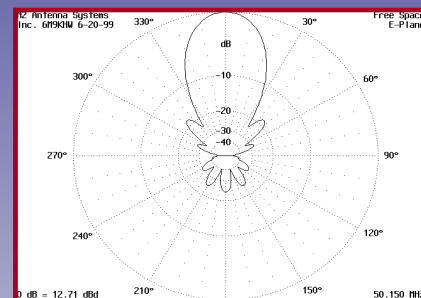
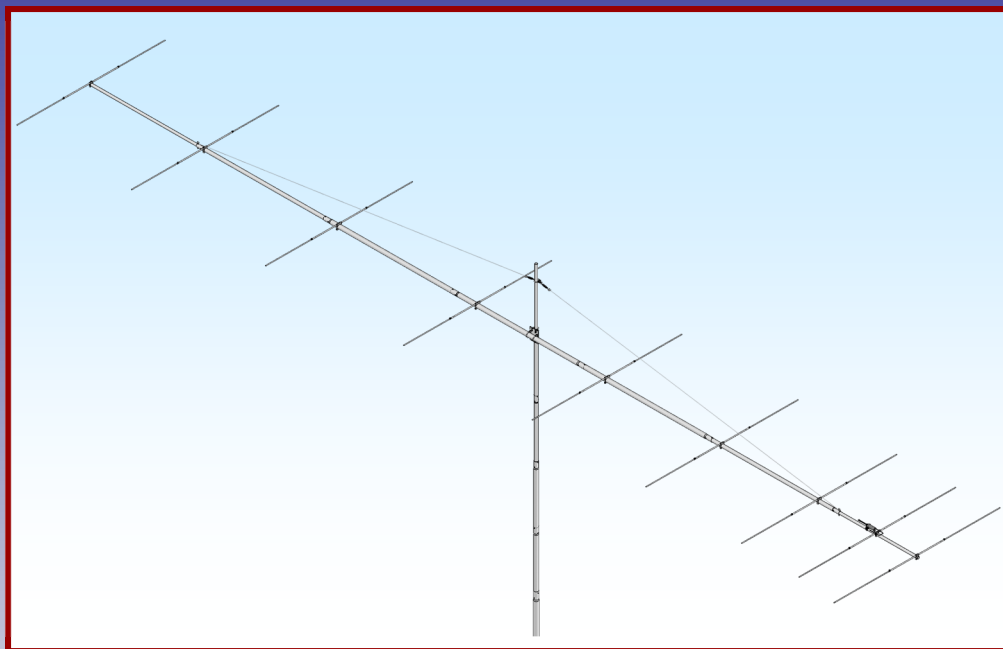




M2 Antenna Systems, Inc.

Model No: 6M9KHW



SPECIFICATIONS:

Model6M9KHW
 Frequency Range.....50.0 To 50.4 MHz
 *Gain, (FS) / Over gnd14.8 dBi
 Front to back23 dB Typical
 BeamwidthE=34° H=39°
 Feed typeDirect feed
 Feed Impedance.....50 Ohms Unbalanced
 Maximum VSWR.....1.2 Typical
 Input Connector.....“N” Female

Power Handling3 kW, Higher avl.
 Boom Length / Dia.....49' 4" / 2-1/2" To 1-1/2"
 Maximum Element Length.....9' 9"
 Turning Radius:27' 7"
 Stacking Distance.....27' High & 30' Wide
 Mast Size.....2" Nom.
 Wind area / Survival4.3 Sq. Ft. / 100 MPH
 Weight / Ship Wt.....35 Lbs. / 38 Lbs.

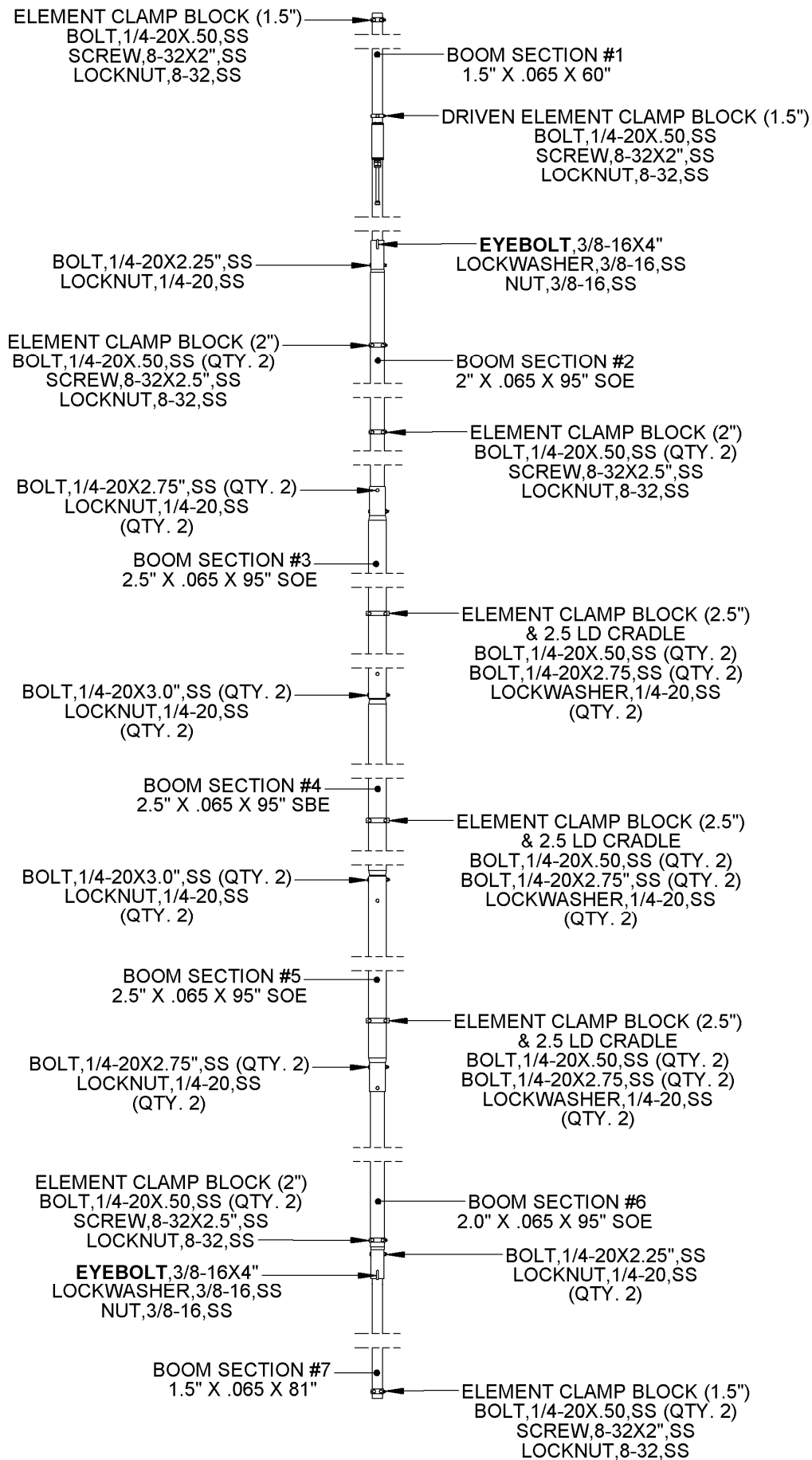
***Subtract 2.14 from dBi for dBd / FS = Free Space**

FEATURES:

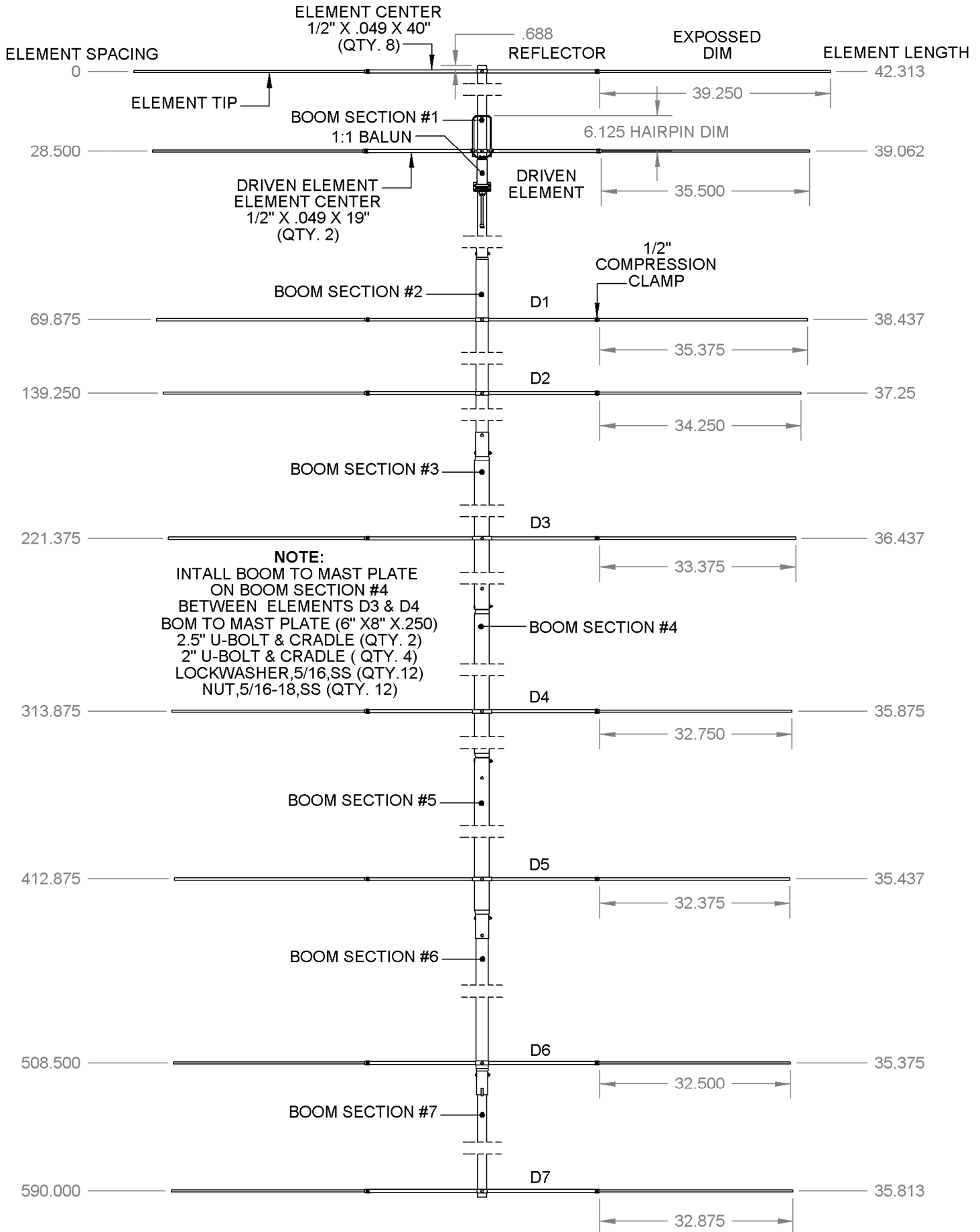
This antenna was inspired by Ray Grenier, K9KHW. Countless hours of computer optimization, range confirmation and on the air testing have resulted in a truly remarkable antenna. The 6M9KHW is capable of producing moon echoes when pointed at rising or setting moon and running the legal power limit. If you can hear your own moon echoes over a one half million mile path, just think what it could do for your signal on long haul tropo, meteor scatter or just an ordinary E or F2 opening. And for the adventurous, imagine what four would do.

The 6M9KHW boom center sections are 2.5" dia. & the rest of the sections all telescope in 1/2" or 1/4" increments. It will survive horrible conditions (100 MPH). This antenna is fed with a new hairpin design to optimize VSWR and new 1:1 balun, designed more rugged than the previous feed. Rugged 1/2" X 40" element center sections and 3/8" dia. tips mounted on machined, “slip on” element to boom clamps guarantees this antenna will stay up for years to come.

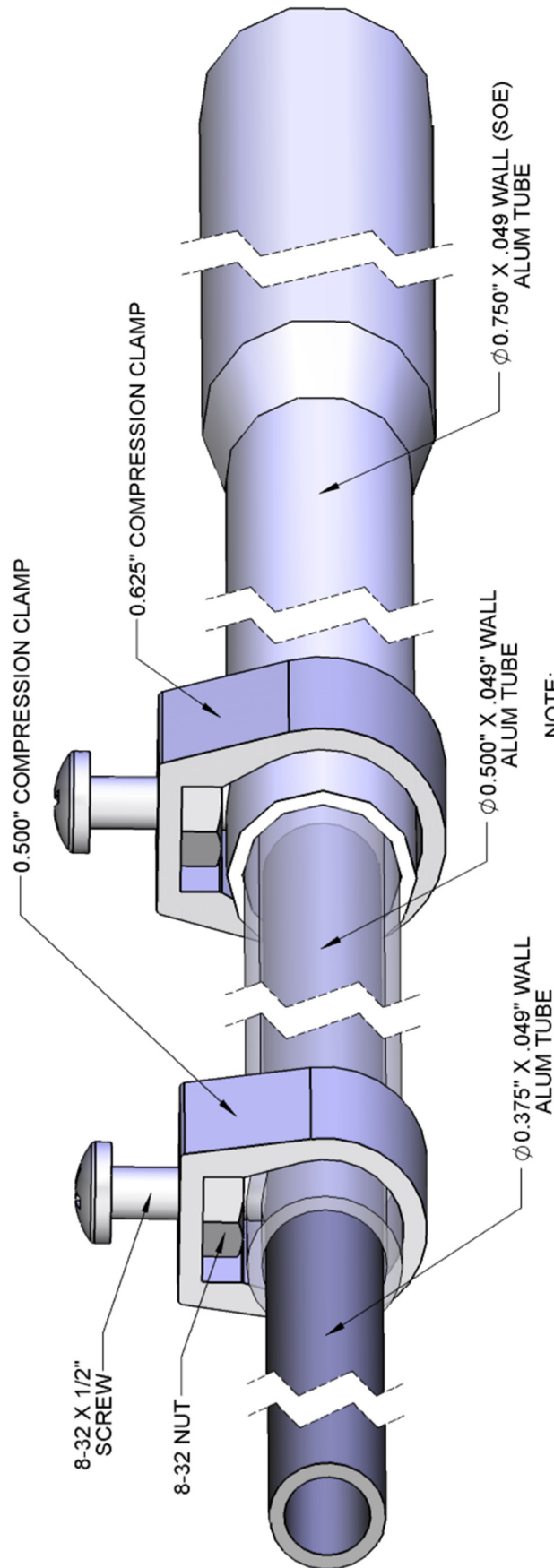
6M9KHW BOOM LAYOUT



6M9KHW DIMENSION SHEET



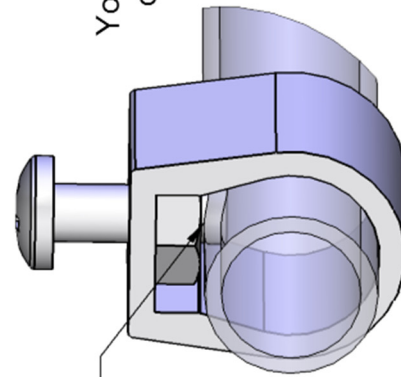
GENERIC COMPRESSION CLAMP DETAIL



NOTE:
TUBES SHOWN TRANSPARENT
TO SHOW MORE DETAIL

NOTE:

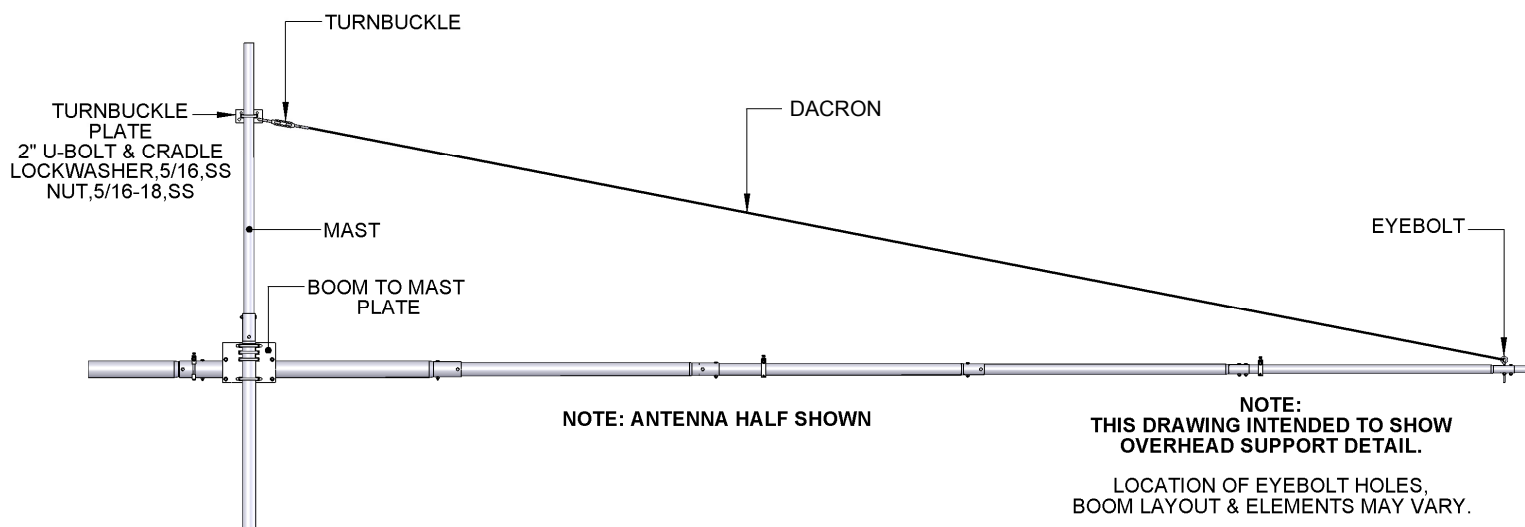
Generic layout to show
how compression clamps work.
Your antenna may have one or the other
or may even have both compression
clamp sizes.



NOTE:
8-32 X 1/2" SCREW
PRESSES ON INNER TUBE

NOTE: INSIDE TUBE NOT SHOWN FOR CLARITY

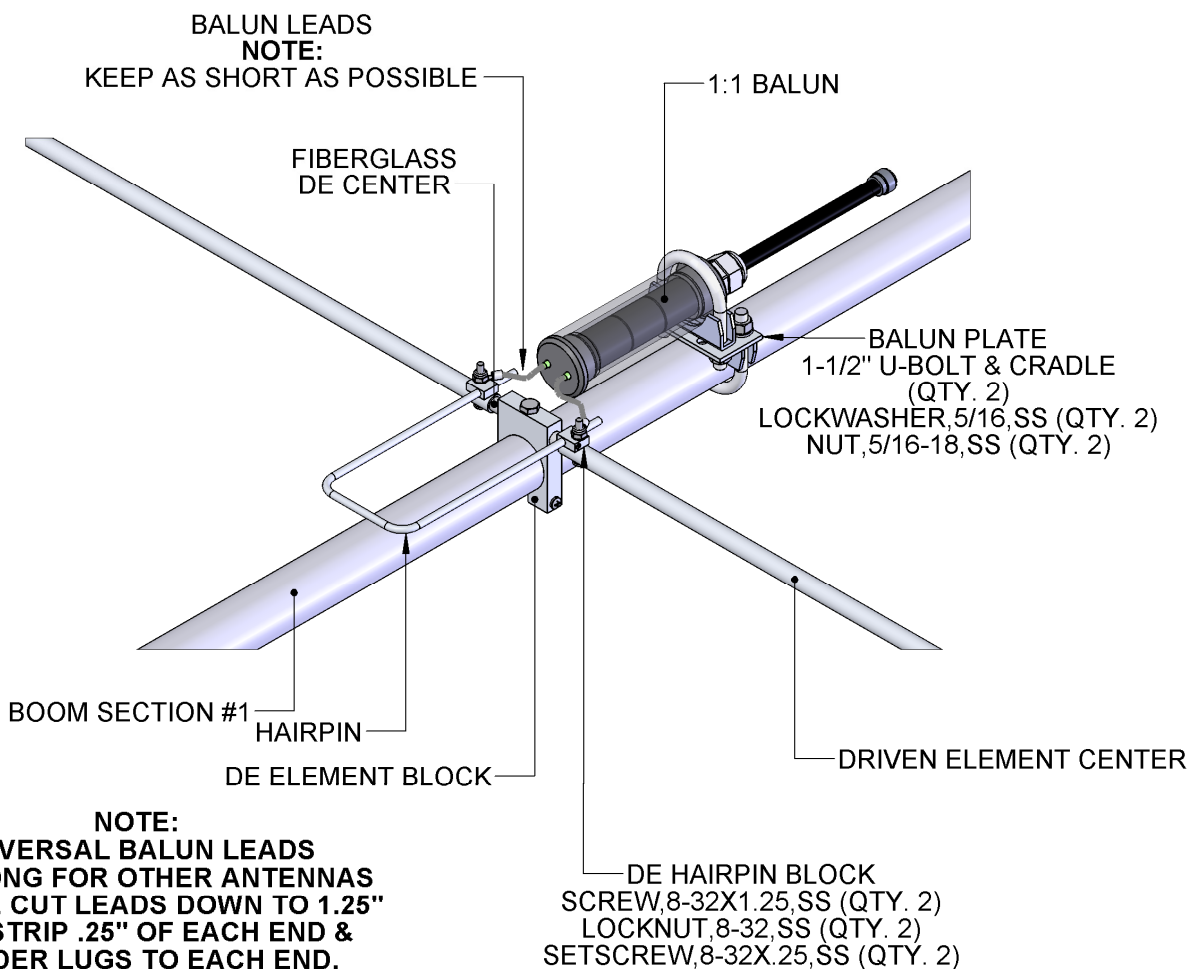
OVERHEAD SUPPORT & BALUN DETAIL



NOTE:
THIS DRAWING INTENDED TO SHOW
OVERHEAD SUPPORT DETAIL.

LOCATION OF EYEBOLT HOLES,
BOOM LAYOUT & ELEMENTS MAY VARY.

REFER TO BOOM LAYOUT & DIMENSION SHEET
FOR ACTUAL LOCATIONS OF EYEBOLTS
BOOM SECTIONS & ELEMENTS.



NOTE:
UNIVERSAL BALUN LEADS
ARE LONG FOR OTHER ANTENNAS
PLEASE CUT LEADS DOWN TO 1.25"
AND STRIP .25" OF EACH END &
SOLDER LUGS TO EACH END.

M² ANTENNA SYSTEMS, INC.

4402 N. SELLAND AVE.

FRESNO, CA 93722

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6M9KHWA PARTS & HARDWARE

DESCRIPTION.....	QTY
BOOM SECTION #1: 1.5" X .065 X 60"	1
BOOM SECTION #2 & #6: 2.0" X .065 X 95" SOE	2
BOOM SECTION #3 & #5: 2.5" X .065 X 95" SOE	2
BOOM SECTION #4: 2.5" X .065 X 95" SBE	1
BOOM SECTION #7: 1.5" X .065 X 81"	1
ELEMENT CENTER, .50" X .049 X 40"	8
DE ELEMENT CENTER, .50" X .049 X 19"	2
ELEMENT TIPS 3/8", .375" X .049 X SEE CHART	18
FIBERGLASS DE CENTER, .375" X 10" (M2AFG0017)	1
DE MOUNT BLOCK, (M2ADE0094)	1
ELEMENT CLAMP BLOCK (M2AEC0108)	2
ELEMENT CLAMP BLOCK (M2AEC0114)	3
ELEMENT CLAMP BLOCK (M2AEC0116)	3
CRADLE, 2.5 LD (M2AMC0134)	3
DE HAIRPIN BLOCK, (M2ADP0620)	2
HAIRPIN ROD 3/16"	1
BALUN PLATE, .125" X 1.5" X 3" (M2APT0013)	1
TURNBUCKLE PLATE, 2" X .250 X 5"	1
BOOM TO MAST PLATE, 6" X 8" X .250	1
(3) FAIRITE 1:1 VHF BALUN W/ CABLE LEADS (FGBL0800)	1
BALUN WIRE KIT	2
PENETROX / ZINC PASTE CUP	1
ASSEMBLY MANUAL	1

HARDWARE:

TURNBUCKLE, 5/16 X 6-1/2" ZINC, HOOK & EYE	2
DACRON, 3/16" X 40'	1
COMPRESSION CLAMP, 1/2"	18
U-BOLT AND CRADLE, 2.5"	2
U-BOLT AND CRADLE, 2"	5
U-BOLT AND CRADLE, 1-1/2"	2
EYEBOLT, 5/16-18 X 4", ZINC	2
LOCKWASHER, 5/16, SS	20
NUT, 5/16-18, SS	20
LOCKNUT, 5/16-18, SS	2
BOLT, 1/4-20 X 3", SS	4
BOLT, 1/4-20 X 2-3/4", SS	10
BOLT, 1/4-20 X 2-1/4", SS	2
BOLT, 1/4-20 X 1/2", SS	17
LOCKWASHERS, 1/4, SS	6
LOCKNUT, 1/4-20, SS	10
SCREW, 8-32 X 2-1/2", SS	3
SCREW, 8-32 X 2", SS	3
SCREW, 8-32 X 1-1/4", SS	2
SCREW, 8-32 X 1/2", SS	18
SET SCREW, 8-32 X 1/4", SS	2
LOCKWASHER, 8-32, SS	2
NUT, 8-32, SS	20
LOCKNUT, 8-32, SS	8
ALLEN HEAD WRENCH, 5/64"	1

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