

THE WORLD LEADER IN HIGH PERFORMANCE WRAPAROUND™ ANTENNAS.



# C and X-BAND BUTTON ANTENNAS

Haigh-Farr C and X-Band Button antennas were designed for applications where size and weight are critical, covering frequencies from 5.4 to 9.6 GHz. All Button antennas provide the omnidirectional coverage of a stub in a rugged package, with Model 2107 being designed to fill in the overhead null.

All Haigh-Farr Button antennas utilize well-proven materials and methods of construction. Superb protection is obtained through the use of a high-impact, high-temperature radome, with excellent properties in environments containing moisture and contaminants found in airborne applications.

Mounting is accomplished through a "D" hole in the vehicle. The antenna is secured using a lock washer and nut with vehicle sealing achieved through an integral O-Ring.



## FEATURES

- **Omnidirectional Coverage (Azimuth)**
- **Overhead Null Filled In (Elevation)**
- **Frequencies from UHF to X-Band**
- **Small, Compact Footprint**
- **High Impact Radome Material**
- **Common Footprint**
- **Built to Withstand Extreme Shock & Vibration Environments**

## APPLICATIONS

- **Data Links**
- **Aircraft**
- **UAVs**
- **Helicopters**
- **Tactical Missiles**
- **Ships**
- **Ground-Based Vehicles**
- **Single or Array Implementations with Matching Power Dividers and Cables**

## DESIGN CAPABILITY

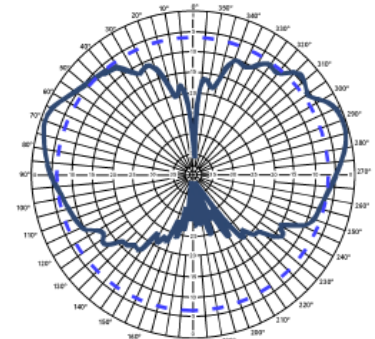
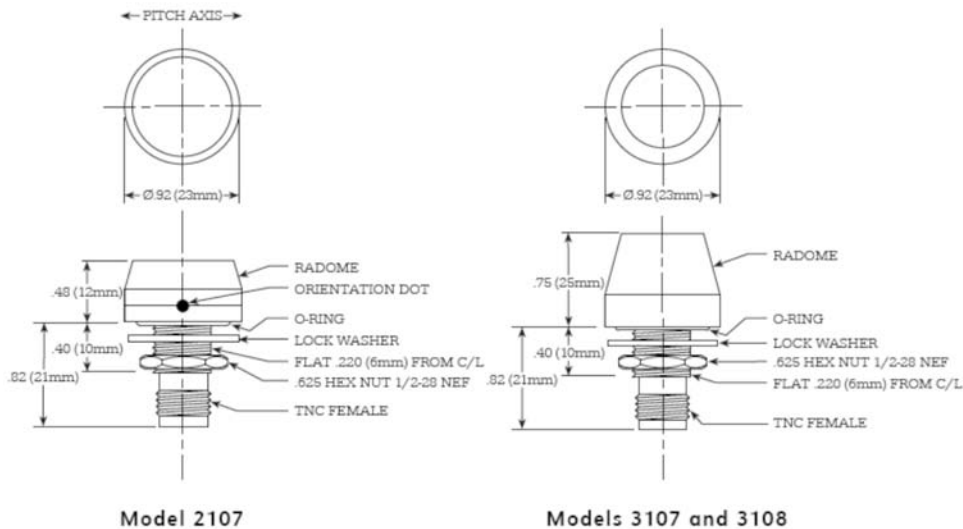
With over 30 years of design history, your antenna configuration/performance requirements may already exist, or extrapolations from similar Haigh-Farr designs may be possible with minimal effort. If a design meeting your requirements does not exist, Haigh-Farr has the experience and modeling capability to customize a solution. Contact Haigh-Farr for a review of your antenna requirements.

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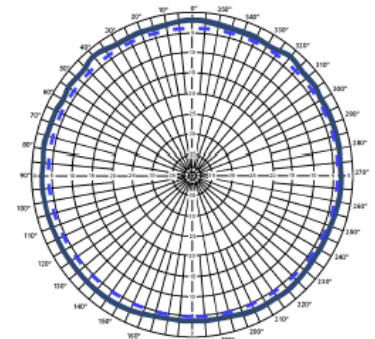
E-mail: sales@haigh-farr.com Web Site: www.haigh-farr.com

# C AND X-BAND BUTTON ANTENNAS

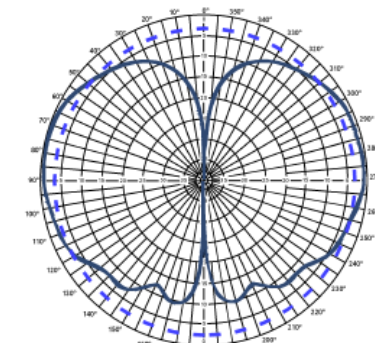
THE WORLD LEADER IN  
HIGH PERFORMANCE  
WRAPAROUND™  
ANTENNAS.



ELEVATION (PITCH) - 2250 MHz  
ISOTROPIC - 6 dB



AZIMUTH (YAW) - 2250 MHz  
ISOTROPIC - 4 dB



ROLL - 2250 MHz  
ISOTROPIC - 3 dB

## TYPICAL SPECIFICATIONS:

### ELECTRICAL:

<b>Operating Band:</b>	P/N 2107 5.4 - 5.9 GHz P/N 3107 5.4 - 5.9 GHz P/N 3108 5.4 - 9.6 GHz
<b>Input Impedance:</b>	50 Ohms
<b>VSWR (Across Band):</b>	P/N 2107 1.5:1 Max P/N 3107 1.5:1 Max P/N 3108 typically 1.5:1, 2.2:1 Max
<b>Polarization:</b>	Vertical
<b>Power:</b>	Compatible with high power transponders
<b>Radiation Pattern<sup>1</sup>:</b>	See plots to right
<b>Connector:</b>	TNC Standard

### MECHANICAL:

<b>Weight:</b>	1.0 ounce
<b>Dimensions:</b>	See drawings above
<b>Mounting:</b>	Through "D" hole in vehicle and secured using lock washer and nut

### ENVIRONMENTAL:

<b>Vibration<sup>2</sup>:</b>	5 g from 5 to 2,500 Hz
<b>Shock<sup>2</sup>:</b>	20 g, 10 ms any axis 100 g, 3 ms any axis
<b>Acceleration:</b>	40 g any axis
<b>Temperature:</b>	-85°F to 311°F (-65°C to 155°C)
<b>Humidity:</b>	100% over temperature range
<b>Salt Fog:</b>	MIL-STD-810 Method 509.1 Procedure 1
<b>Altitude:</b>	70,000 feet (21,350 meters)

<sup>1</sup> Radiation patterns are a function of the vehicle shape and size since the vehicle serves as the ground plane for the antenna. The patterns shown were measured on a typical smooth cylindrical ground plane.

<sup>2</sup> Typical for this antenna, which has been designed for substantially harsher environments. (Different conditions considered on a case-by-case basis).