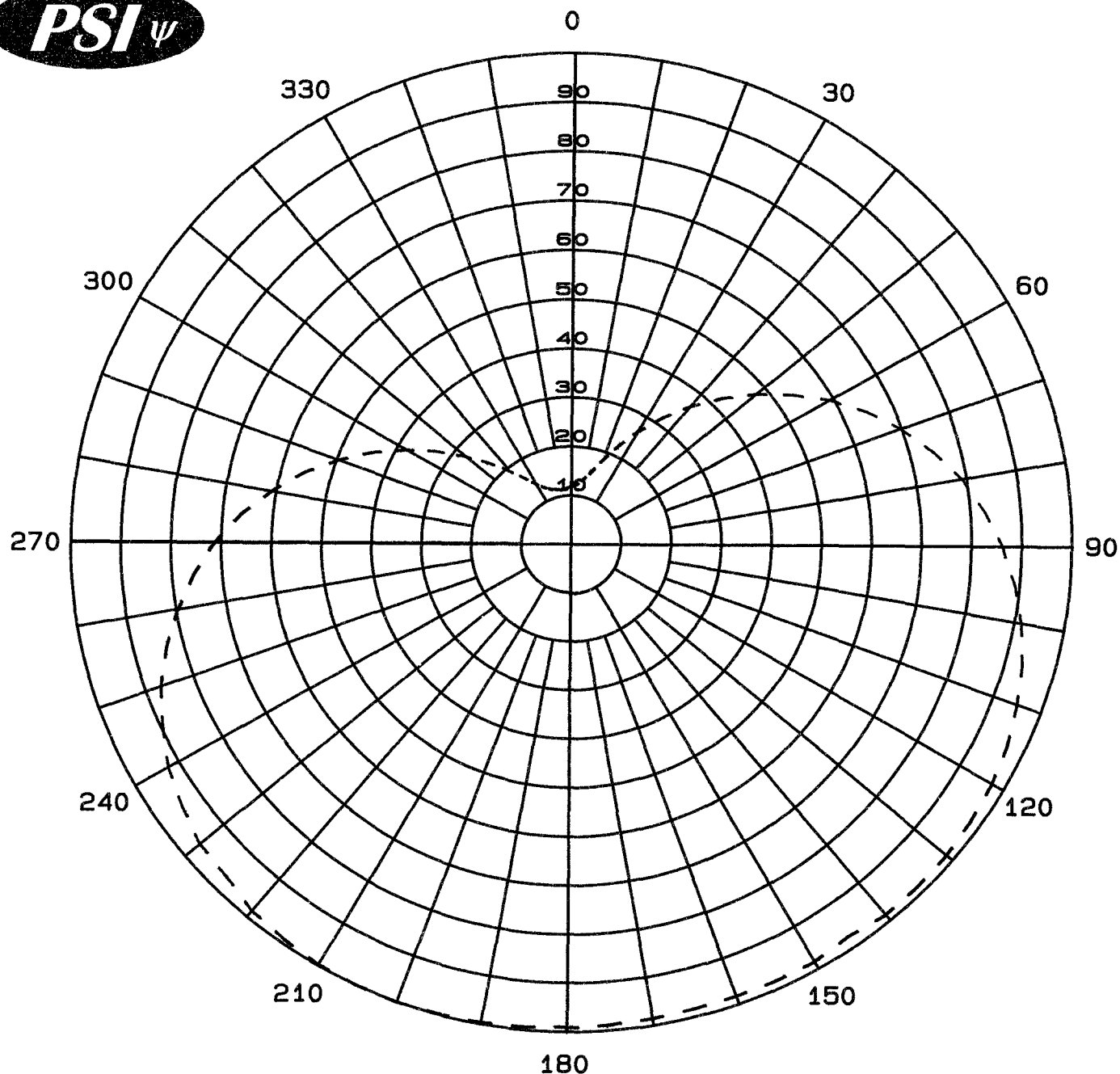
Statement of Certification

This is to certify the antenna has been designed, fabricated and tested under my supervision and it meets the required envelope pattern limitations set forth in the stations construction permit.



3/5/08

Douglas A. Ross
President
Propagation Systems Inc.



Measured Relative Field
Azimuth Plane Pattern
Antenna: PSIFMV-2-HWS-DA
Type: 2-Bay FM Directional Antenna
Polarization: Vertical
Peak Gain: 2.19 (3.40 dB)
Frequency: 88.7 MHz
Station: KGSF

Propagation Systems Inc.
PO Box 113
Ebensburg, PA 15931

Green Forest, AR

Measured Relative Field Tabulation

Antenna: PSIFMV-2-HWS-DA

Station: KGSF

Frequency: 88.7 MHz

Location: Green Forest, AR

Vertical Component Measured Relative Field

Angle	Relative Field	Power Gain	Gain dB
0	0.117	0.03	-15.23
10	0.135	0.04	-13.99
20	0.184	0.07	-11.30
30	0.267	0.16	-8.07
40	0.368	0.30	-5.28
50	0.481	0.51	-2.95
60	0.595	0.78	-1.11
70	0.701	1.08	0.32
80	0.792	1.37	1.38
90	0.861	1.62	2.10
100	0.915	1.83	2.63
110	0.951	1.98	2.97
120	0.974	2.08	3.18
130	0.984	2.12	3.26
140	0.985	2.12	3.27
150	0.983	2.12	3.26
160	0.982	2.11	3.25
170	0.984	2.12	3.26
180	0.990	2.15	3.32
190	0.996	2.17	3.37
200	1.000	2.19	3.40
210	0.996	2.17	3.37
220	0.983	2.12	3.26
230	0.961	2.02	3.06
240	0.924	1.87	2.72
250	0.869	1.65	2.18
260	0.797	1.39	1.43
270	0.713	1.11	0.47
280	0.608	0.81	-0.92
290	0.497	0.54	-2.67
300	0.384	0.32	-4.91
310	0.280	0.17	-7.65
320	0.197	0.08	-10.71
330	0.142	0.04	-13.55
340	0.119	0.03	-15.08
350	0.112	0.03	-15.61

Maximum Field (V-pol)

Field 1.00

Gain 2.19 (3.40 dB)

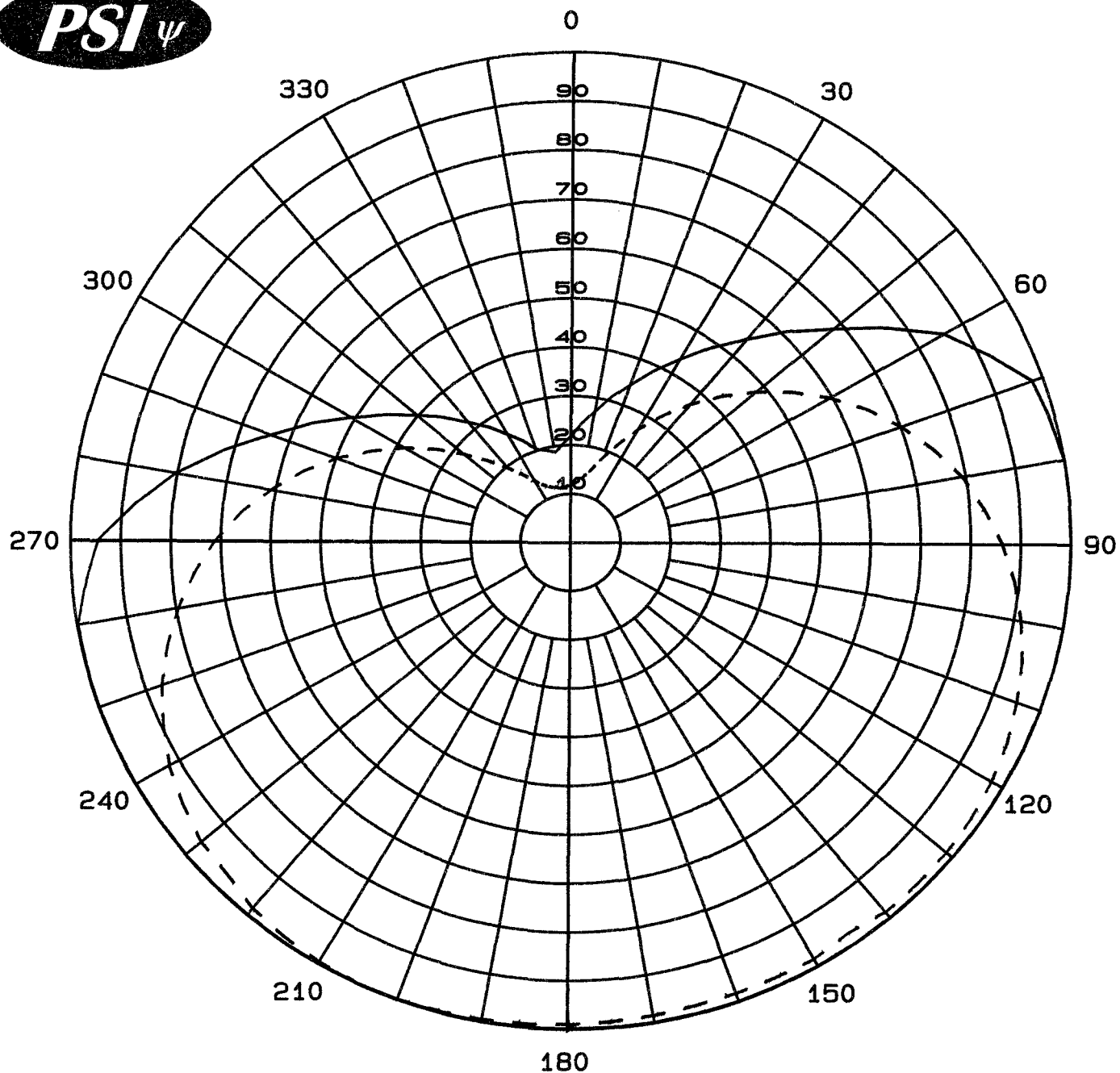
Azimuth Bearing 200-205 degrees

Minimum Field (V-pol)

Field 0.112

Gain .03 (-15.61 dB)

Azimuth Bearing 350 degrees



Maximum Envelope and
Measured Pattern
Antenna: PSIFMV-2-HWS-DA
Type: 2-Bay FM Directional Antenna
Polarization: Vertical
Peak ERP: 3.55 kW (5.50 dBk)
Frequency: 88.7 MHz
Station: KGSF

Propagation Systems Inc.
PO Box 113
Ebensburg, PA 15931

Green Forest, AR

ERP Tabulation

Antenna: PSIFMV-2-HWS-DA

Station: KGSF

Frequency: 88.7 MHz

Location: Green Forest, AR

Maximum ERP: 3.55 kW

Vertical Component

Angle	Relative Field	ERP kW	ERP dBk
0	0.117	0.05	-13.13
10	0.135	0.06	-11.89
20	0.184	0.12	-9.20
30	0.267	0.25	-5.97
40	0.368	0.48	-3.18
50	0.481	0.82	-0.85
60	0.595	1.26	0.99
70	0.701	1.74	2.42
80	0.792	2.23	3.48
90	0.861	2.63	4.20
100	0.915	2.97	4.73
110	0.951	3.21	5.07
120	0.974	3.37	5.27
130	0.984	3.44	5.36
140	0.985	3.44	5.37
150	0.983	3.43	5.35
160	0.982	3.42	5.34
170	0.984	3.44	5.36
180	0.990	3.48	5.41
190	0.996	3.52	5.47
200	1.000	3.55	5.50
210	0.996	3.52	5.47
220	0.983	3.43	5.35
230	0.961	3.28	5.16
240	0.924	3.03	4.82
250	0.869	2.68	4.28
260	0.797	2.25	3.53
270	0.713	1.80	2.56
280	0.608	1.31	1.18
290	0.497	0.88	-0.57
300	0.384	0.52	-2.81
310	0.280	0.28	-5.55
320	0.197	0.14	-8.61
330	0.142	0.07	-11.45
340	0.119	0.05	-12.99
350	0.112	0.04	-13.51

Maximum ERP (V-pol)

Field 1.00

ERP 3.55 kW (5.50 dBk)

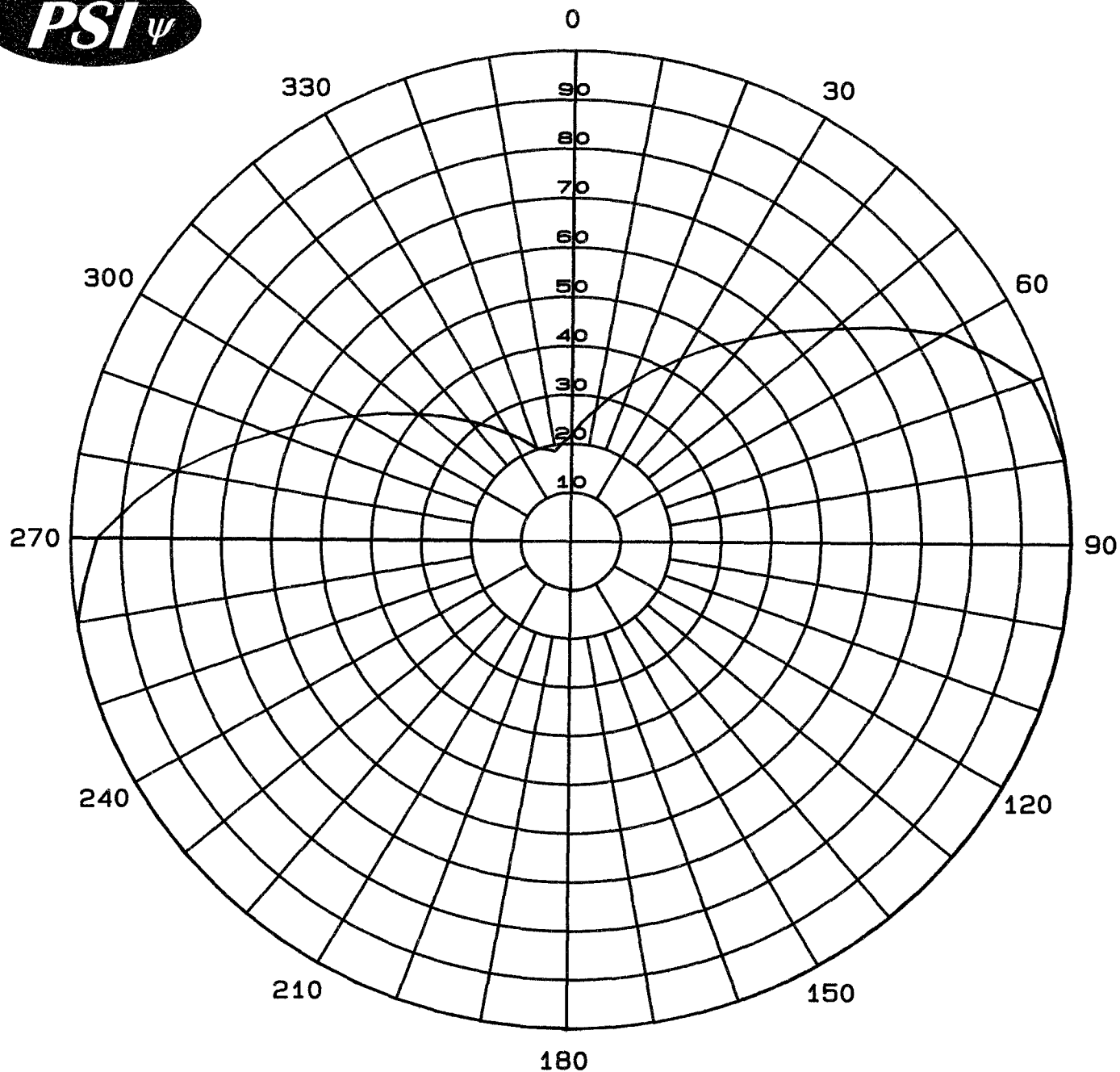
Azimuth Bearing 200-205 degrees

Minimum ERP

Field 0.112

ERP .04 kW (-13.51 dBk)

Azimuth Bearing 350 degrees



Maximum Envelope
Azimuth Plane Pattern
Antenna: PSIFMV-2-HWS-DA
Type: 2-Bay FM Directional Antenna
Polarization: Vertical
Peak ERP: 3.55 kW (5.50 dBk)
Frequency: 88.7 MHz
Station: KGSF

Propagation Systems Inc.
PO Box 113
Ebensburg, PA 15931

Green Forest, AR

Envelope Pattern

Antenna: PSIFMV-2-HWS-DA

Station: KGSF

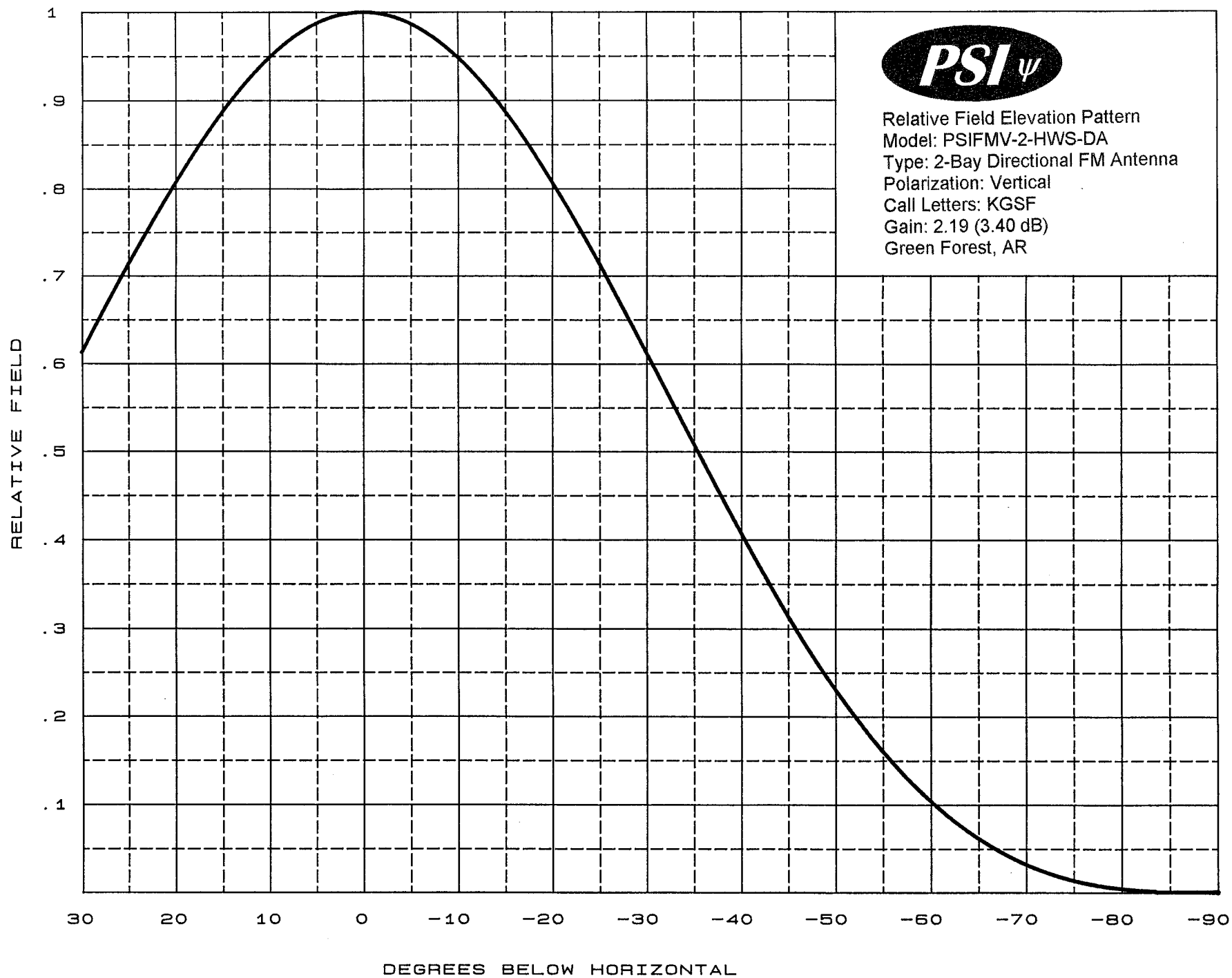
Frequency: 88.7 MHz

Location: Green Forest, AR

Maximum ERP: 3.55 kW (5.50 dBk)

Vertical Component

Angle	Relative Field	ERP kW	ERP dBk
0	0.216	0.17	-7.81
10	0.271	0.26	-5.84
20	0.341	0.41	-3.84
30	0.430	0.66	-1.83
40	0.541	1.04	0.17
50	0.680	1.64	2.15
60	0.857	2.61	4.16
70	0.978	3.40	5.31
80	1.000	3.55	5.50
90	1.000	3.55	5.50
100	1.000	3.55	5.50
110	1.000	3.55	5.50
120	1.000	3.55	5.50
130	1.000	3.55	5.50
140	1.000	3.55	5.50
150	1.000	3.55	5.50
160	1.000	3.55	5.50
170	1.000	3.55	5.50
180	1.000	3.55	5.50
190	1.000	3.55	5.50
200	1.000	3.55	5.50
210	1.000	3.55	5.50
220	1.000	3.55	5.50
230	1.000	3.55	5.50
240	1.000	3.55	5.50
250	1.000	3.55	5.50
260	1.000	3.55	5.50
270	0.946	3.18	5.02
280	0.800	2.27	3.56
290	0.635	1.43	1.56
300	0.505	0.91	-0.43
310	0.401	0.57	-2.43
320	0.319	0.36	-4.42
330	0.253	0.23	-6.44
340	0.201	0.14	-8.43
350	0.185	0.12	-9.15



INSTRUCTION MANUAL

Calvary Chapel of Twin Falls, Inc.

KGSF

88.7 MHz

Antenna Model: PSIFMV-2-HWS-DA

Uncrating

When uncrating the antenna system, open each crate carefully so that the crates may be used to return any merchandise that may have been damaged in shipping. Separate all parts and confirm that all items on the packing list have been received. If any parts are missing, notify PSI or it's agent prior to assembling the antenna. If any parts are damaged through shipment or are missing, promptly notify the shipping carrier and PSI.

General Notes:

1. Review antenna elevation and plan the installation. The antenna brackets are for tower face mount only. The antenna is to be mounted on the south/east tower face positioned 170 degrees true. Be aware of possible mounting conflicts such as other antennas, guy wires, tower leg flanges, conduits etc. and plan accordingly.
2. All bays are to be aligned to the same azimuth angle.
3. Use only the supplied hardware and O-ring at all 1-5/8" flange connections.
4. Exercise care when assembling the inner conductors of the coaxial line. The bullet should fit firmly in the inner conductor in order to assure a proper connection.
5. Check a bracket on the tower for proper fit.
6. Install one bay/inter-bay assembly at a time.
7. Keep all transmission lines free from dirt and moisture. All Teflon insulators must be clean and dry.
8. The antenna must be pressurized with dry air or nitrogen.
9. The antenna has been tuned at the factory and should not require field adjustment. However a fine matcher has been supplied and if the antenna requires tuning, consult the factory before adjustments are made.
10. The antenna system should be tested before the erector leaves the premises to insure that the complete antenna system is functioning properly.

Installation Procedure

Step One

The antenna must be installed one bay/inter-bay assembly at a time. Starting with bay 1, attach the bay mounting brackets to the antenna balun mounting plate using the supplied 3/8-16 x 1" galvanized hex head bolts and nuts. See drawing J108FM-662-018 for the correct positioning of each bay input flange. The feed flange for bay one is down and the feed flange for bay two is up. The drain holes in the feed point radomes must be positioned down for each bay.

Next attach inter-bay one block to bay one feed flange using the supplied 5/16-18 x 7/8" hardware and O-ring. Inter-bay one and the end cap have been pre-assembled at the factory. Attach an inter-bay bracket at approximately the mid point of inter-bay one using the supplied hose clamps. The first bay/inter-bay assembly is now ready to be installed on the tower. **The inter-bay inner conductor is not captivated. Take precautions to secure all inner conductors during erection.** Carefully hoist the first bay/inter-bay assembly to the correct location on the tower and secure the brackets to the south/west tower leg using the 3/8-16 x 2-15/16" ID U-bolts, nuts and locks. Next attach the vertical support pipe to the bay bracket so that the end of the

pipe is at the same elevation as the shorting stub. Secure the support pipe to the northeast tower leg with the standoff bracket. Attach standoff brackets directly above and below the bay-mounting bracket. Adjust the standoff bracket for the correct bay orientation. See drawing J108FM-662-019 for an overview.

Step Two

Follow the same procedure with bay 2. Inter-bay 2 is a short section that has been pre-attached to the fine matcher. Attach the bay brackets and then the element to the inter-bay block. Attach an inter-bay bracket at the base of the fine matcher using the supplied hose clamps. Hoist bay 2 and inter-bay assembly and connect with inter-bay 1 using the supplied 5/16-18 x 7/8" bolts, locks and O-ring. Secure the bay brackets to the tower face and support pipe. Attach standoff brackets directly above and below the bay-mounting bracket. Position the final standoff near the bottom inter-bay support bracket. See drawing J108FM-662-020 for an overview.

Step Three

Check all bolted connections for tightness. Connect the main transmission line to the antenna input located at the tuner base. Do not allow the weight of the feed line to be supported by the antenna. Pressurize the antenna system to a maximum of 5 lbs. with dry air or nitrogen. The antenna system should be tested before the erector leaves the premises to insure that the complete antenna system is functioning properly. The antenna has been tested at the factory and the tuner has been adjusted for optimum match conditions, see attached test data. If the antenna-input match (VSWR) is greater than a 1.1:1, confirm the antenna was installed properly. If the VSWR is greater than 1.15:1 contact the factory for instructions before applying power to the antenna. If the VSWR is greater than 1.1:1 but less than 1.15:1 the tuner can be adjusted, using the appropriate test equipment, for minimum reflected power.

Drawing Index

<u>Drawing</u>	<u>Title</u>
J108FM-662-001	Antenna Elevation
J108FM-662-002B	Antenna Orientation
J108FM-662-018	Element/Bay Bracket Assembly
J108FM-662-019	Bay 1 Assembly and Elevation
J108FM-662-020	Bay 2 Assembly and Elevation
J108FM-662-012	Bay Mounting Bracket
J108FM-662-015	Inter-bay Bracket Outline
J108FM-662-011	Input Section
J108FM-662-010	End Cap
33-00006	Tuner Outline

Antenna Specifications

Model	PSIFMV-2-HWS-DA
Description	2-bay directional FM broadcast antenna
Frequency	88.7 MHz
Configuration	Half-wave spaced elements
Polarization	Vertical
Gain	2.19 (3.40 dB)
Input	1-5/8" EIA end fed
Rating	6 kW
Length	17.8 ft.
Weight	160 lbs.
Wind Area	14.97 sq. ft.

1 5/8" END CAP
J108FM-662-010

NOTE: INVERTED BAY

2X BAY MOUNTING
BRACKET
J108FM-662-012

INTERBAY SUPPORT
BRACKET
J108FM-662-015

INTERBAY 1

2X BAY MOUNTING
BRACKET
J108FM-662-012

1 5/8" INPUT SECTION
J108FM-662-011

1 5/8" TUNER
33-00006

INTERBAY SUPPORT
BRACKET
J108FM-662-015

CENTER OF RADIATION
230 FT AGL

1 5/8" E.I.A. INPUT

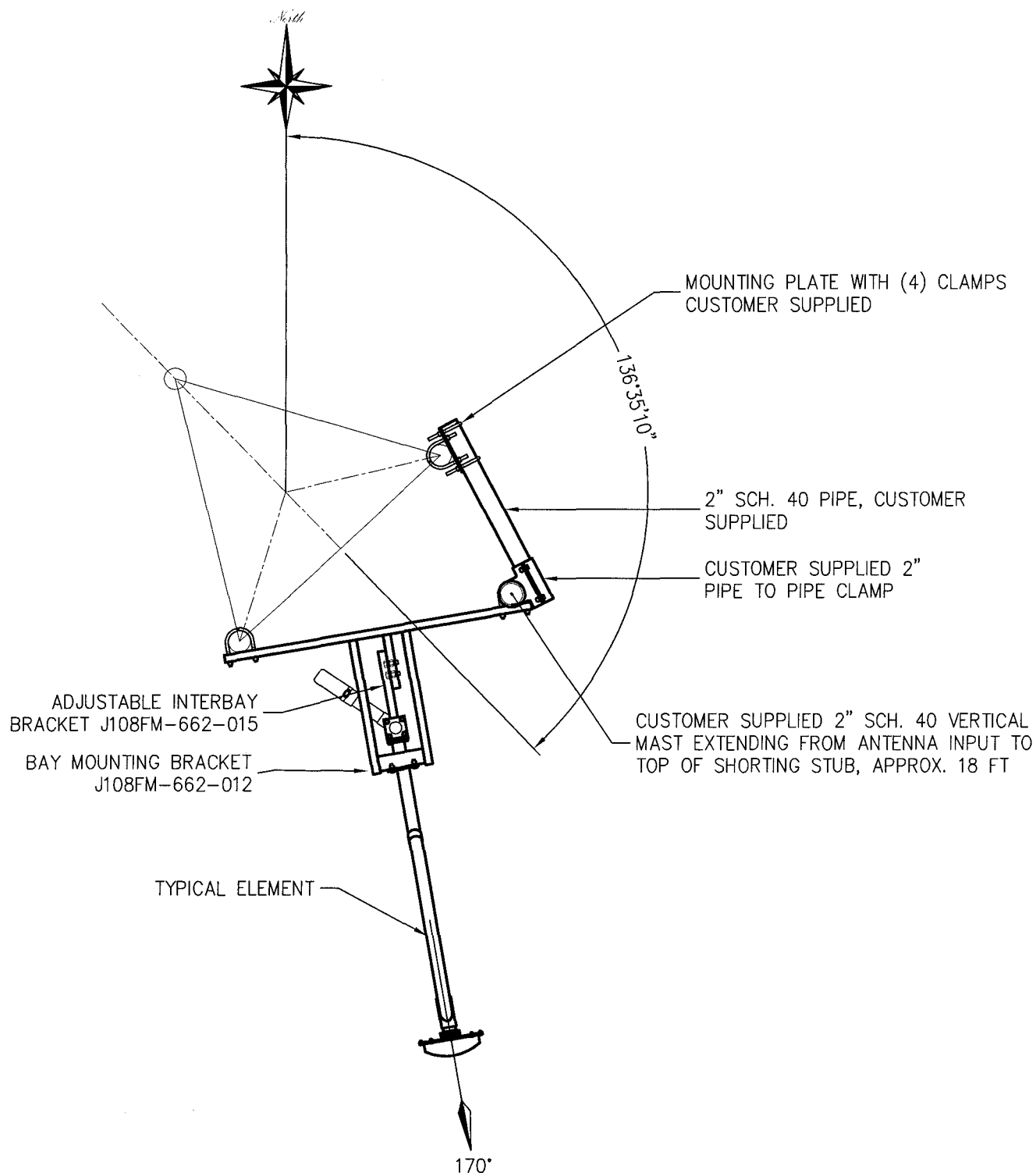
35.64
70.72
214.26
29.90
78.00

[17'-10 1/4"]

SPECIFICATIONS	
SPACING:	.5λ
LENGTH:	17.8 Ft
APERTURE:	5.89 Ft.
RATING:	6 kW
GAIN:	2.19 (3.40 dB)
WEIGHT:	160.18 Lb [72.18 Kg]
WINDAREA:	14.97 Sq. Ft. [1.39 Sq. M]
TIA-222-F	(NO ICE)
NOTE:	
1. REF. J108FM-662-019 FOR ASSEMBLY DETAILS AT BAY 1	
2. REF. J108FM-662-020 FOR ASSEMBLY DETAILS AT INPUT	

REV.	MADE BY CHECKED BY	DATE	CHANGE
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			SIZE A

PROPAGATION SYSTEMS, INC.			
Ebensburg, Pennsylvania USA 814-472-5540			
ANTENNA ELEVATIONS AND SPECIFICATIONS			
MODEL:	PSIFMV-2-HWS-DA	DRAWN BY:	D.G. Kellar
CHANNEL/FREQUENCY:	88.7 MHz	APPROVED BY:	
SCALE:	1:30	DRAWING NO.:	J108FM-662-001
			DATE: 2/07/08
			DATE:
			REV.



B	D.G. Kellar	5/13/08	CHANGE MOUNTING CONFIGURATION TO "AS BUILT"
A	D.G. Kellar	5/6/08	CHANGE TOWER ORIENTATION PER CUSTOMER TELECON WITH DOUG SHOWN FIELD FAB BRACKET TO CORRECT ORIENTATIN OF ANTENNA
REV.	MADE BY CHECKED BY	DATE	CHANGE

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SIZE

A

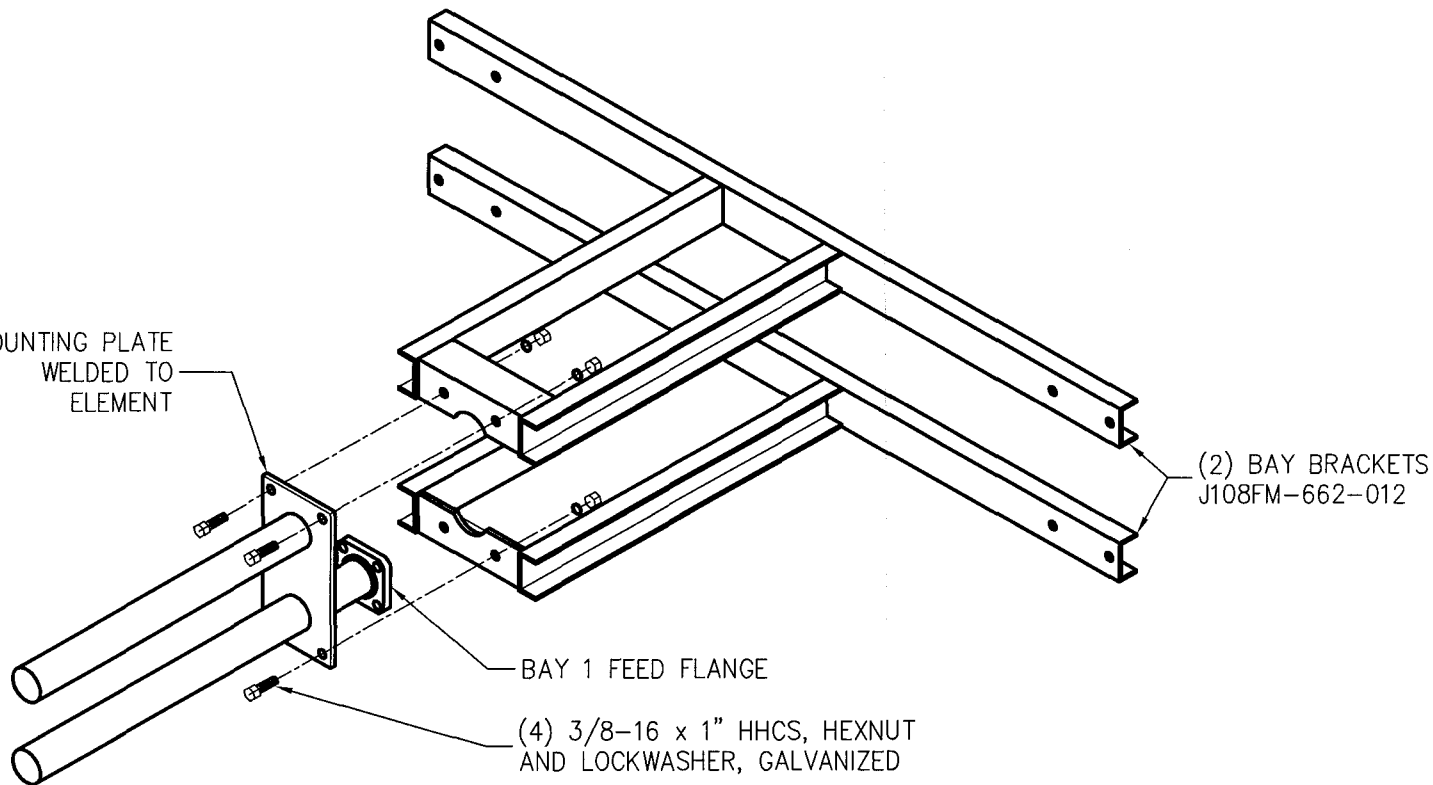
PROPAGATION SYSTEMS, INC.

Ebensburg, Pennsylvania USA 814-472-5540

ANTENNA PLAN VIEW AND ORIENTATION

MODEL:	PSIFMV-2-HWS-DA	DRAWN BY:	D.G. Kellar	DATE:	3/05/08
CHANNEL/ FREQUENCY:	88.7 MHz	APPROVED BY:		DATE:	
SCALE:	1:20	DRAWING NO.:	J108FM-662-002	REV.	B

MOUNTING PLATE
WELDED TO
ELEMENT

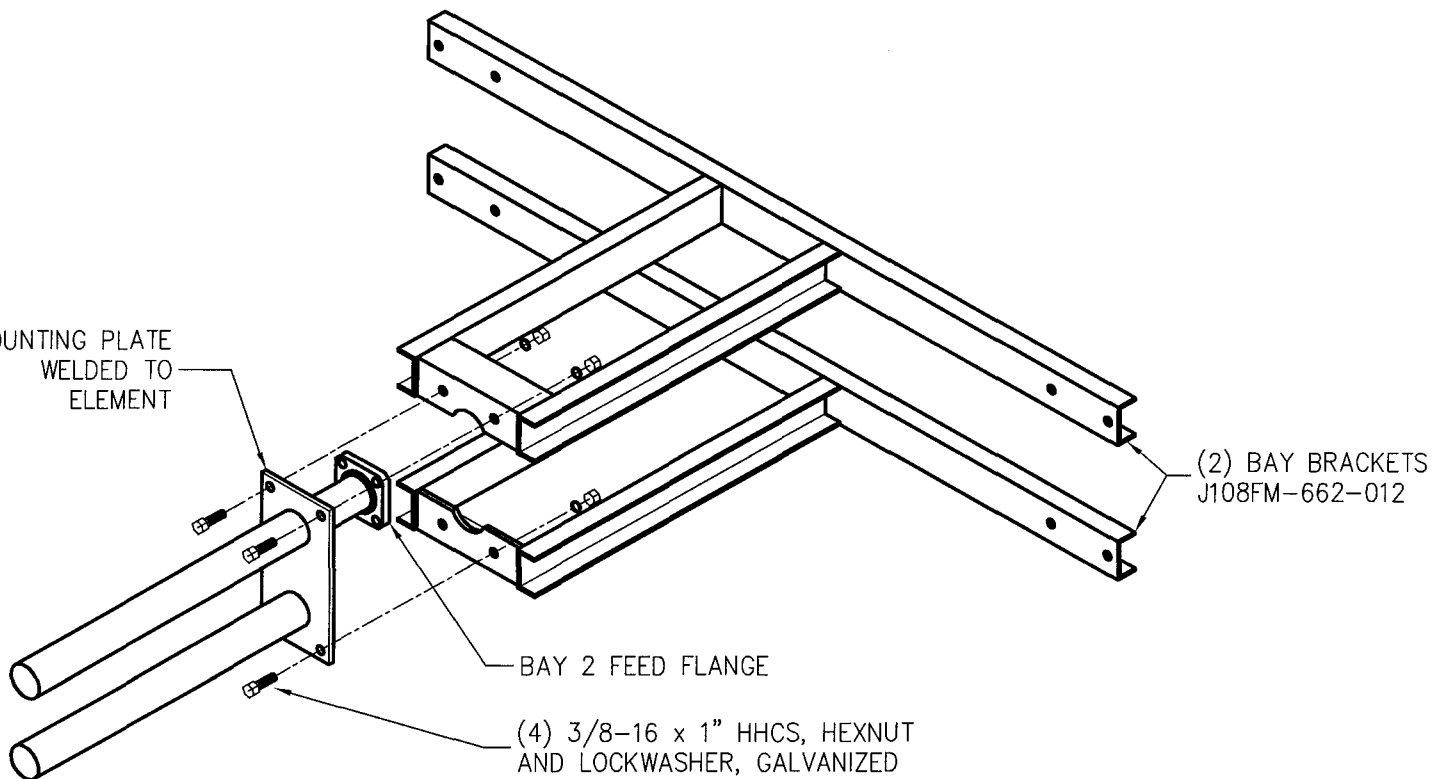


BAY 1 FEED FLANGE

(4) 3/8-16 x 1" HHCS, HEXNUT
AND LOCKWASHER, GALVANIZED

(2) BAY BRACKETS
J108FM-662-012

MOUNTING PLATE
WELDED TO
ELEMENT



BAY 2 FEED FLANGE

(4) 3/8-16 x 1" HHCS, HEXNUT
AND LOCKWASHER, GALVANIZED

(2) BAY BRACKETS
J108FM-662-012

PROPAGATION SYSTEMS, INC.

Ebensburg, Pennsylvania USA 814-472-5540

ELEMENT/BAY BRACKET ASSEMBLY

REV.	MADE BY CHECKED BY	DATE	CHANGE

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SIZE

A

MODEL: PSIFMV-2-HWS-DA

CHANNEL/
FREQUENCY: 88.7 MHz

SCALE: 1:10

DRAWN BY: D.G. Kellar

APPROVED BY:

DRAWING NO.:

DATE: 2/05/08

DATE:

J108FM-662-018

REV.

1 5/8" PRESSURE CAP
J108FM-662-010

NOTE: INVERTED
BAY

2X BAY MOUNTING
BRACKET
J108FM-662-012
AND (4) 3/8-16
x 2 15/16" I.D. U-BOLT
ASSEMBLY

ATTACH FLANGES TO INTERBAY
BLOCK WITH (4) 5/16-18 x 7/8"
HHCS AND LOCKWASHERS,
INSTALL 2-328 O-RING, TYPICAL
(3) PLACES EACH BLOCK

4X 3/8-16 x 1" HHCS,
HEXNUT AND LOCWASHER

BRACKET IS
ADJUSTABLE

INTERBAY SUPPORT
BRACKET
J108FM-662-015
AND (2) 3/8-16
x 2 15/16" I.D. U-BOLT
ASSEMBLY

(2) #28 HOSE
CLAMPS

INTERBAY 1

35.64

PROPAGATION SYSTEMS, INC.

Ebensburg, Pennsylvania USA 814-472-5540

BAY 1 ASSEMBLY AND ELEVATION

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SIZE

A

MODEL: PSIFMV-2-HWS-DA

DRAWN BY: D.G. Kellar

DATE: 3/06/08

CHANNEL/
FREQUENCY: 88.7 MHz

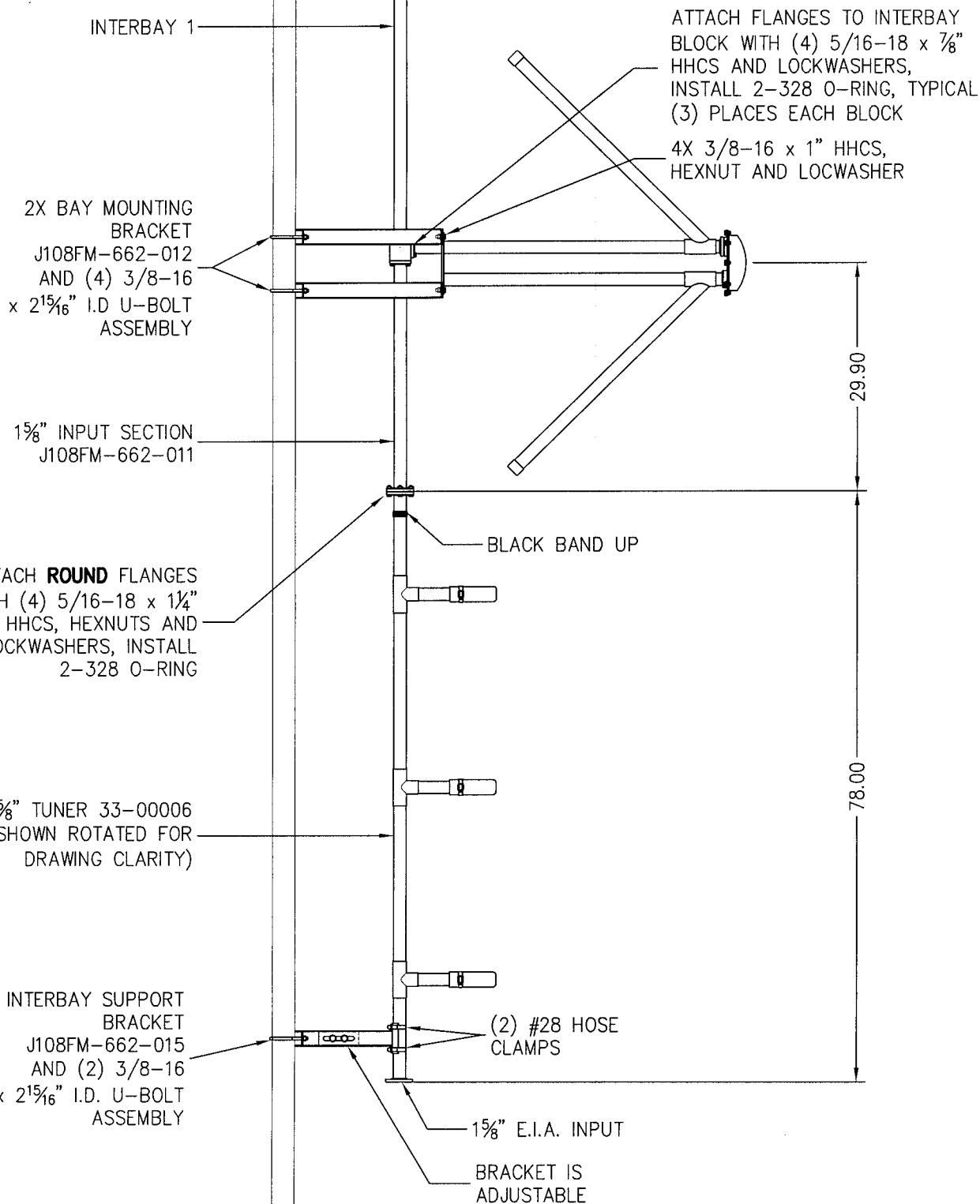
APPROVED BY:

DATE:

SCALE: 1:10

DRAWING NO.: J108FM-662-019

REV.



PROPAGATION SYSTEMS, INC.

Ebensburg, Pennsylvania USA 814-472-5540

BAY 2 ASSEMBLY AND ELEVATION

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SIZE

A

MODEL: PSIFMV-2-HWS-DA

DRAWN BY: D.G. Kellar

DATE: 3/06/08

CHANNEL/
FREQUENCY: 88.7 MHz

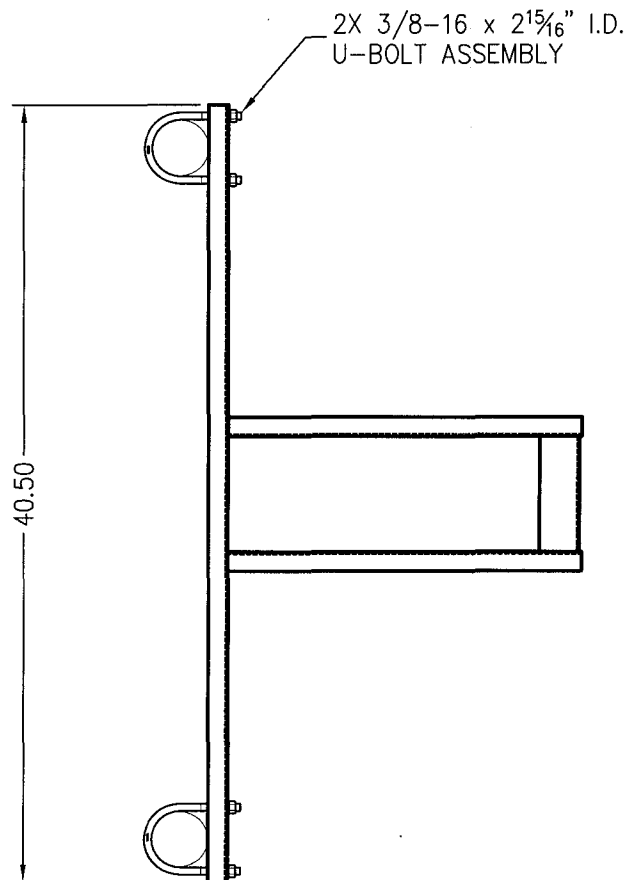
APPROVED BY:

DATE:

SCALE: 1:20

DRAWING NO.: J108FM-662-020

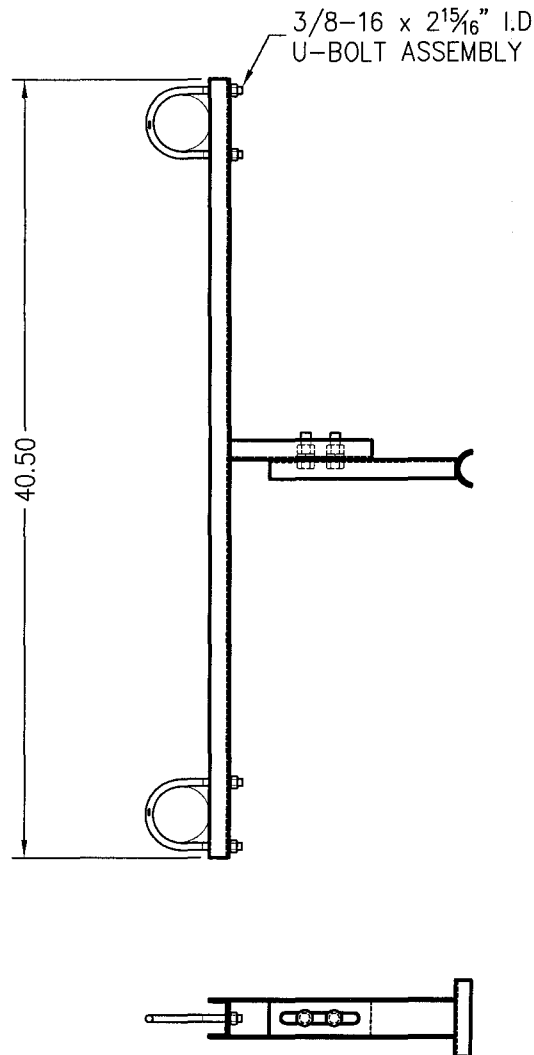
REV.



NOTES:

1. (4) REQUIRED
2. TO BE HOT DIP GALVANIZED
3. CALCULATED WEIGHT: ± 15.4 LB EACH COMPLETE
4. WIND AREA: 1.15 SQ. FT. EACH

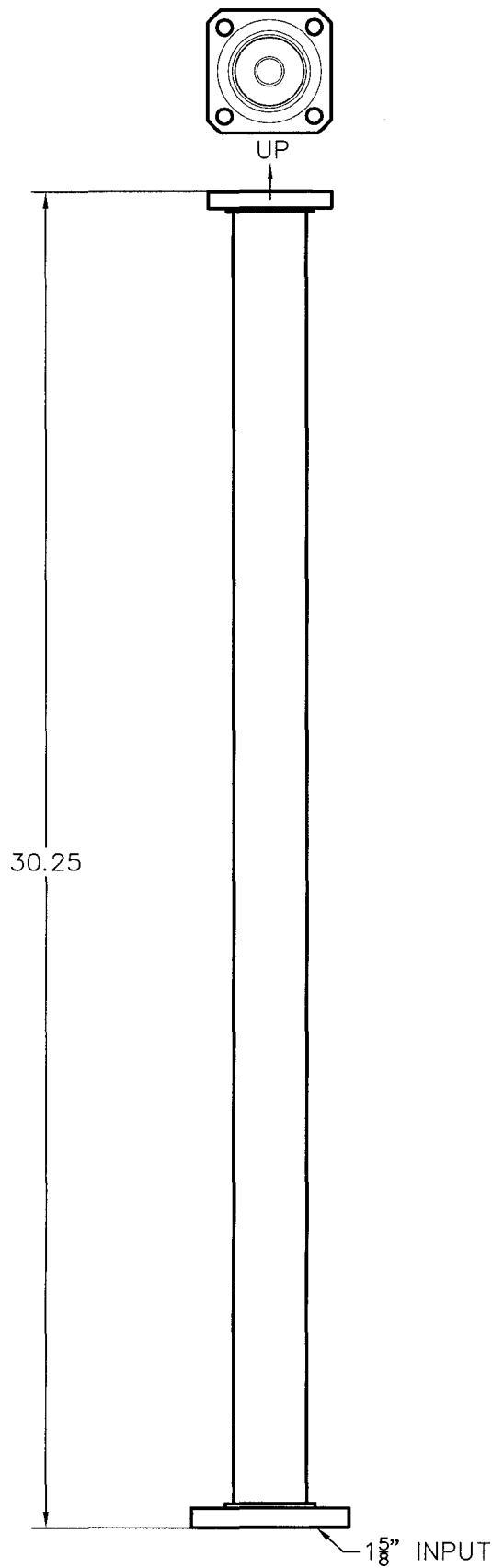
REV.	MADE BY CHECKED BY	DATE	CHANGE
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<h2 style="margin: 0;">PROPAGATION SYSTEMS, INC.</h2> <p style="margin: 0;">Ebensburg, Pennsylvania USA 814-472-5540</p>			
<h3 style="margin: 0;">BAY MOUNTING BRACKET</h3>			
MODEL:		DRAWN BY:	
PSIFMV-2-HWS-DA		D.G. Kellar	
CHANNEL/ FREQUENCY:		DATE:	
88.7 MHz		2/07/08	
SCALE:		DRAWING NO.:	
1:10		J108FM-662-012	
			REV.



NOTES:

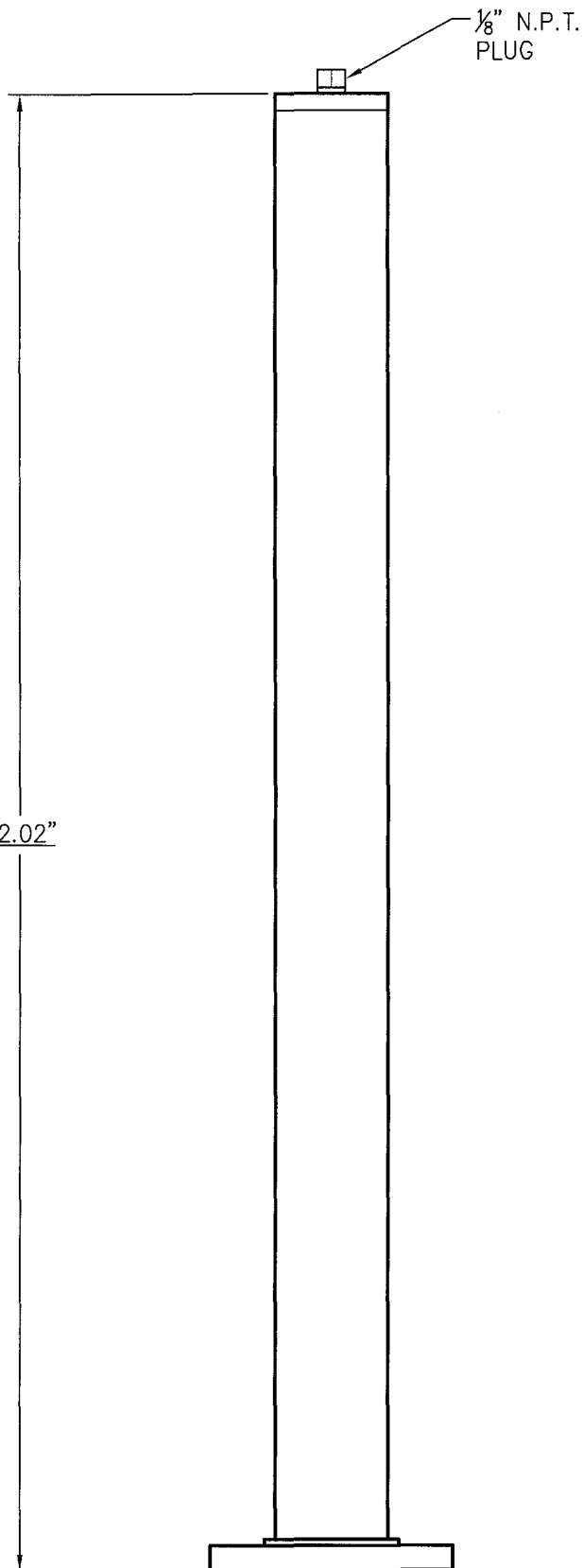
1. (2) REQUIRED
2. TO BE HOT DIP GALVANIZED
3. CALCULATED WEIGHT: ± 8.9 LB EACH COMPLETE
4. WIND AREA: 1.15 SQ. FT. EACH

<h2 style="margin: 0;">PROPAGATION SYSTEMS, INC.</h2> <p style="margin: 0;">Ebensburg, Pennsylvania USA 814-472-5540</p>			
REV.	MADE BY CHECKED BY	DATE	CHANGE
<p>This drawing is loaned subject to the express understanding and agreement that the drawing and information therein contained are, and shall remain the property of PSI, and will not be otherwise utilized or disposed of, directly or indirectly, and will not be used in whole or in part or assist in making or finish any information for the making of drawings, prints or other reproductions hereof, or for the design or making of any item, parts, object, apparatus or parts thereof, except upon the written permissions of PSI first obtained. The acceptance of this drawing will be construed as an acceptance of the forgoing agreement.</p>			A
<h3 style="margin: 0;">INTERBAY MOUNTING BRACKET</h3>			
MODEL:		DRAWN BY:	
PSIFMV-2-HWS-DA		D.G. Kellar	
CHANNEL/ FREQUENCY:		DATE:	
88.7 MHz		2/07/08	
SCALE:		DRAWING NO.:	
1:10		J108FM-662-015	
			REV.

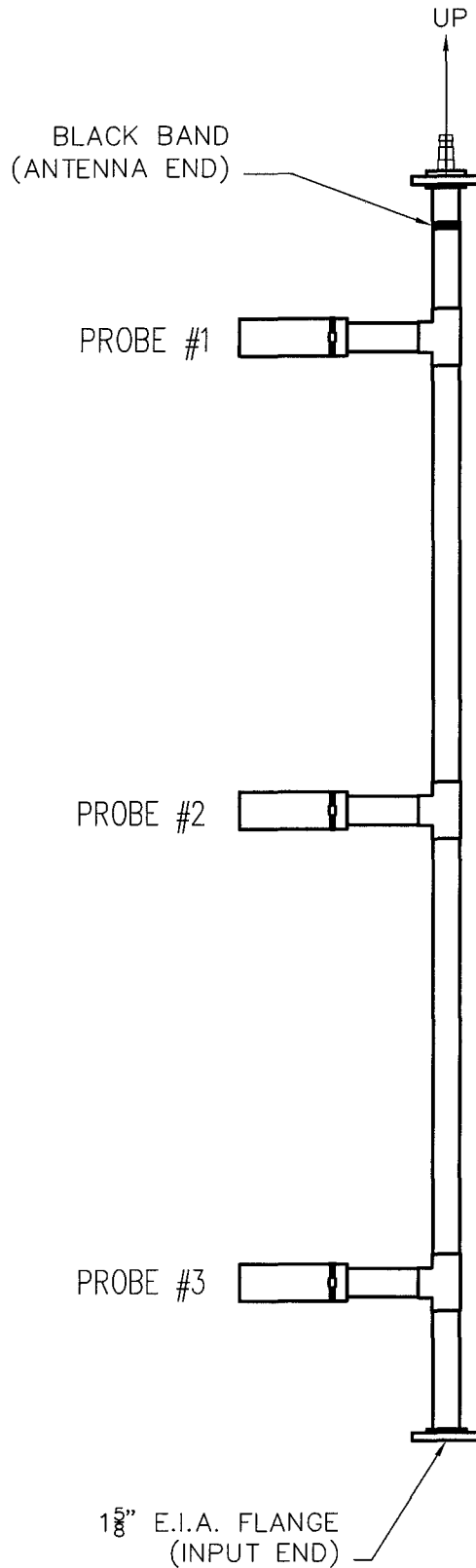


REV.		MADE BY	CHECKED BY	DATE	CHANGE	PROPAGATION SYSTEMS, INC. Ebensburg, Pennsylvania USA 814-472-5540 1-5/8" INPUT SECTION OUTLINE			
This drawing is loaned subject to the express understanding and agreement that the drawing and information therein contained are, and shall remain the property of PSI, and will not be otherwise utilized or disposed of, directly or indirectly, and will not be used in whole or in part or assist in making or finish any reproductions hereof, or for the design or making of any item, parts, object, apparatus or parts thereof, except upon the written permissions of PSI first obtained. The acceptance of this drawing will be construed as an acceptance of the forgoing agreement.						SIZE	MODEL: PSIFMV-2-HWS-DA CHANNEL/FREQUENCY: 88.7 MHz SCALE: 1: 4	DRAWN BY: D.G. Kellar APPROVED BY: DRAWING NO.: J108FM-662-011	DATE: 1/28.08 DATE: REV.

A



			PROPAGATION SYSTEMS, INC.					
			Ebensburg, Pennsylvania USA 814-472-5540					
REV.	MADE BY CHECKED BY	DATE	CHANGE					
<p>This drawing is loaned subject to the express understanding and agreement that the drawing and information therein contained are, and shall remain the property of PSI, and will not be otherwise utilized or disposed of, directly or indirectly, and will not be used in whole or in part or assist in making or finish any information for the making of drawings, prints or other reproductions hereof, or for the design or making of any item, parts, object, apparatus or parts thereof, except upon the written permissions of PSI first obtained. The acceptance of this drawing will be construed as an acceptance of the forgoing agreement.</p>			EXTENDED PRESSURE CAP					
			MODEL:	PSIFMV-2-HWS-DA	DRAWN BY:	D.G. Kellar	DATE:	2/07/08
			CHANNEL/ FREQUENCY:	88.7 MHz	APPROVED BY:		DATE:	
			SCALE:	NONE	DRAWING NO.:	J108FM-662-010	REV.	0



REV.		MADE BY	CHECKED BY	DATE	CHANGE	PROPAGATION SYSTEMS, INC. Ebensburg, Pennsylvania USA 814-472-5540			
This drawing is loaned subject to the express understanding and agreement that the drawing and information therein contained are, and shall remain the property of PSI, and will not be otherwise utilized or disposed of, directly or indirectly, and will not be used in whole or in part or assist in making or finish any information for the making of drawings, prints or other reproductions hereof, or for the design or making of any item, parts, object, apparatus or parts thereof, except upon the written permissions of PSI first obtained. The acceptance of this drawing will be construed as an acceptance of the forgoing agreement.						SIZE	3 PROBE TUNER ASSEMBLY		
						A	MODEL:	DRAWN BY:	DATE:
							CHANNEL/ FREQUENCY:	APPROVED BY:	DATE:
							SCALE:	DRAWING NO.:	REV.
						1:16	33-00006	0	

6-27-08

J108FM-66Z

FMV-2 - HWS - DA

Fwdn

