

**ANTENNA INFORMATION**

Label	Description	Frequencies	Model	Qty.	Exp.	Type	Width of Beam at Half Power Point:	Orientation in horizontal plane (degrees from True North)	Orientation in vertical plane (degrees from horizontal)
1	Ka ESA	26.0-29.55 GHz	Collins/UCSD 256	5	y	Directional	8°	± 45° electronically; may vary 360° via aircraft orientation	± 45°
2	Ku ESA	14.5-17.2 GHz	Collins/UCSD 8x16	5	y	Directional	8° horizontal 16° vertical	± 45° electronically; may vary 360° via mechanical mounting	± 45°
3	Ku Dish	14.5-17.2 GHz	Steatite QSR-600-A228	3	n	Directional	3°	may vary over 360° via mechanical mounting	+ 90°, - 10° via mechanical mounting
4	Ka/Ku Omni	14.5-17.2 GHz 26.0-29.55 GHz	Steatite QOM-SL-0.8-40-K-SG-L	3	n	Omni	n/a	n/a	n/a
5	Omni L/S/C	1.755-1.85 GHz 2.025-2.30 GHz 4.4-4.9 GHz	Antcom 5B-L-S-C-BANDVVV-XTTT-2	5	n	Omni	n/a	n/a	n/a
6	Ground Panel	2.025-2.30 GHz	Tupavco TP24-20-18	3	n	Directional	18° horizontal and vertical	varies	90-110°
7	Ground Panel	4.4-4.9 GHz	Tupavco TP4958-22-10	3	n	Directional	10° horizontal 12° vertical	varies	90-110°

**Antenna Uses and Types of Stations**

Label	Description	Frequencies	Fixed	Mobile (van)	Mobile (aircraft)
1	Ka ESA	26.0-29.55 GHz			x
2	Ku ESA	14.5-17.2 GHz	x		x
3	Ku Dish	14.5-17.2 GHz	x		
4	Ka/Ku Omni	14.5-17.2 GHz 26.0-29.55 GHz	x	x	
5	Omni L/S/C	1.755-1.85 GHz 2.025-2.30 GHz 4.4-4.9 GHz	x	x	x
6	Ground Panel	2.025-2.30 GHz	x		
7	Ground Panel	4.4-4.9 GHz	x		

*x = antenna will be used on this station*

**Fixed Location 1**

Collins Aerospace  
5145 Rockwell Drive NE, Cedar Rapids, IA 52402  
42 1 55 N, 91 38 53 W  
Linn County

**Fixed Location 2**

Iowa City Municipal Airport  
1801 Riverside Drive, Iowa City, IA 52246  
41 38 23 N, 91 32 53 W  
Johnson County

**Mobile Radius (van)**

Johnson and Linn Counties  
50 km around 41 48 18 N, 91 38 20 W

**Mobile Radius (aircraft)**

Johnson and Linn Counties  
160km around 41 48 18 N, 91 38 20 W

Altitude not to exceed 20,000 feet above ground level