



# Whip Type MF Band Antenna JWA-13.

For GMDSS, A2 AREA. 2 To 2.7 MHz

- ★ Compact High Efficiency Radiation
- ★ Easy Installation, Ground or Roof Top
- ★ 3-Channel Present

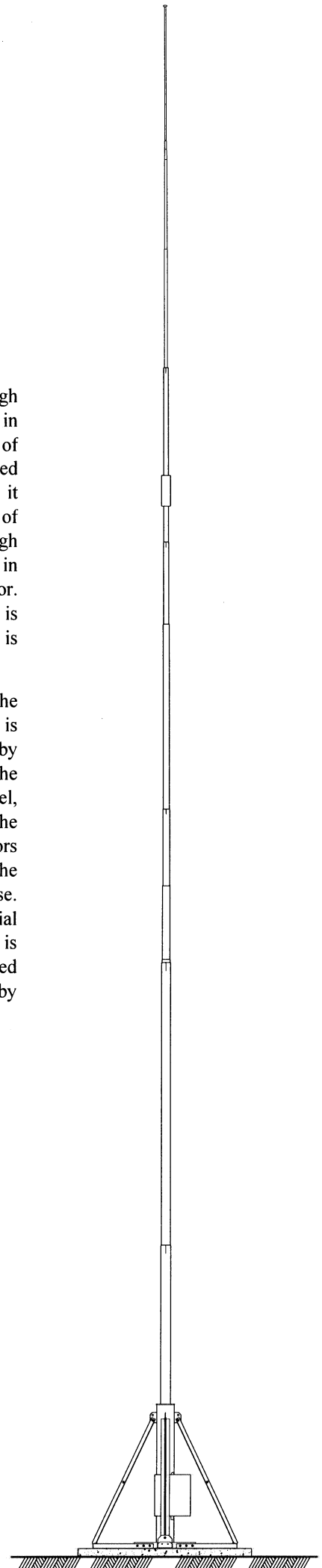
## 1. GENERAL

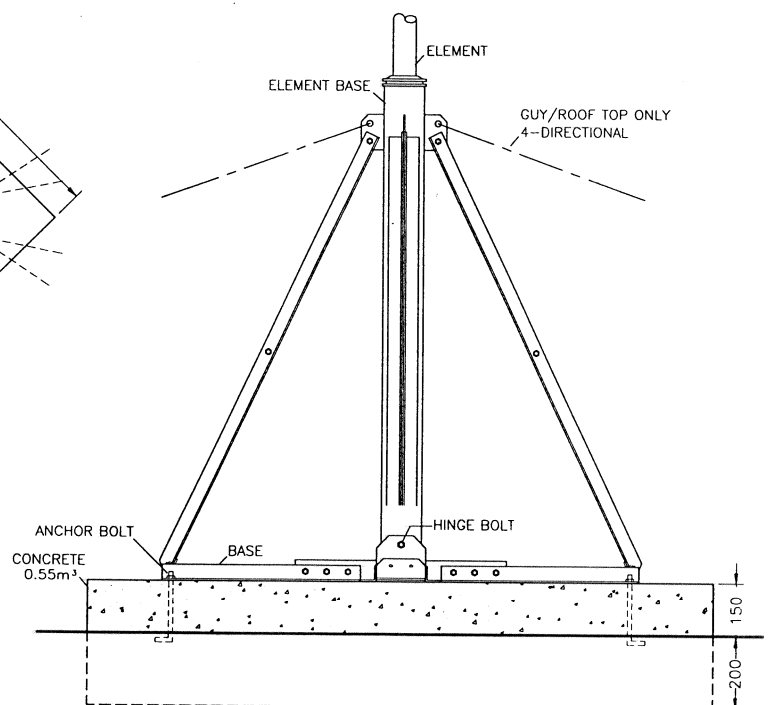
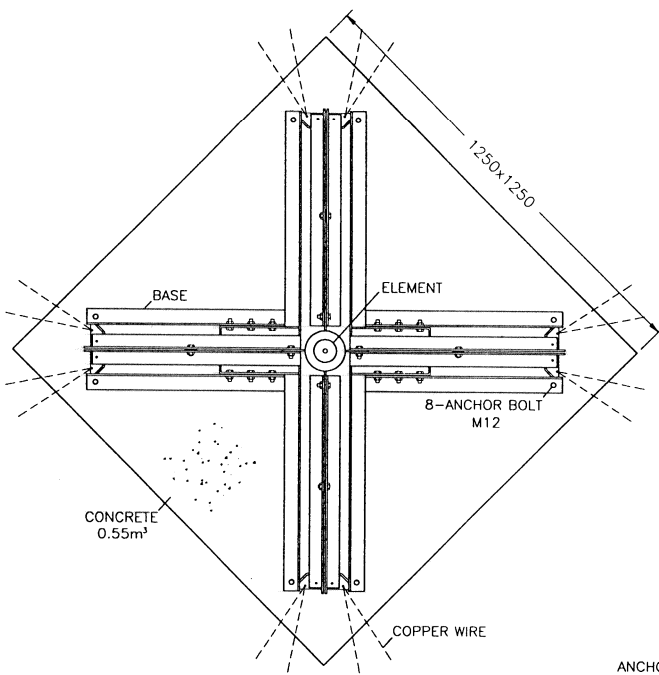
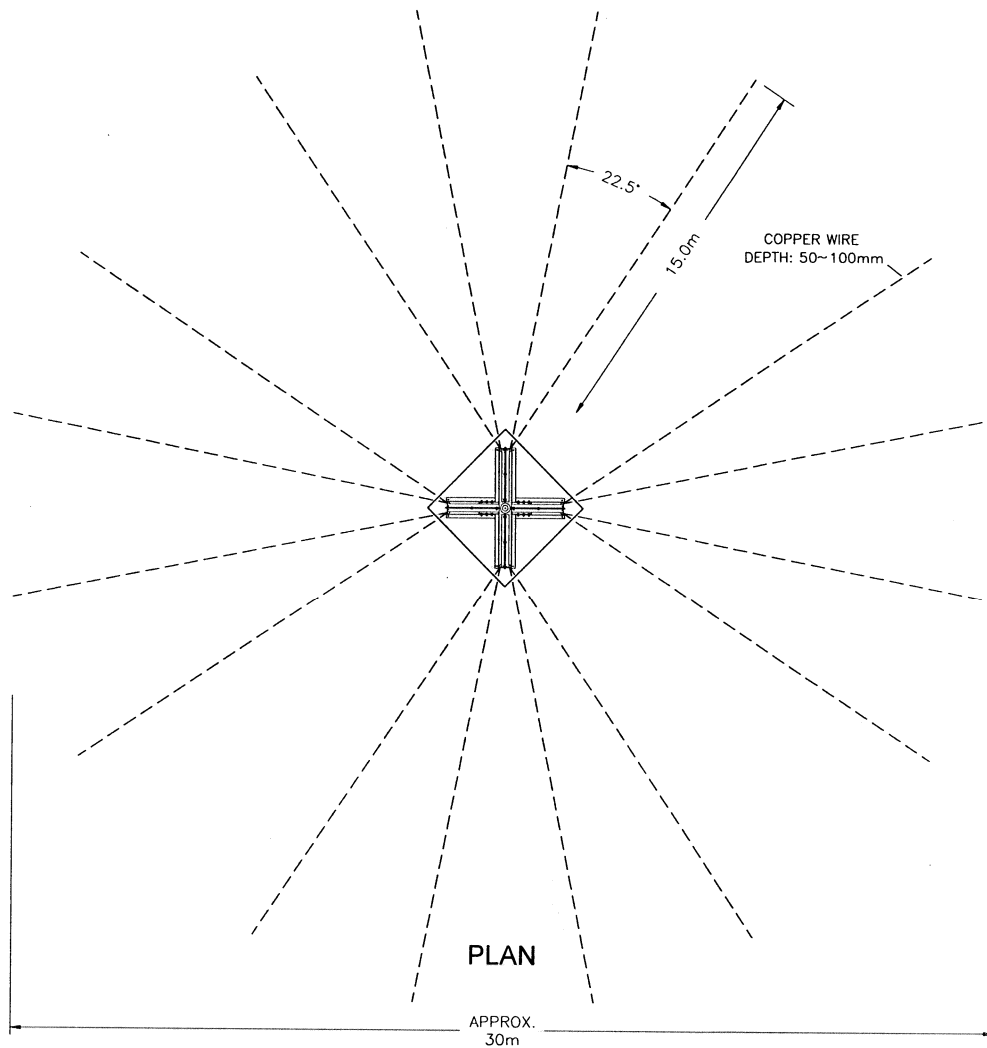
This JWA-13 is a whip type vertical antenna offering an extremely high radiational efficiency. The frequency range of this antenna is from 2 to 2.7MHz in which enable to operate 3-frequencies within the band. A low-loss type of loading inductance is inserted in the radiator which is 40% optimally reduced (approx. 2.2MHz) against full-size wave length, and this consequentially makes it possible to minimize loss of the RF power in the tuning circuit in the base part of this antenna. Owing to this, although this is a compact, it brings to a high radiational efficiency with a minimum loss of gain at only approx. -1dB in comparison with other similar type of antenna which has a full -sized radiator. Radiator element is constructed of high strength aluminum tubings, hence there is no need to prepare a particular equipment in order to lift up the antenna as it forms a hinge construction in the lower part of this antenna.

This antenna is designed to make an easy installation enable to install it at the location either on the ground or roof top. For the installation on the ground, it is to fix with an small amount of concrete as a supporting base on the ground by using anchor bolts. It is required to bury 16 pieces of radial screens under the ground, made of copper wires at 50~100mm deep below the ground level, spreading out (with the radius of approx. 15m) from the center. In the meanwhile, the installation from the roof top, is constructed with anchors (minimum with the radius of approx. 4m) at 4 points on the roof top. Neither the concrete nor anchor bolts are not additionally required in the part of antenna base. The ground side is constructed with a roof top base with 12 pieces of radial screens attached that is copper wires of the length of approx 15m long. If this is the case that root top area is narrow, the same radiational efficiency is derived performed by attaching reduced copper wires which are cut at approx. 10m and by increasing the quantity of radial wire as far up 24 pieces.

## SPECIFICATIONS

Frequency:	2~2.7MHz
	3-Frequency Within the Band
Polarization:	Vertical
Gain:	-1dB/Full-Sized Radiator
Radiational Pattern:	Omni-Directional
RF Power Capability, CW/PEP:	1/2kW
Impedance:	50 Ω (NJ)
VSWR:	Less Than 1.5:1
Length:	15m
Power Requirement:	115-220-240VAC. 20VA
System Net Weight:	60kg
Tuning Unit:	CM-227
Method of Band Select:	Relay Controlled
VSWR Meter:	Built-in
Cooling Fan:	Activate When Transmitting
Wind Loading Capability:	45m/s
Weight:	8kg





JWA-13, Antenna installation.