

ITEM	QTY.	PART NO.	DESCRIPTION	SOURCE
1	66 IN.	T3118	SQUARE TUBE, ALUMINUM, 1" X 1" X 1/8" WALL	WWW.MCMASTE R.COM
2	16 FT.		ALUMINUM ROD, EXTRUDED, 1/4" OD	WWW.TEXASTOWERS .COM
3	7	DXE-RSB-I02500	RESIN SUPPORT BLOCK CLAMP, 1/4"	WWW.DXENGINEERING.COM
4	10	92196A550	SOCKET CAP SCREW, 1/4-20 X 2", STAINLESS	WWW.MCMASTE R.COM
5	16	98437A108	LOCKWASHER, 1/4", STAINLESS	WWW.MCMASTE R.COM
6	1		ALUMINUM FLAT, 2" X 2-3/4" X 1/8"	WWW.HOMEDEPOT.COM
7	1		MAST	
8	1	M/B	MOUNTING BRACKET FOR 1" SQUARE BOOMS	WWW.ARROWANTENNA S.COM
9	1	DXE-112-KIT	SO-239, CHASSIS MOUNT	WWW.DXENGINEERING.COM
10	6	92196A550	HEX SOCKET SCREW, 1/4-20 X 1-1/4", STAINLESS	WWW.MCMASTE R.COM
11	2	92185A151	HEX SOCKET SCREW, 6-32 X 3/4", STAINLESS	WWW.MCMASTE R.COM
12	2	98437A104	LOCKWASHER, #6, STAINLESS	WWW.MCMASTE R.COM
13	1	7113K815	RING TERMINAL, #6, 16-14 AWG	WWW.MCMASTE R.COM
14	14	98017A660	WASHER, FLAT, 1/4", 1/2" OD, STAINLESS	WWW.MCMASTE R.COM
15	4	92314A144	HEX HEAD SCREW, 6-32 X 1/4", STAINLESS	WWW.MCMASTE R.COM

ANTENNA DIMENSION CHART							
DIMENSION	BOOM	R	DE ^{NOTE-1}	D1	D2	D3	D4
ELEMENT OD	1" SQ	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
ELEMENT SPACING FROM BOOM START	0"	10-1/4"	20-1/2"	24-3/4"	36-1/2"	48"	65-1/8"
ELEMENT LENGTH	66"	40-3/8"	19-5/8"	37"	36-1/8"	36-1/8"	34-1/2"
BOOM CENTERLINE TO ELEMENT TIP	-	20-3/16"	19-3/4"	18-1/2"	18-1/16"	18-1/16"	17-1/4"

NOTES

- THERE ARE TWO 19-5/8" LONG DRIVEN ELEMENTS.
- THE UPPER 21 INCHES OF MAST HELPS TO MINIMIZE MAST INTERFERENCE WHEN YAGI IS MOUNTED FOR VERTICAL POLARIZATION.
- EZNEC DATA
 FREE SPACE: GAIN = 10.2 dBi (8.1 dB), F/B = 31.7 dB, VERTICAL BEAMWIDTH = 53°
 30 FT. ELEVATION: GAIN = 14.6 dBi (12.5 dB), F/B = 31.7 dB, VERTICAL BEAMWIDTH = 3.1°

KG4JJH

2-METER 6-ELEMENT OWA YAGI ASSEMBLY

SIZE	DESIGN	DWG NO	REV
B	A. BAKER		0
SCALE 1/8 : 1		SHEET 1 OF 2	

2-M 6-ELEMENT OWA (OPTIMIZED WIDE-BAND ANTENNA) YAGI
(SHOWN VERTICALLY POLARIZED)

8

7

6

5

4

3

2

1

H

G

F

E

D

C

B

A

H

G

F

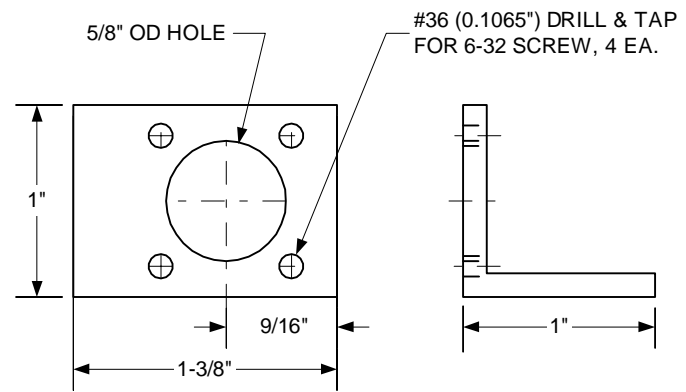
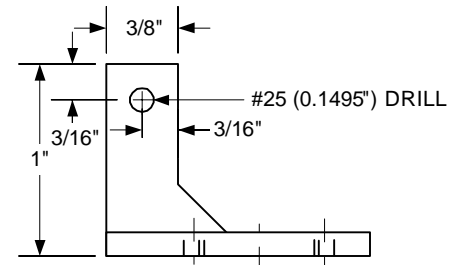
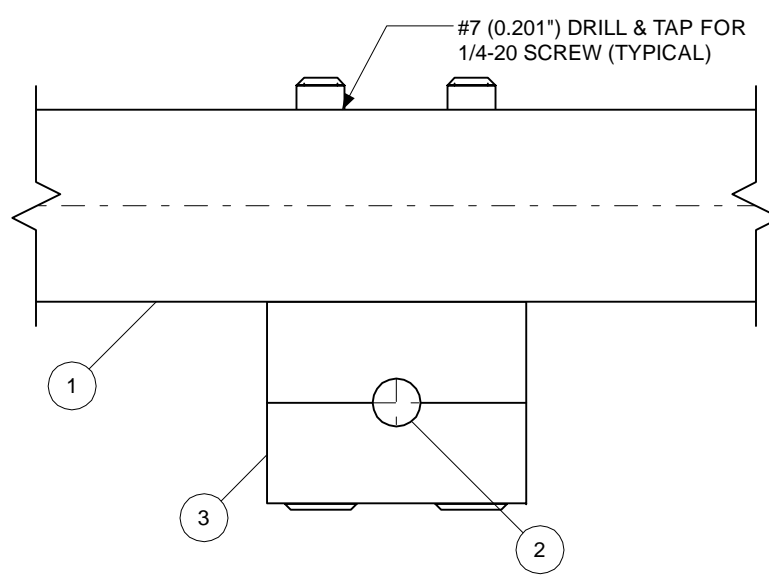
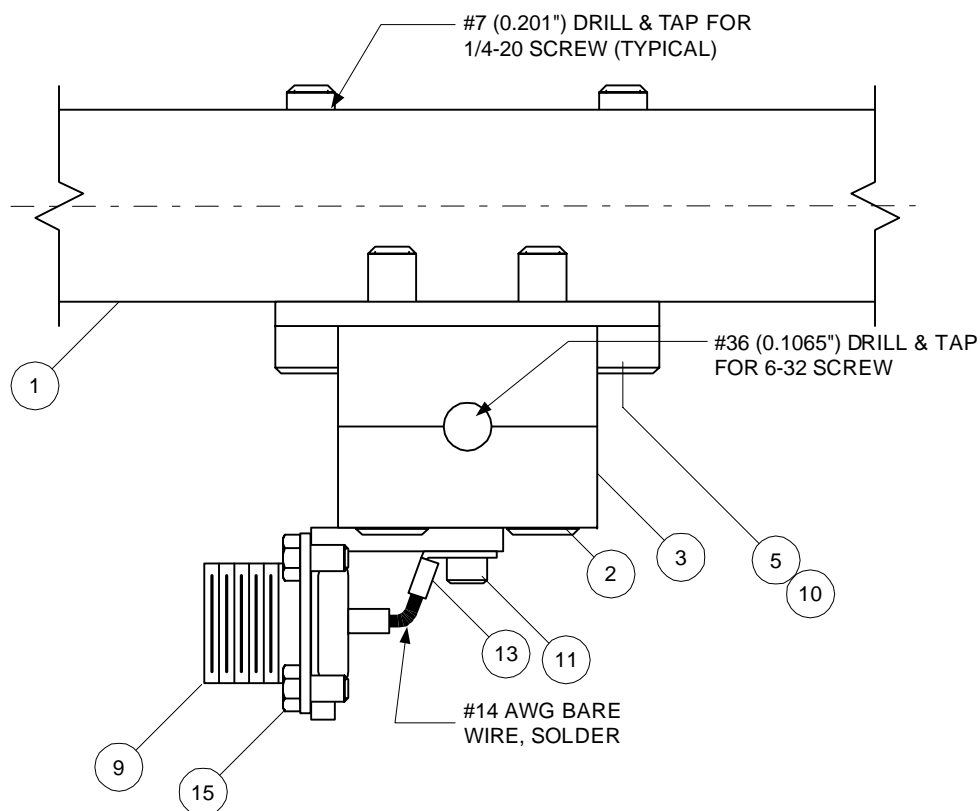
E

D

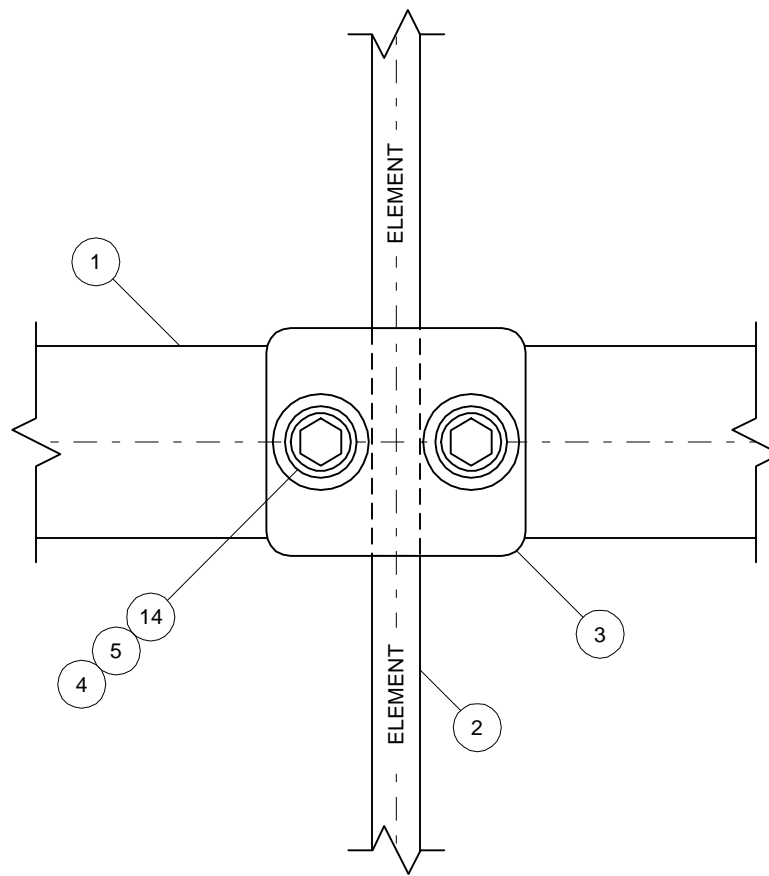
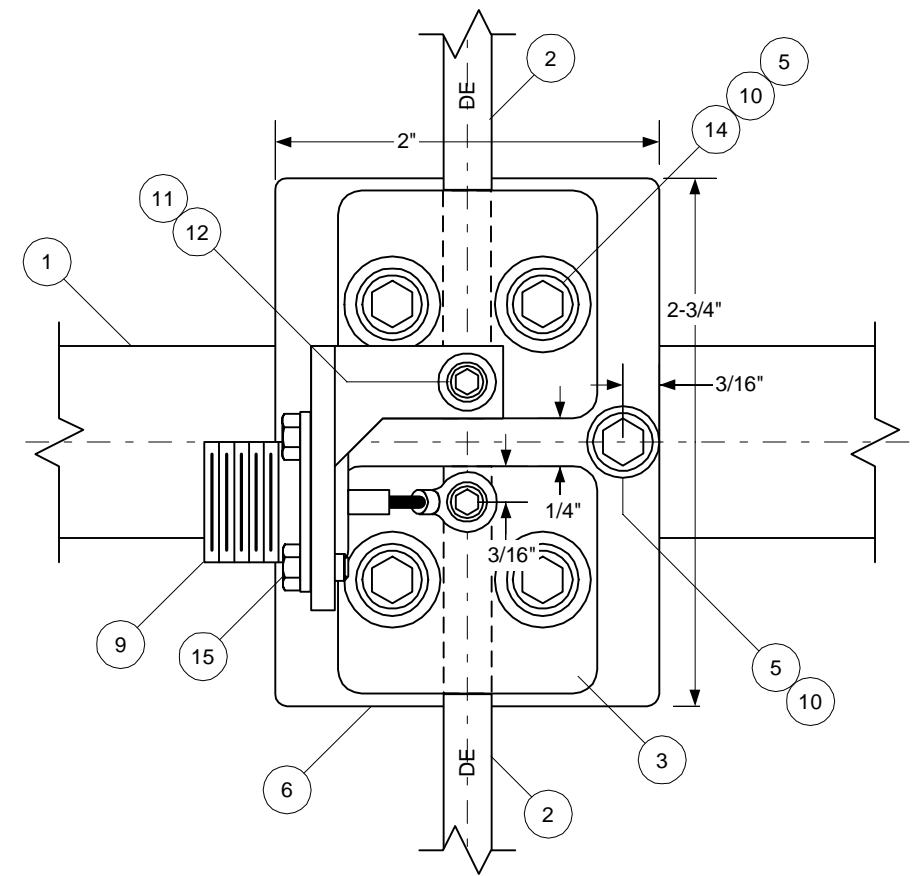
C

B

A



SO-239 BRACKET
MADE FROM 1"X1" ALUM (ITEM 1)



DETAIL A
DRIVEN ELEMENT

DETAIL B
REFLECTOR & DIRECTORS

KG4JJH			
2-METER 6-ELEMENT OWA YAGI DETAILS			
SIZE B	DESIGN A. BAKER	DWG NO	REV 0
SCALE 1 : 1	SHEET 2 OF 2		

8

7

6

5

4

3

2

1