

# MORE RELIABILITY DRIVEN BY MORE SYSTEM GAIN

Path Length	Comparison: 154Mbps /128QAM /30MHz	EHP Radio	USING NON EHP RADIO		
			OPTION A	OPTION B	OPTION C
<b>17.8 miles</b> C Factor =4.82 Average annual temperature (°F) =66.45 Dispersive fade occurrence factor = 4.0	Main Dish (ft)	6	6	8	
	Div Dish (ft)	6	6	6	
	Annual 2-Way Multipath Availability (%)	99.99998%	99.99985%	99.99997%	
	Annual 2-Way Multipath Unavailability (sec)	6.47	48.2	10.99	
<b>18.1 Miles</b> C Factor=8.23 (flat) Average annual temperature (°F) = 67.74 Dispersive fade occurrence factor = 4.0	Main Dish (ft)	6	6	8	8
	Div Dish (ft)	6	6	6	8
	Annual 2-Way Multipath Availability (%)	99.99996%	99.99970%	99.99993%	99.99995%
	Annual 2-Way Multipath Unavailability (sec)	13.31	94.36	21.18	15.37
<b>28.6 Miles</b> C Factor=8.23 (flat) Average annual temperature (°F) = 74.23 Dispersive fade occurrence factor = 4.0	Main Dish (ft)	10	10	10	12
	Div Dish (ft)	8	8	10	10
	Annual 2-Way Multipath Availability (%)	99.99985%	99.99931%	99.99952%	99.99978%
	Annual 2-Way Multipath Unavailability (sec)	48.27	216.93	151.2	68.81

TOTAL NUMBER OF EHP LINKS	98	LINK OUTAGE w/ ALTERNATIVE
17.8 Mile Links	35	1460.55
18.1 Mile Links	6	486.3
28.6 Mile Links	57	9613.62

TOTAL	11560.5	seconds
	192.7	minutes
	3.2	hours

**OPTION A** represents a design with the lower gain radio that adds thousands of additional seconds of outage annually.

**AVIAT HAS 3+ MORE HOURS PER YEAR MORE NETWORK AVAILABILITY**