

# Type 2726 Series GRANGER™

## Vertically Polarized, Log-Periodic HF Antennas

- 2.5-30 MHz Frequency Range
- Up to 10 kW Average, 20 kW Peak Power Rating
- Vertical Polarization
- 2.0:1 Maximum VSWR
- Long-Range HF Communications
- Minimum Tower Height
- Minimum Space Required

### General Description

The 2726 Series is a family of monopole, log-periodic arrays, the most economic configuration which can efficiently radiate at broadband HF frequencies as low as 2.5 MHz. The antennas are intended for either point-to-point communications or sector broadcast.

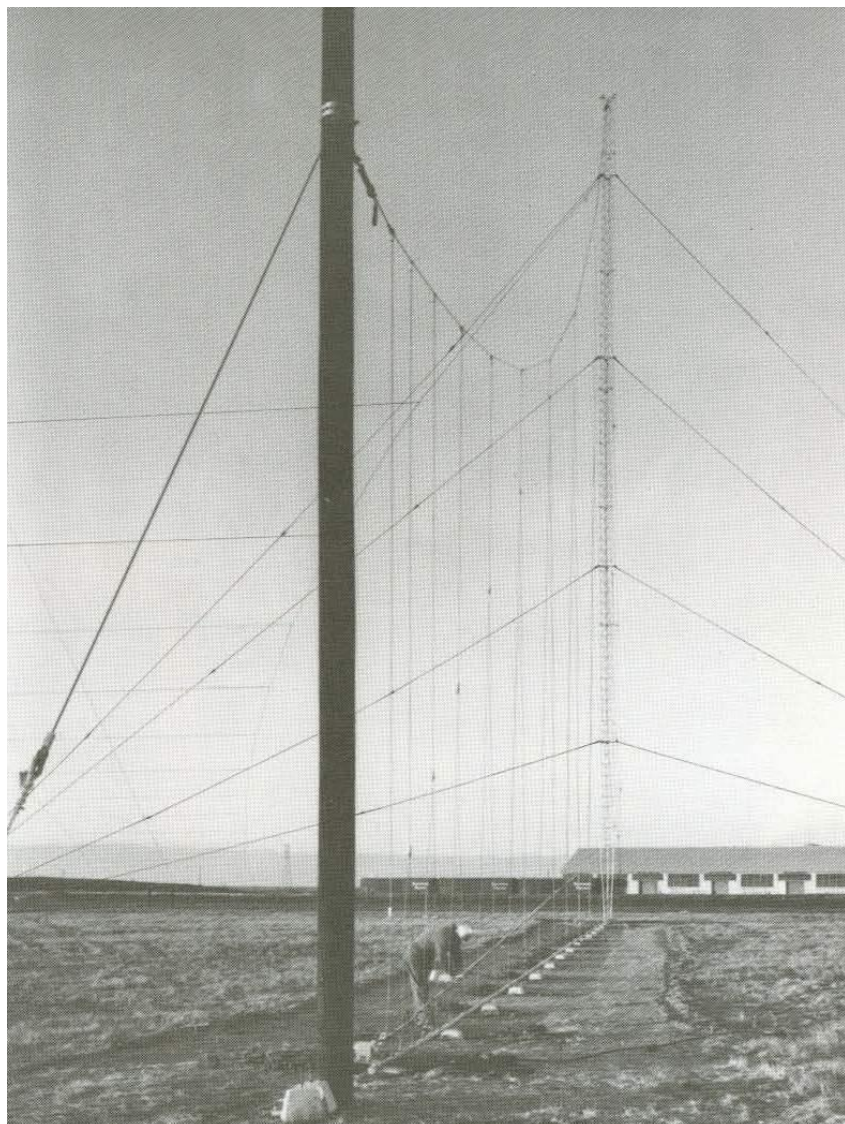
Radiation patterns, characterized by a high-gain lobe directed close to the horizon, are nearly constant at all operating frequencies. The vertical beamwidth is sufficiently narrow to provide high directive gain, yet broad enough to encompass the range of take-off angles required by diverse ionospheric conditions. Side and back lobes are virtually absent, thereby minimizing off-path interference.

### Features

**Strength and Durability.** The 2726 Series antennas have been carefully designed to create a light, strong, resilient structure and will operate for long periods in harsh environments. Radiators are high-strength bronze wire. The supporting catenary is fiberglass rod bonded to manganesebronze end fittings. All materials have been selected for maximum resistance to corrosive environments, such as salt spray, tropical locations and industrial regions.

**Ease of Assembly and Installation.** Towers are shipped unassembled and are easily assembled in the field through interconnection of three vertical rails. All parts are supplied. Antennas can be erected without a crane, using an erection fixture available as an option.

ASC Signal offers field engineering services, including propagation analysis, antenna specification, manufacturing, installation and field tests, to facilitate sitting and installation of antennas.

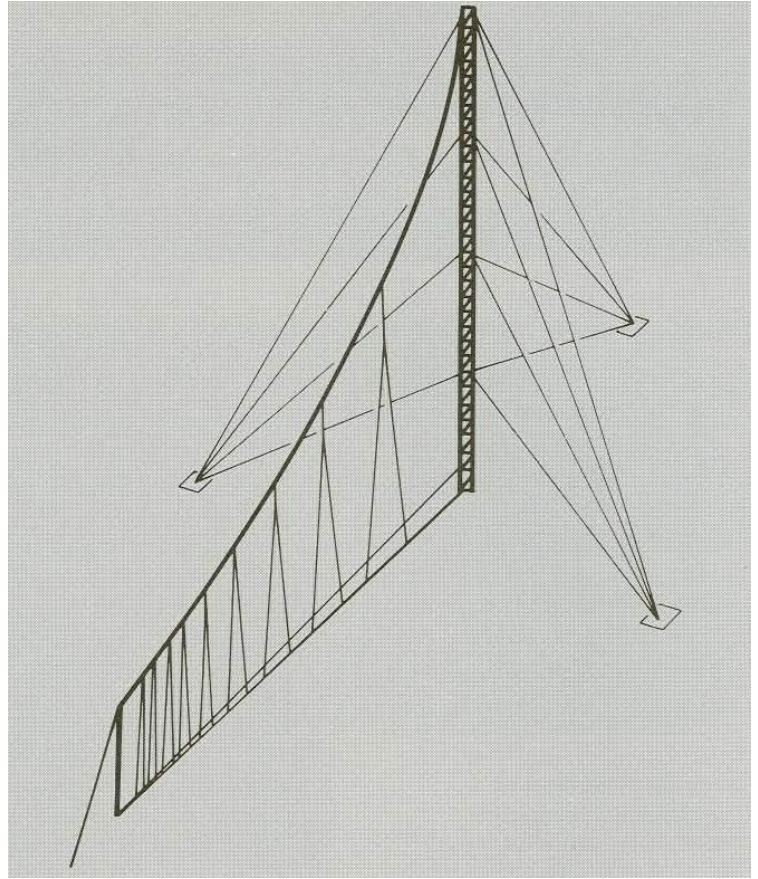


### Accessories

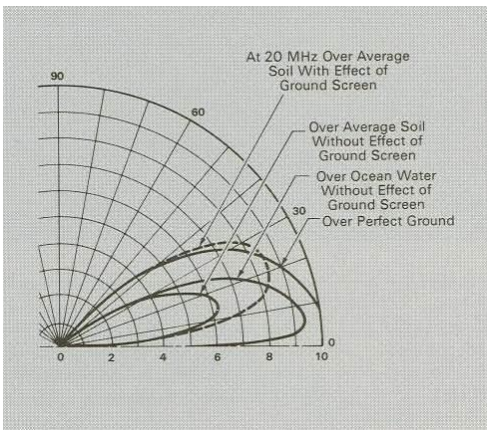
The following accessories are available for ease of installation and maintenance: tower lighting kit, erection kit, paint kit, tool kit, lightning rod kit, anti-climbing kit, and spares kit.

### Characteristics

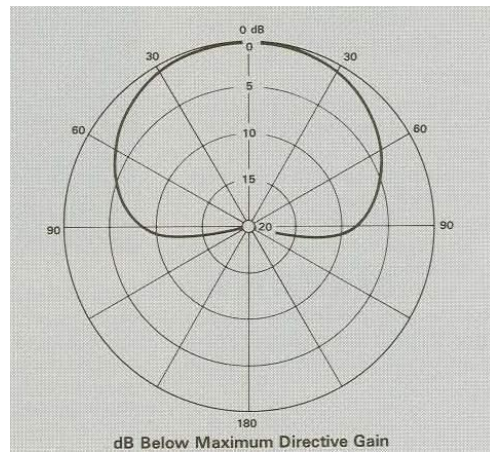
Type	HF Monopole log-periodic
Frequency Range, MHz	2.5-32
Power Rating, kW	Up to 10 average, 20 peak
Polarization	Vertical
VSWR	2.0:1 maximum
Gain, dBi	Greater than 10 over perfect ground
Wind Survival Rating, mph (km/h)	120 (190)
Without Ice	100 (160)
With 0.5 in (12mm) Radial Ice	



### Elevation Plane Radiation Patterns

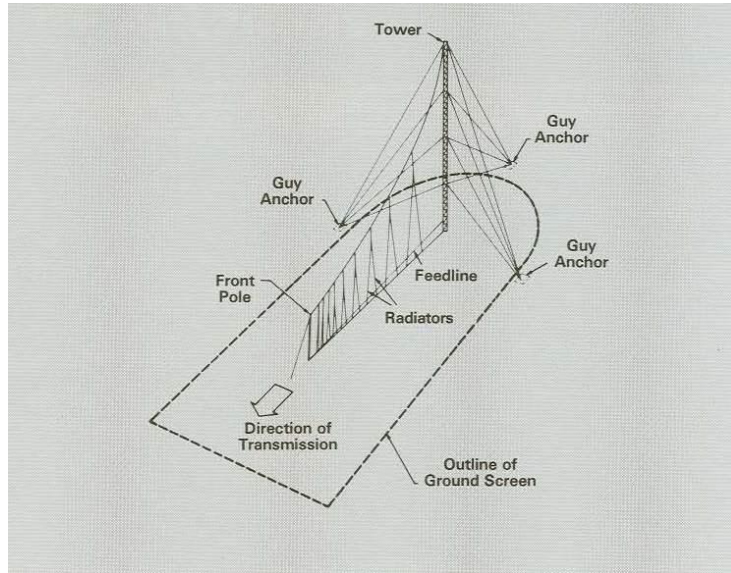


### Azimuth Plane Radiation Pattern

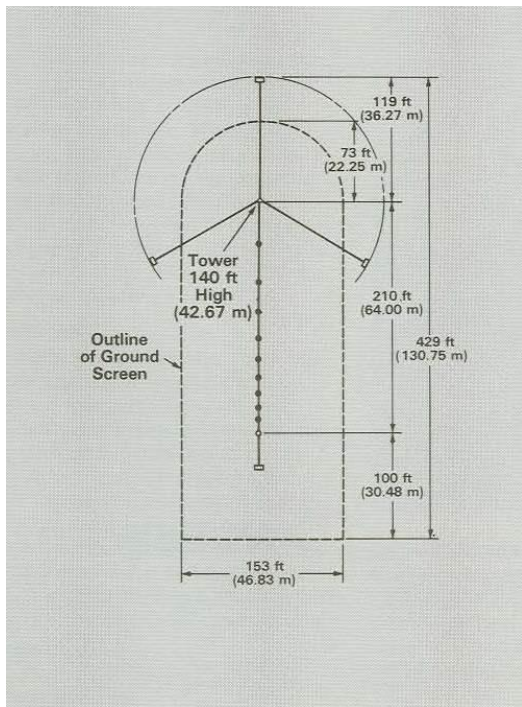




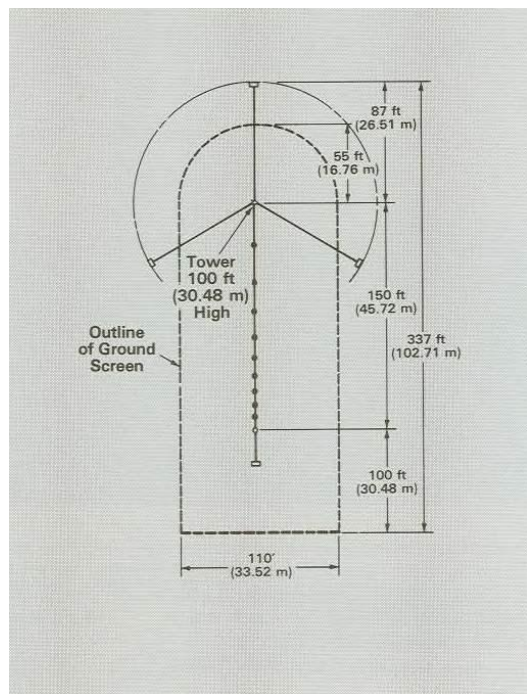
## Configuration of All Series 2726 Antennas



**Antenna Dimensions 2.5 to 32 MHz**  
Models 2726-1 and 2726-2



**Antenna Dimensions 3.5 to 32 MHz**  
Models 2726-3 and 2726-4



## Ordering Information

Type No.	2726-1K	2726-2K	2726-3K	2726-4K
Frequency Range, MHz	2.5-32	2.5-32	3.5-32	3.5-32
Power Rating, kW	Receive Only	10 Average, 20 Peak	Receive Only	10 Average, 20 Peak
Input Impedance, ohms	50, coaxial	50, coaxial	50, coaxial	50, coaxial
Input Connector	Type N Female	1-5/8" EIA, female	Type N female	1-5/8" EIA, female
Level of Largest Side or Back Lobe	-10 below 3.2 MHz	-10 below 3.2 MHz	-10 below 4.4 MHz	-10 below 4.4 MHz
Relative to Main Lobe	-14 from 3.2 to 32 MHz	-14 from 3.2 to 32 MHz	-14 from 4.4 to 32 MHz	-14 from 4.4 to 32 MHz

**Note:** Class 2, 3 or 4 Douglas Fir pole required (not furnished).  
 Required lengths are 35 ft (10.7m) for Type Nos. 2726-1 and 2726-2; and 25 ft  
 (7.6m) for Type Nos. 2726-3 and 2726-4.