Button Antennas

Haigh-Farr Button antennas are designed for applications where size and weight are critical. Models cover frequencies ranging from UHF to X-Band, and provide the omnidirectional coverage of a monopole in a rugged package. Models 2107, 2207 and 13215 have a filled-in overhead null, and, therefore, provide the added benefit of full hemispherical coverage.

Haigh-Farr Button antennas utilize proven materials and methods of construction, providing a solid package that requires only one "D" hole in the vehicle for mounting. Superb protection is obtained through the use of a high-impact, high-temperature radome, with excellent properties for environments containing moisture and contaminants.

APPLICATIONS:

- Data Links, Telemetry, Transponder
- Aircraft
- UAVs
- Helicopters
- Tactical Missiles
- Ships
- Ground-Based Vehicles
- Supersonic aircraft
- Single or Array Implementations with Power Dividers and Cables

FEATURES:

- Omni-directional Coverage in Azimuth
- Overhead Null in Elevation Pattern (Most Models)
- Models 2107, 2207, 13215 have the overhead null filled in.
- Frequencies from UHF to X-Band
- Input impedance of 50 Ohms
- Vertical Polarization
- Compatible with high power transponders
- TNC is the standard connector, with SMA options available
- See representative radiation plots on the following page. Additional plots available upon request.
- Small, Compact Footprint
- High Impact Radome Material
- Built to Withstand Extreme Shock & Vibration Environments

DESIGN CAPABILITY:

Haigh-Farr has an over 50 year history of designing and producing exceptionally rugged, high-performance antennas. If you don't find an antenna meeting your requirements in our standard list of products, Haigh-Farr has the experience and modeling capability to customize a solution. Adaptations of existing designs can be done with very short lead times.

Contact Haigh-Farr for a review of your antenna requirements.

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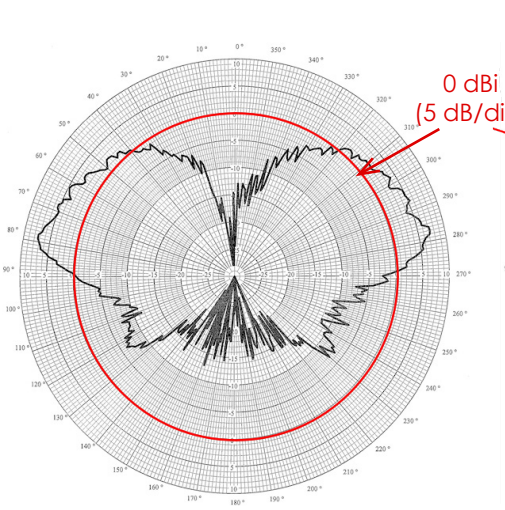
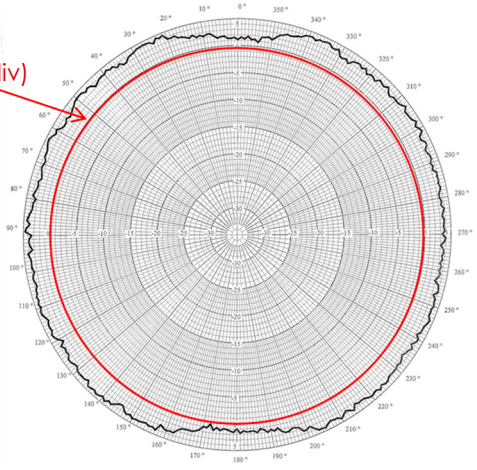
Band	Button P/N	Frequency Range GHz	VSWR MAX/TYPICAL	Representative Drawing	Height Inches (mm)	Weight (SMA) OZ (grams)
UHF	6160	.350 – .600†	2.0:1/1.5:1	E	6.30 [160.0]	3.5 [99]
UHF/L	13120	0.9 – 1.625	2:1/1.75:1	D	2.69 [68.3]	3.0 [85]
L/S	13215*	1.43 – 2.50	2:1/1.5:1	G	1.355 [34.4]	5.1 [144]
S	3106	2.20 – 2.50	1.5:1/1.25:1	B	1.25 [31.8]	1.3 [37]
C	2207*	4.40 – 5.00	1.75:1/1.50:1	F	0.63 [16.0]	1.41 [40]
C	3107-1	4.40 – 5.00	1.5:1/1.25:1	B	0.95 [24.1]	1.0 [29]
C	2107*	5.40 – 5.90	1.5:1/1.25:1	A	0.48 [12.2]	0.9 [26]
C	3107	5.40 – 5.90	1.5:1/1.25:1	B	0.75 [19.0]	1.0 [29]
C	3107S HP	5.40 – 5.90	1.5:1/1.25:1	C	0.95 [24.1]	1.0 [29]
C/X	3108	5.40 – 9.60	2.2:1/1.50:1	B	0.75 [19.0]	1.0 [29]
C	3108-1	6.40 – 7.20	1.5:1/1.25:1	B	0.75 [19.0]	1.0 [29]
X	3108-3	8.00 – 10.50	1.5:1/1.25:1	B	0.75 [19.0]	1.0 [29]

† The center frequency of model 6160 can be set at the factory to any frequency from 350 to 600 MHz. Maximum bandwidth is 50 MHz.
*Models 2107, 2207, and 13215 feature filled-in overhead null

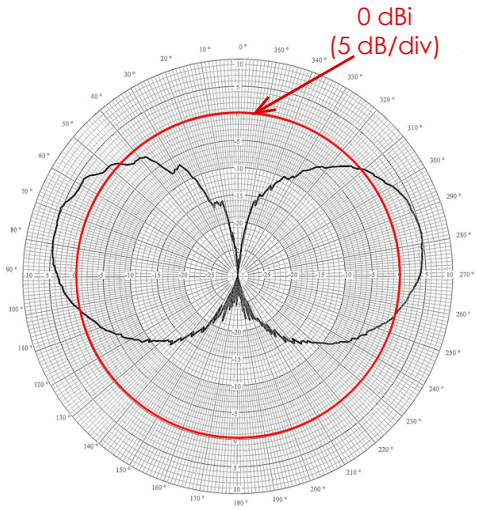
REPRESENTATIVE PATTERNS:



ELEVATION (PITCH)
5.90 GHz



AZIMUTH (YAW)
5.90 GHz



ROLL
5.90 GHz

Note: The patterns above were measured with model 3107 mounted on a smooth cylindrical ground plane but are typical of all Button antennas offered. Fins and other protrusions on the vehicle will perturb the radiation pattern. The extent of any perturbations cannot be fully determined until radiation patterns are either calculated or measured on a model of the vehicle. Haigh-Farr offers engineering services, which include the calculation of radiation patterns on a specific vehicle.

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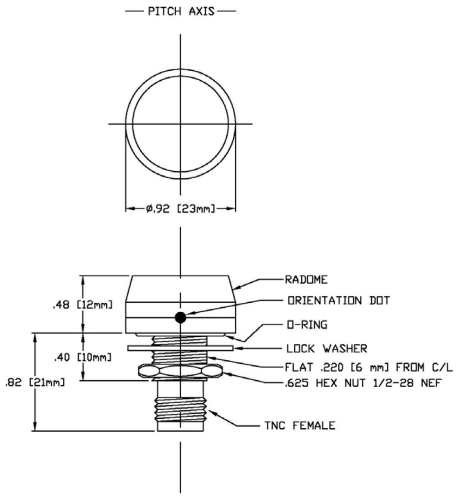
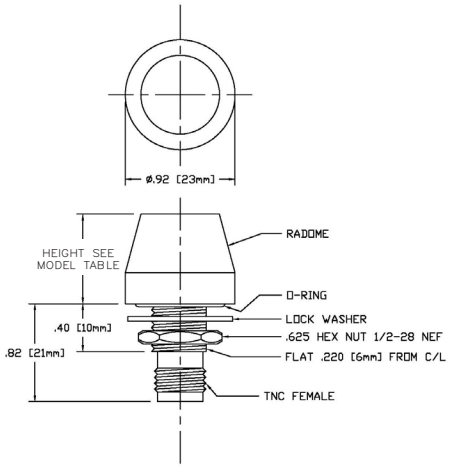
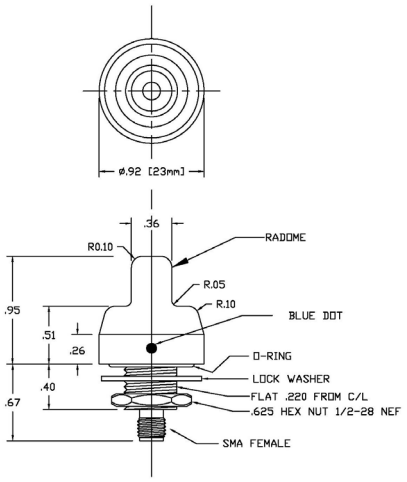
MECHANICAL DIMENSIONS:



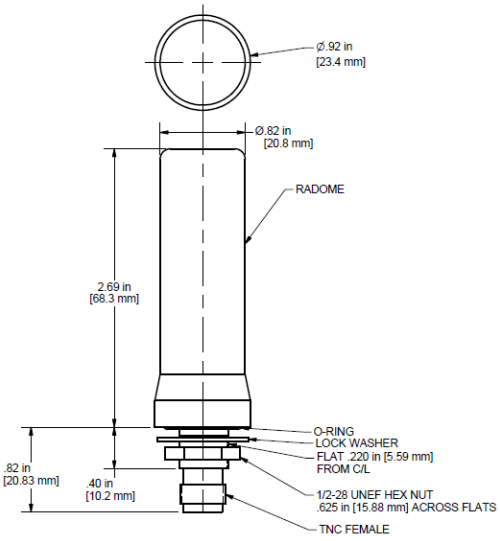
Drawing A



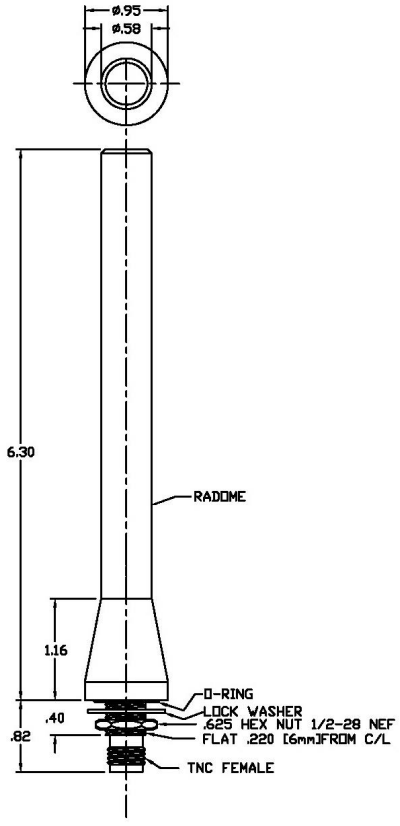
Drawing B



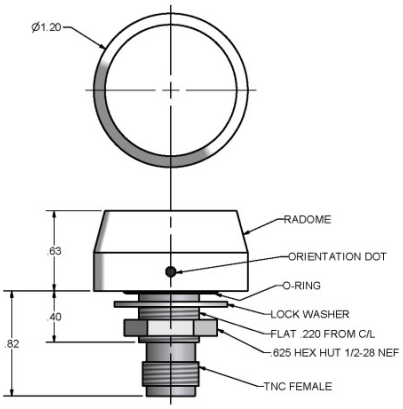
Drawing C



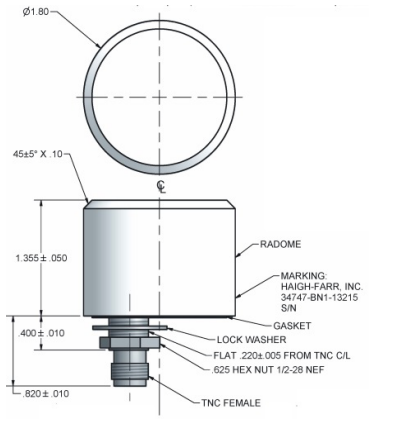
Drawing D



Drawing E



Drawing F



Drawing G

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