



1.4 - 2.7 & 4.3 - 5.5 GHz Blade Antenna

Haigh-Farr's P/N 16150-XXX Blade antenna utilizes the identical materials and construction as our 60XX and 61XX series Blades. Originally introduced in the early 70's, our Blades have proven to be reliable and rugged for a variety of applications. With over 30,000 of these antennas produced, our 16150-XXX model continues in this tradition with an extended bandwidth design.

This antenna utilizes the same mounting flange as our 60XX and 61XX series.



ELECTRICAL:

Operating Band:	1.4 to 2.6 GHz & 4.3 to 5.5 GHz
Input Impedance:	50 Ohms nominal
VSWR:	<1.75:1 typical, 2.0:1 max
Power Handling:	30 Watts average Sufficient airflow is required at higher peak levels.
Polarization:	Linear, primarily vertical
Radiation Patterns:	Hemispherical (see attached patterns)

MECHANICAL:

Connector:	SMA & TNC options available see attached drawing.
Weight:	1.2 oz/34 grams
Dimensions:	See above drawings
Finish:	All exposed metallic surfaces either nickel-plated per MIL-C-26074 or passivated stainless steel.
Environmental:	Typical for supersonic airborne applications. Qualification data available upon request.
Mounting/Securing:	See options for mounting in table on the attached drawing.

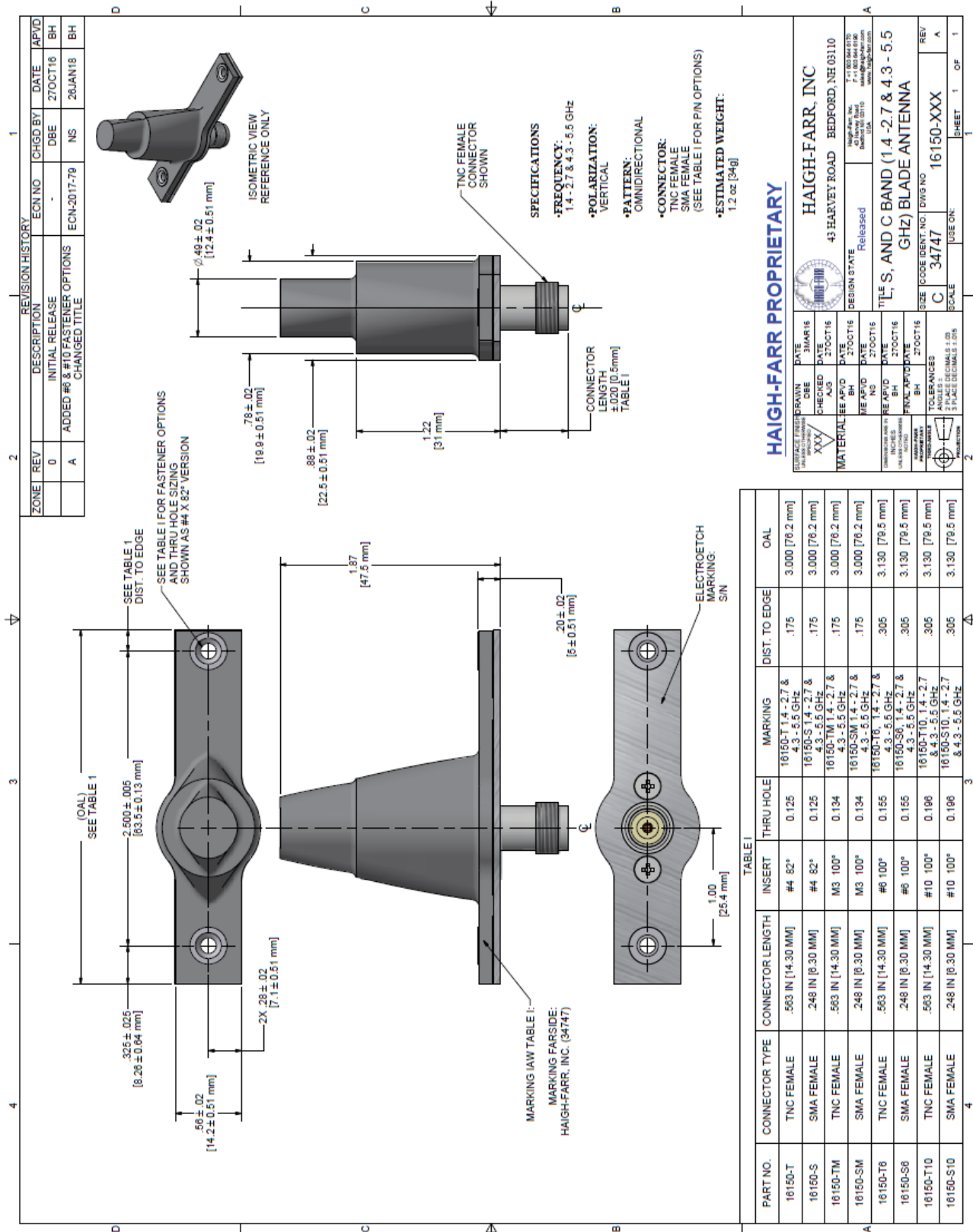
DESIGN CAPABILITY:

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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REVISION HISTORY						
ZONE	REV	DESCRIPTION	ECN NO.	CHGD BY	DATE	APVD BY
	0	INITIAL RELEASE	-	DBE	27OCT16	BH
	A	ADDED #8 & #10 FASTENER OPTIONS CHANGED TITLE	ECN-2017-79	NS	26JAN18	BH

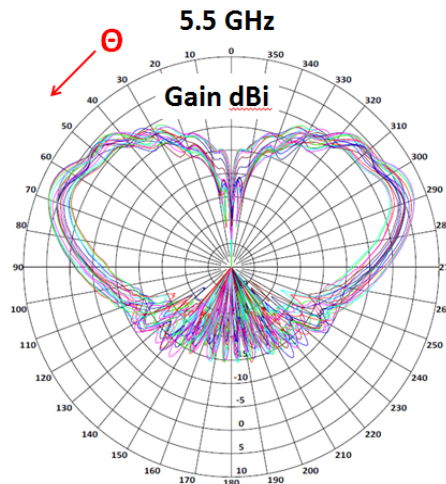
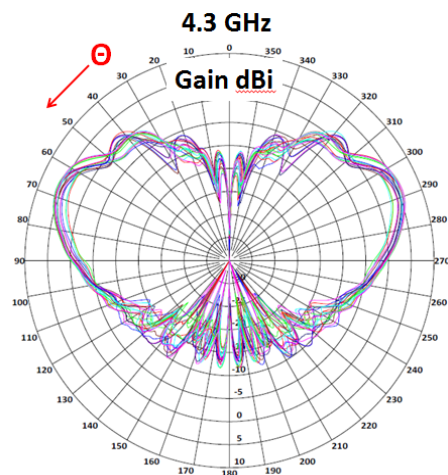
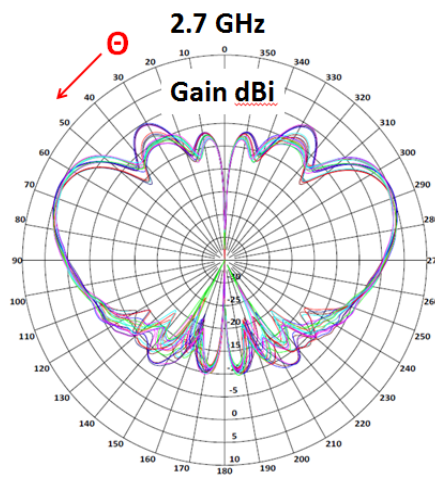
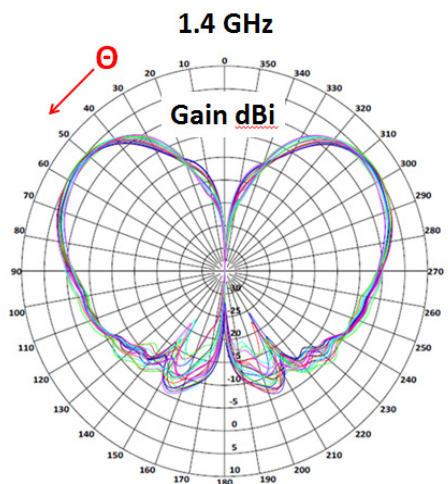
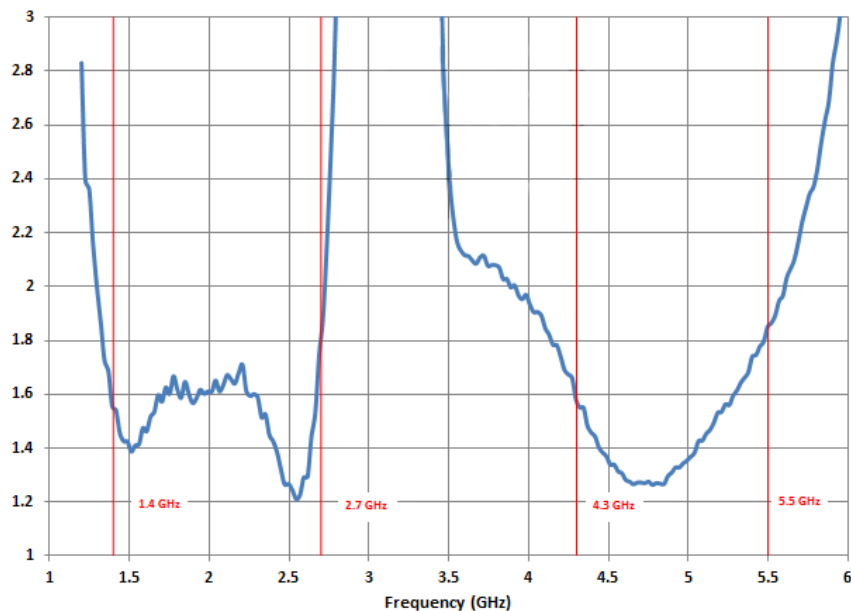
HAIGH-FARR PROPRIETARY

DATE	31MAR16	DESIGN STATE	Released
CHECKED	AJS	HAIGH-FARR, INC. 43 HARVEY ROAD BEDFORD, NH 03110 71-100-044-018 REV. 10/10/16	
RE APVD	BH	TITLE S, AND C BAND (1.4 - 2.7 & 4.3 - 5.5 GHz) BLADE ANTENNA	
RE APVD	NS	SIZE (CODE IDENT. NOT DWG NO.)	
RE APVD	NS	SCALE	
RE APVD	BH	USE ON: 16150-XXX	
RE APVD	BH	REV A	

PART NO.	CONNECTOR TYPE	CONNECTOR LENGTH	INSERT	THRU HOLE	MARKING	DIST. TO EDGE	OAL
16150-T	TNC FEMALE	.563 IN [14.30 MM]	#4 82°	0.125	16150-T 1.4 - 2.7 & 4.3 - 5.5 GHz	.175	3.000 [76.2 mm]
16150-S	SMA FEMALE	.248 IN [6.30 MM]	#4 82°	0.125	16150-S 1.4 - 2.7 & 4.3 - 5.5 GHz	.175	3.000 [76.2 mm]
16150-TM	TNC FEMALE	.563 IN [14.30 MM]	M3 100°	0.134	16150-TM 1.4 - 2.7 & 4.3 - 5.5 GHz	.175	3.000 [76.2 mm]
16150-SM	SMA FEMALE	.248 IN [6.30 MM]	M3 100°	0.134	16150-SM 1.4 - 2.7 & 4.3 - 5.5 GHz	.175	3.000 [76.2 mm]
16150-T6	TNC FEMALE	.563 IN [14.30 MM]	#6 100°	0.155	16150-T6 1.4 - 2.7 & 4.3 - 5.5 GHz	.305	3.130 [79.5 mm]
16150-S6	SMA FEMALE	.248 IN [6.30 MM]	#6 100°	0.155	16150-S6 1.4 - 2.7 & 4.3 - 5.5 GHz	.305	3.130 [79.5 mm]
16150-T10	TNC FEMALE	.563 IN [14.30 MM]	#10 100°	0.196	16150-T10 1.4 - 2.7 & 4.3 - 5.5 GHz	.305	3.130 [79.5 mm]
16150-S10	SMA FEMALE	.248 IN [6.30 MM]	#10 100°	0.196	16150-S10 1.4 - 2.7 & 4.3 - 5.5 GHz	.305	3.130 [79.5 mm]



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The plots show gain vs. θ for $\phi = 0$ to 180° in 10° increments. There is little variation among the different ϕ cuts.