# Type **2726** Series GRANGER®

# Vertically Polarized, Log-Periodic HF Antennas



- 2.5-32 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

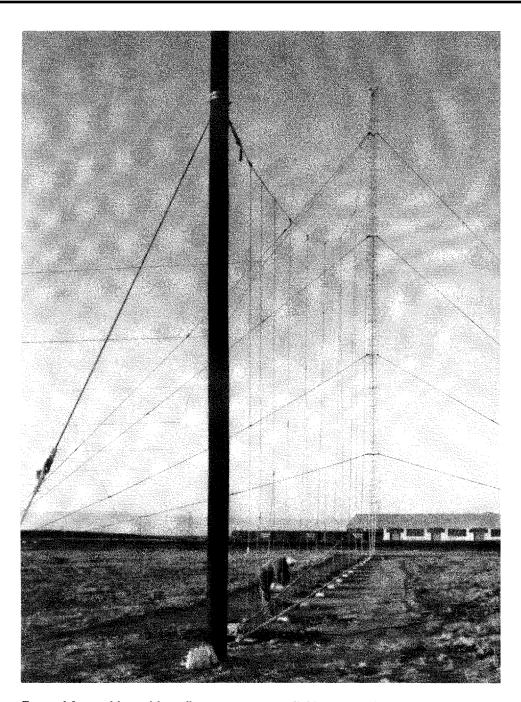
### **General Description**

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 manganese-bronze end fittings. All materials have been selected for maximum resistance to corrosive environments, such as salt spray, tropical locations and industrial regions.

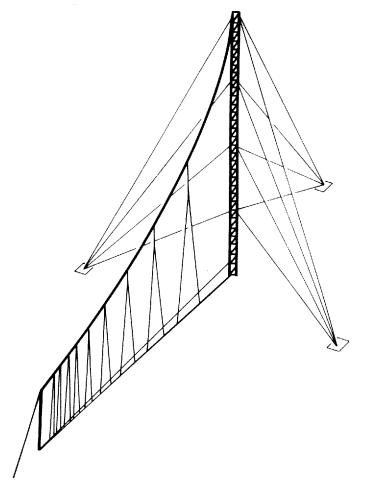


# Ease of Assembly and Installa-

tion. 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. Andrew offers field engineering services, including propagation analysis, antenna specification, manufacturing, installation and field tests, to facilitate siting 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.



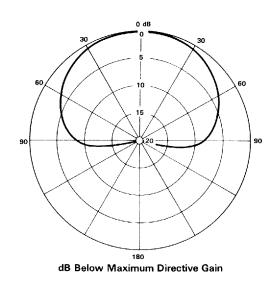
### **Characteristics**

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

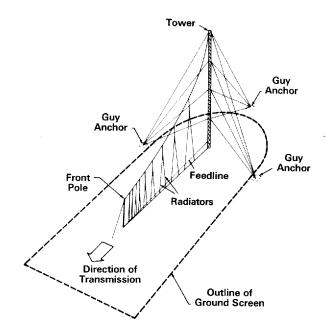
### **Elevation Plane Radiation Patterns**

# At 20 MHz Over Average Soil With Effect of Ground Screen Over Average Soil Without Effect of Ground Screen Over Ocean Water Without Effect of Ground Screen Over Perfect Ground

### **Azimuth Plane Radiation Pattern**



## **Configuration of All Series 2726 Antennas**

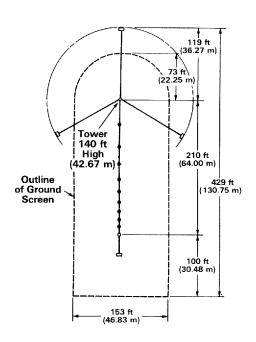


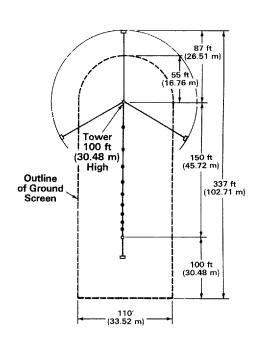
### Antenna Dimensions 2.5 to 32 MHz

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<br>Power Rating, kW<br>Input Impedance, ohms*<br>Input Connector | 2.5-32<br>Receive only<br>50, coaxial<br>Type N Female | 2.5-32<br>10 Average, 20 Peak<br>50, coaxial<br>1-5/8" EIA, female | 3.5-32<br>Receive Only<br>50, coaxial<br>Type N Female | 3.5-32<br>10 Average, 20 Peak<br>50, coaxial<br>1-5/8" EIA, female |
| Level of Largest Side<br>or Back Lobe<br>Relative to Main Lobe                        | -10 below 3.2 MHz<br>-14 from 3.2 to 32 MHz            | -10 below 3.2 MHz<br>-14 from 3.2 to 32 MHz                        | -10 below 4.4 MHz<br>-14 from 4.4 to 32 MHz            | -10 below 4.4 MHz<br>-14 from 4.4 to 32 MHz                        |

<sup>\*</sup>Optional 70-ohms input available

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



Bulletin **1426B** 4/00

Data subject to change without notice Printed in U.S.A.

Andrew Corporation 10500 West 153rd St. Orland Park, IL 60462 U.S.A. From North America:

U.S.A. From North America 1-800-255-1479 Fax: 1-800-349-5444 Intl.: 708-873-2307 Fax: 708-349-5444 Andrew Canada, Inc. 606 Beech Street, West Whitby, Ontiario, Canada L1N 5S2 Tel: 905-668-3348 Fax: 905-668-8590 Andrew Ltd.
Ilex Building, Mulberry
Business Park
Fishponds Road
Wokingham, Berkshire
England, United Kingdom
RG41 2GY
Tel: +44 118-936-6700

Tel: +44 118-936-6700 Fax: +44 118-936-6777 Fax-on-Demand From North America: 1-800-861-1700 International: 708-873-3614

Visit us on the Internet at: http://www.andrew.com