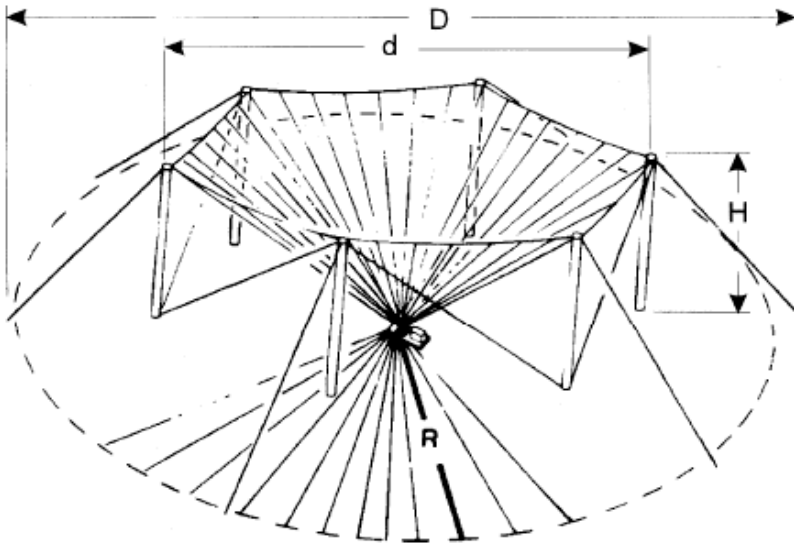


VERTICAL OMNI ANTENNAS



APPLICATIONS

The ICV series are rugged, vertically polarized fixed station antennas designed for harsh environments. They are suitable for short range groundwave and medium to long range skywave communications. The antennas are well-suited for naval shore-to-ship groundwave communication circuits where whip antennas are used on the ships. The antennas are broadband and operate in the 2 to 30 MHz frequency band without tuning or switching. They have a maximum VSWR of 2:1 and are designed to handle 25 kW average and 50 kW PEP. The antenna input connector is a 3-1/2-inch EIA flange.

FEATURES

The inverted cone vertical (ICV) antennas are a series of vertical, omnidirectional, broadband, antennas suitable for fixed station requirements.

The curtains are made of aluminum-covered steel wires and connections are made using swaged fittings. The curtain and matching unit are at DC ground which provides protection against lightning and static charges.

The equipment supplied consists of a prefabricated curtain, bolted aluminum tower, guys, anchors, and antenna matching unit. Optional equipment includes obstruction lights, a repair kit, and a spares kit. 6 each 60 foot wood poles are required to be procured locally for the installation.

SPECIFICATIONS

| | |
|--------------------------|--|
| GAIN | 3 dBi at 2 MHz; 8 dBi at 30 MHz |
| INPUT IMPEDANCE | 50 Ohms unbalanced |
| VSWR | 2:1 maximum |
| POLARIZATION | Vertical |
| AZIMUTH PATTERN | Omnidirectional \pm dB |
| POWER | 25 kW avg/50 kW PEP 100 kW peak instantaneous |
| INPUT CONNECTOR | 3-1/8 EIA flange |
| ENVIRONMENTAL CONDITIONS | 125 mph wind, no ice 90 mph wind, 1/2-in radial ice |

| SPECIFICATIONS | ICV-I | ICV-II | ICV-III | ICV-IV |
|--|----------|------------|----------|----------|
| FREQUENCY RANGE | 2-30 MHz | 2.5-30 MHz | 3-30 MHz | 4-30 MHz |
| HEIGHT (H) | 55 ft | 44 ft | 37 ft | 28 ft |
| INSTALLED DIAMETER (D) | 295 ft | 236 ft | 197 ft | 148 ft |
| CONE DIAMETER (d) | 187 ft | 150 ft | 25 ft | 94 ft |
| GROUND SCREEN RADIUS (R) | 123 ft | 99 ft | 82 ft | 62 ft |
| WOOD POLE WEIGHT (approx) (normally drop-shipped) | 17,000 | 12,000 | 10,000 | 7,000 |
| SHIPPING WEIGHT (lbs) | 3,407 | 2,946 | 2,630 | 2,418 |
| SHIPPING VOLUME (cu ft) | 199 | 175 | 157 | 134 |