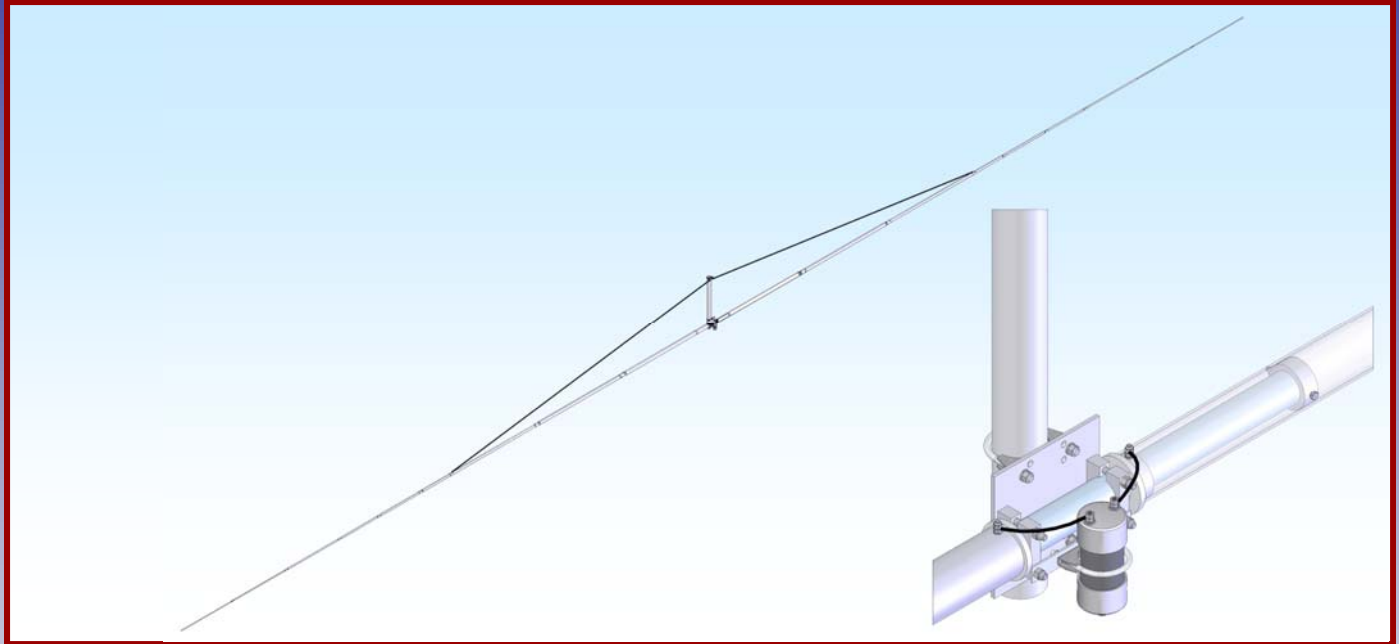




M2 Antenna Systems, Inc. Model No: 60M1FS



SPECIFICATIONS:

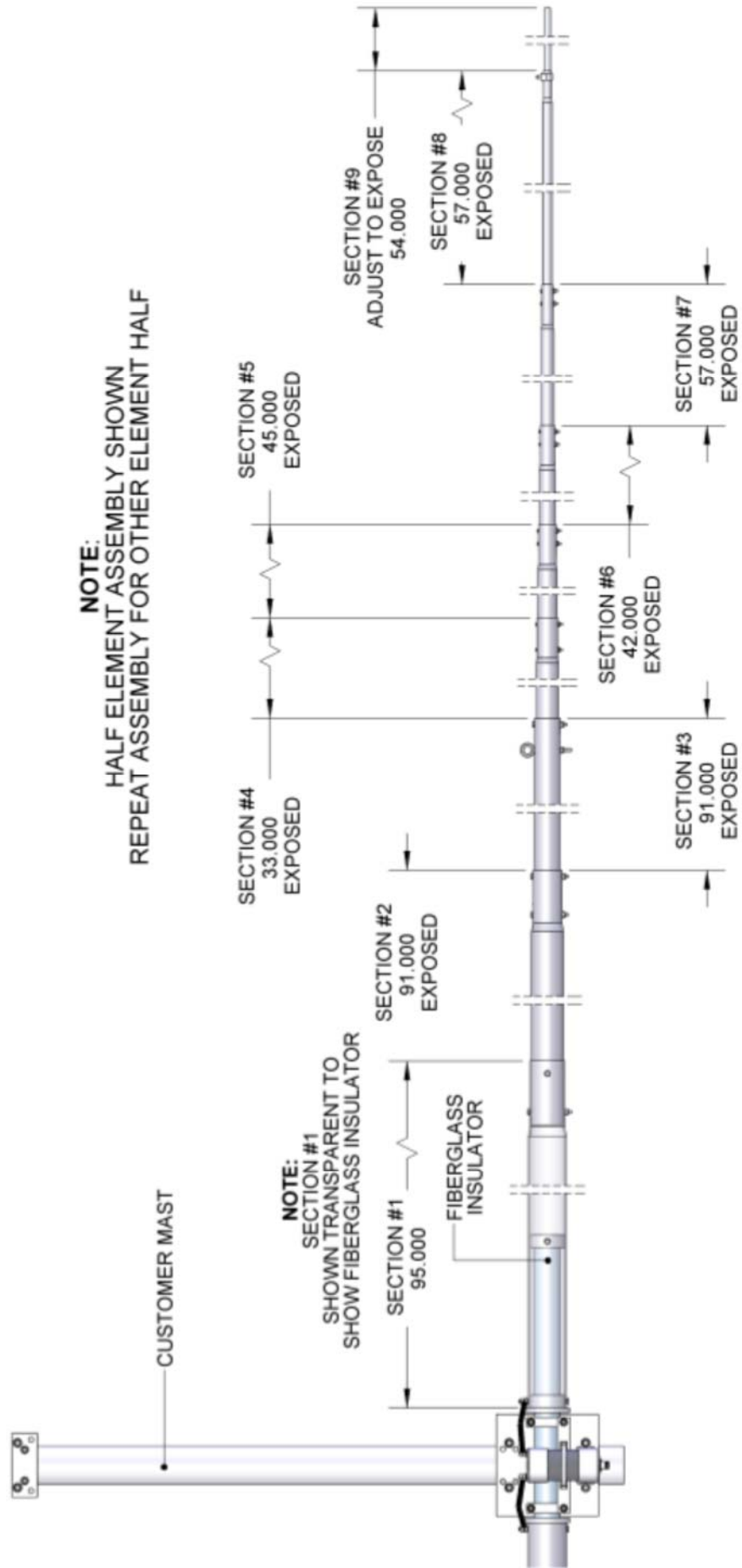
Model	60M1FS	Power Handling	3 kW Higher avl.
Frequency Range.....	5.1 To 6.50 mHz	Boom Length / Dia	N/A
*Gain, (FS) / Over gnd.....	2.1 dBi / 8.1 dBi @ 90'	Maximum Element Length.....	95'
Front to back.....	N/A	Turning Radius:	47.5'
Beamwidth	E=72°	Mast Size	2" to 3" Nom.
Feed Impedance.....	50 Ohms Unbalanced	Wind area / Survival	9.5 Sq. Ft. / 85 MPH
Maximum VSWR	2.0:1	Weight / Ship Wt.	75 Lbs. / 85 Lbs.
Input Connector	SO-239, Other avl.		

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

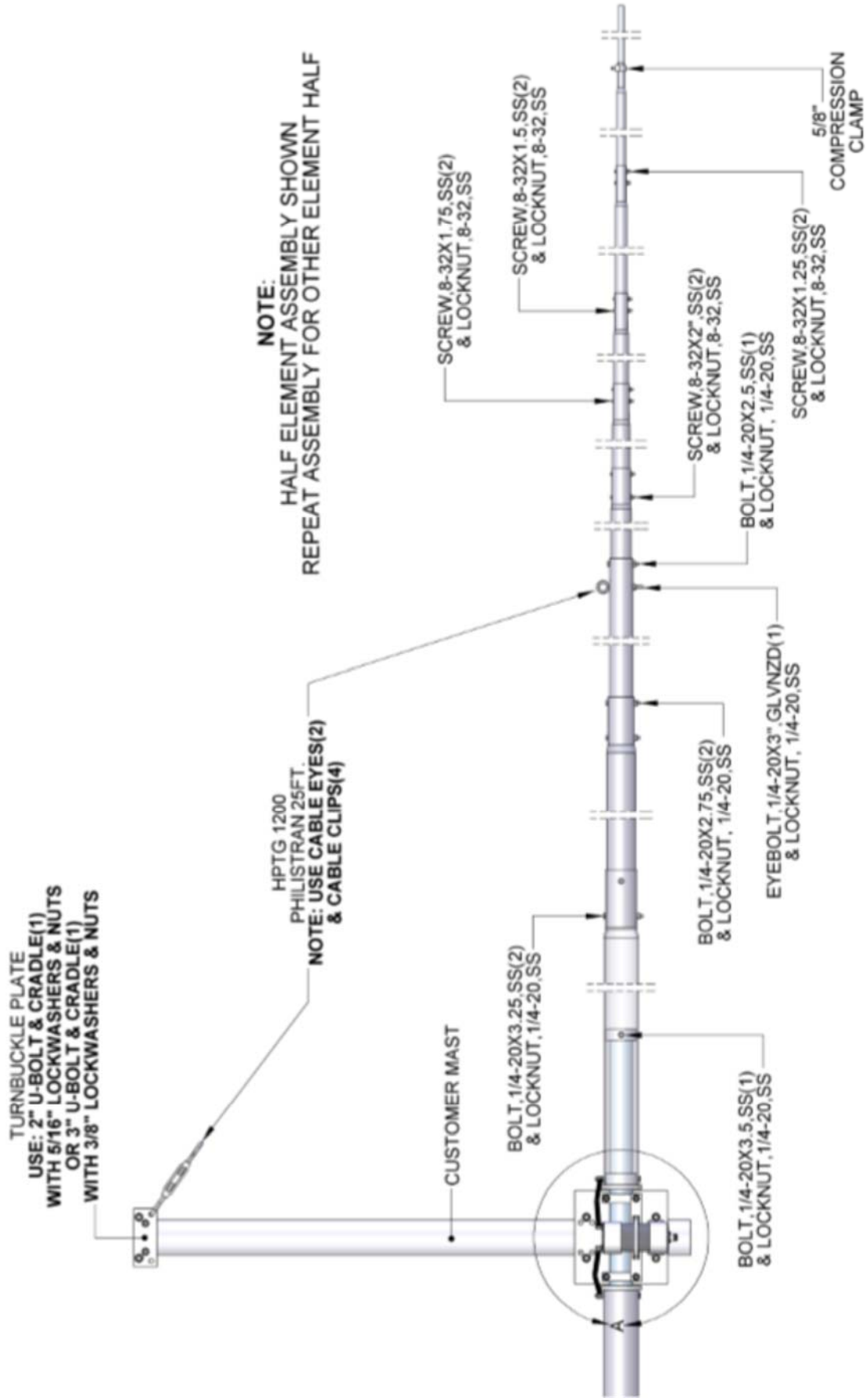
FEATURES:

The 60M1FS is a Full-sized dipole with great versatility. It has been optimized both mechanically and electrically to be strong, but light as possible. When used as a rotatable dipole, it will easily outperform all fixed wire dipoles. It can also be used as a building block for future expansion to a 2 or 3 element beam antenna. The dipole can also be separated in half and used as phased 1/4 wave verticals. Element halves start with 3" diameter tubing and taper through 2", 1-3/4", 1-1/2", 1-1/4", 1", 3/4" & 1/2" sections to the 3/8" tips. The 3" and 2" sections are separated by a rugged fiberglass insulator to allow for the linear loading (3/8" aluminum tubing). A solid 2" O.D. x 36" fiberglass rod, sleeved to the 3" elements, serves as the center insulator. Overhead support system is provided. Tip droop is typically 3-4 feet and looks better than some 40 meter elements. Let your imagination go wild. You may come up with something real different!

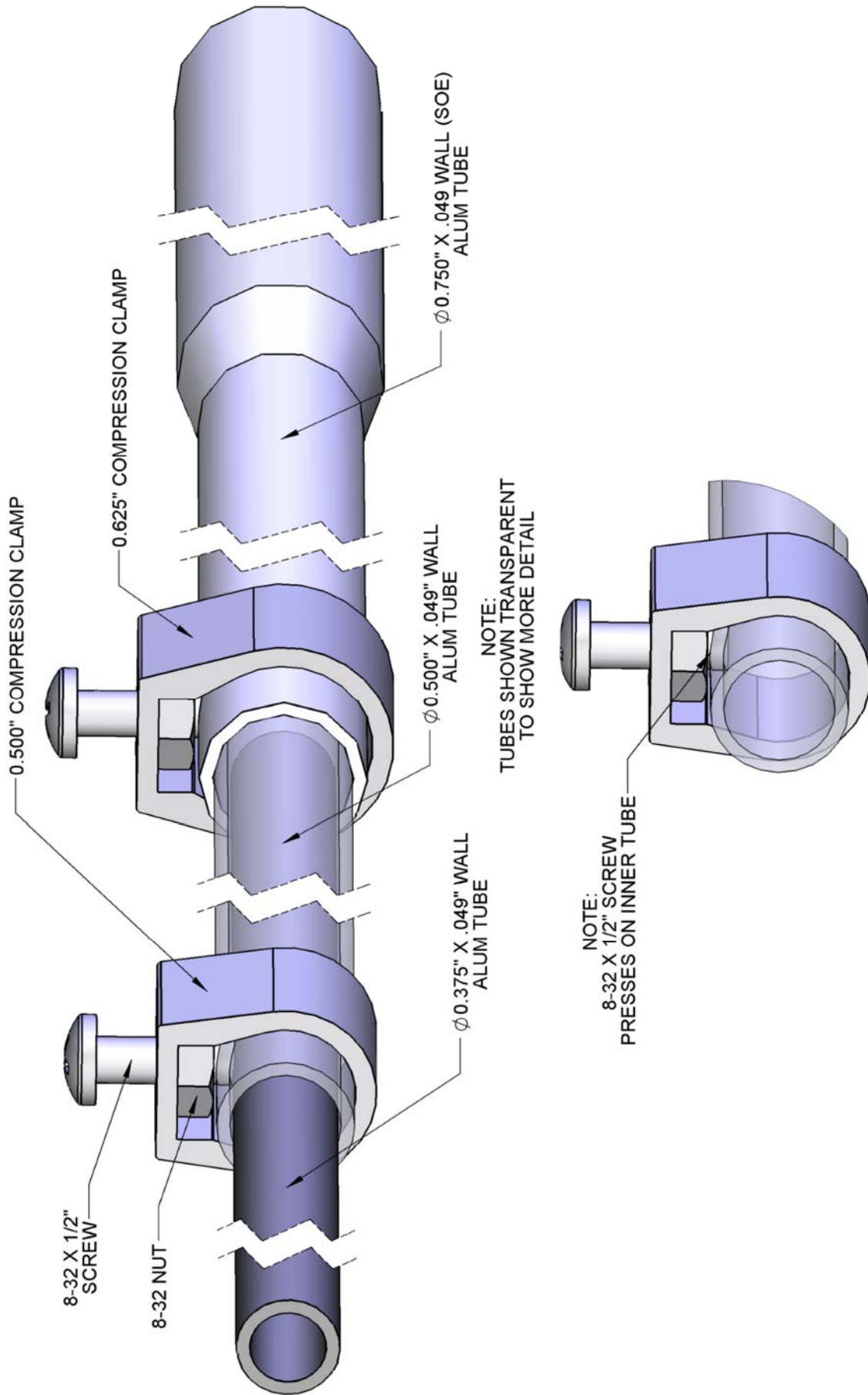
60M1FS ELEMENT LAYOUT



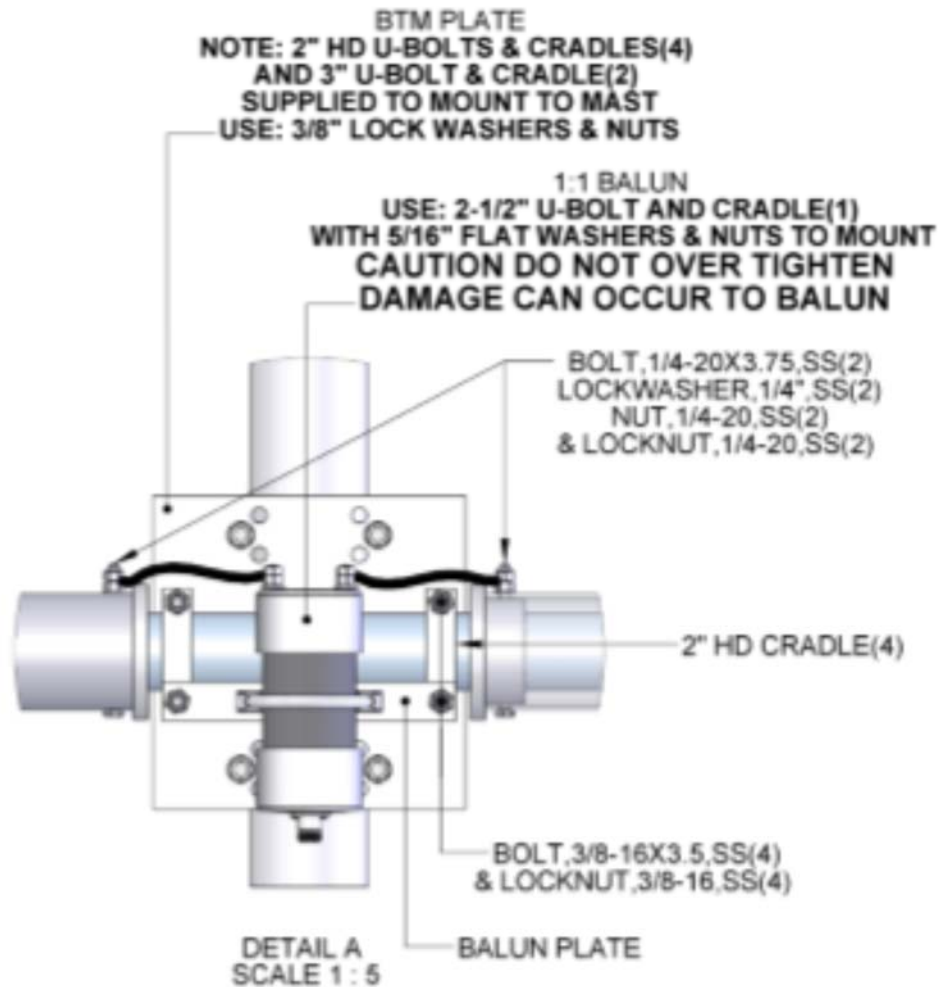
60M1FS ELEMENT HARDWARE



COMPRESSION CLAMP & TIP ASSEMBLY



60M1FS BTM & BALUN DETAIL



OVERVIEW: Feel free to change order of assembly to fit your space needs.

This dipole comes complete with hardware to mount it on a 2 inch mast. OPTIONAL hardware is available for mounting on a 3 inch BOOM. The boom mounting capability is handy for expanding your dipole into a two or three element beam with directionality and gain. This dipole can also be converted to a director or reflector by omitting the balun and adding a jumper in its place. Contact M2 for spacing and tuning information. A small container of zinc paste (Penetrox, Noalox, or equivalent) has been provided to enhance and maintain the quality of all electrical junctions on this antenna. Apply a thin coat wherever two pieces of aluminum come in contact or other electrical connections are made.

Carefully manufactured by:

M² ANTENNA SYSTEMS, INC.

4402 N. Selland Ave.

Fresno, CA 93722

(559) 432-8873 Fax: 432-3059

www.m2inc.com Email: sales@m2inc.com

60M1FS PARTS & HARDWARE

02-02-09

Rev.01

DESCRIPTION	QTY
ELE 1 SEC 1, 3" X 0.125 X 95" SOE, 6061-T6	2
ELE 1 SEC 2, 2-1/2 X 0.125 X 96", SOE 6061-T6	2
ELE 1 SEC 3, 2" X 0.125 X 95", 6061-T6	2
ELE 1 SEC 4, 1-3/4" X 0.058 X 36" SOE 6063-T832	2
ELE 1 SEC 5, 1-1/2" X 0.058 X 48" SOE 6063-T832	2
ELE 1 SEC 6, 1-1/4" X 0.058 X 45" SOE 6063-T832	2
ELE 1 SEC 7, 1" X 0.058 X 60" SOE 6063-T832	2
ELE 1 SEC 8, 3/4" X 0.049 X 60" SOE 6063-T832	2
ELE 1 SEC 9, 1/2" X 0.049 X 60" SOE 6063-T832	2
CENTER SUPPORT INSUL, 2" X 36" W/ COUPLING RINGS	1
POLY DISC INSULATOR, 2" I.D.	2
CRADLE, 2" HD (MACH. ALUM.)	4
COMPRESSION CLAMP, 5/8"	2
BALUN PLATE, 1" X 0.125 X 7-1/2" ALUMINUM	1
BTM PLATE, 8" X 8" X 1/4" (M2APT0071)	1
TURNBUCKLE PLATE, 2" X 5" X 3/16"	1
3" U-BOLT AND CRADLE	3
2-1/2" U-BOLT AND CRADLE	1
2" HD U-BOLT AND CRADLE	4
2" U-BOLT AND CRADLE	1
TURNBUCKLE, 5/16, HOOK & EYE SS	2
CABLE CLIPS, SMALL,	8
CABLE EYE, 1/8"	4
HPTG 1200 PHILISTRAN, 25 FT	2
BALUN 1:1	1
PENETROX CUP	1
HARDWARE	
BOLT, 3/8-16 X 3-1/2", SS	4
LOCKNUT, 3/8-16, SS	4
NUT, 3/8-16, SS	14
LOCK WASHER, 3/8, SS	14
NUT, 5/16-18, SS	4
LOCK WASHER, 5/16", SS	4
EYE BOLT, 1/4-20 X 3", GALVANIZED	2
BOLT, 1/4-20 X 3-3/4", SS	2
BOLT, 1/4-20 X 3-1/2", SS	2
BOLT, 1/4-20 X 3-1/4", SS	4
BOLT, 1/4-20 X 2-3/4", SS	4
BOLT, 1/4-20 X 2-1/2", SS	2
NUT, 1/4-20, SS	2
LOCKWASHER, 1/4", SS	2
LOCKNUT, 1/4-20, SS	16
SCREW, 8-32 X 2", SS	4
SCREW, 8-32 X 1-3/4", SS	4
SCREW, 8-32 X 1-1/2", SS	4
SCREW, 8-32 X 1-1/4", SS	4
SCREW, 8-32 X 1/2", SS	2
LOCKNUT, 8-32, SS	16
NUT, 8-32, SS	2