

# C-BAND BENT STUB ANTENNA

## MODEL 895C



SUPPLYING HIGH PERFORMANCE FLIGHT INSTRUMENTATION, RF/MICROWAVE ASSEMBLIES, POWER AMPLIFIERS, IFF AND DATA ACQUISITION SYSTEMS FOR SEVERE ENVIRONMENTS.

### DESCRIPTION

The Model 895C Bent Stub Antenna was originally developed for airborne applications with C-Band transponders. The most notable feature of the 895C is, its ability to provide coverage for selected planes and polarizations in the overhead region always left uncovered by ordinary stub antennas. This is accomplished without undue sacrifice of normal stub antenna coverage.

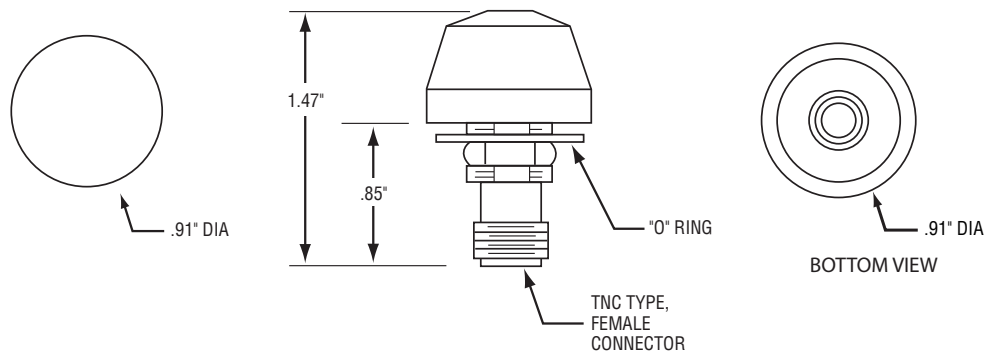
The antenna is characterized by its compactness and light weight, while still maintaining the electrical and environmental characteristics required. Its multi-polarization-sensitive element is enclosed within a radome.

The vehicle skin serves as the ground plane for the antenna. A minimum 2-inch diameter ground plane is required when the antenna is not mounted directly onto a metal surface. The antenna can be mounted to a surface 0.25" thick, an "O" hole is required, it is then secured by a locking nut.

### FEATURES

- Developed for airborne applications with C-Band transponders
- Provides coverage for selected planes and polarizations in the overhead region always left uncovered by ordinary stub antennas
- Multi-polarization-sensitive element is enclosed within a radome
- Compact and extremely light-weight while still maintaining the electrical and environmental characteristics
- Simplified mounting





### ELECTRICAL

- Frequency Range: 5.4 to 5.9 GHz
- Impedance: 50 ohms
- VSWR: <2.0:1 (refer to curve)
- Radiation Coverage: Refer to patterns
- Polarization: Linear
- Power: 1.5 kW peak
- Connector: TNC (female)
- Sealing: O-ring
- Altitude: 70,000 feet
- Temperature: -66°F (-54°C) to +165°F (74°C)
- Vibration Sine: 10 g's - 5 to 2000 Hz

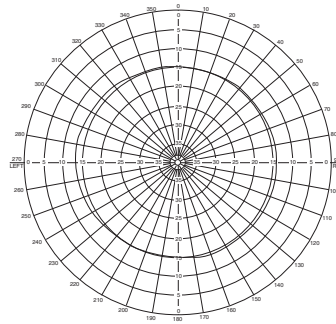
### PHYSICAL

- Size: 1.47" height (3.73 cm) .91" diameter (2.31 cm)
- Weight: 2 oz. (56.7 gms)

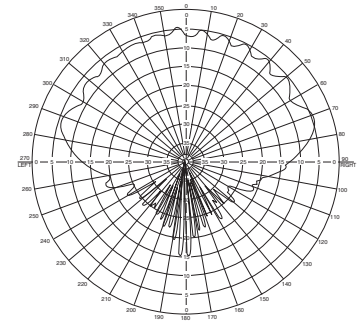
### PRODUCT NUMBERS

- P/N 303294-1 - Standard unit
- P/N 406839-1 - 895C-2, 4.4 to 4.8 GHz, low frequency version

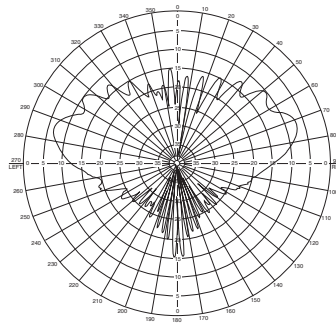
### VERTICAL YAW PLANE



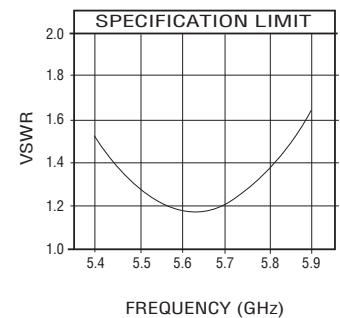
### VERTICAL ROLL PLANE



### VERTICAL PITCH PLANE



### TYPICAL VSWR VS FREQUENCY



making a difference

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