

Microwave Path Data Sheet
COMSEARCH

19700 Janelia Farm Boulevard, Ashburn, VA, 20147
(703)636-5234 www.comsearch.com
Job Number: 160115COMSDS03

Date: 01/15/2016

Adaptive Modulation Prior Coordination Notice

One or more paths in this Prior Coordination Notice (PCN) use microwave radios with Adaptive Modulation. These paths can be identified by a numerical superscript notation immediately following the Radio Code on the path data sheet.

The superscript notation can be cross referenced to the corresponding table(s) below to identify the various modulation modes in which the microwave path will operate.

(1) Master Radio Code: X18147 - EXALT COMMUNICATIONS INC.

Pages: 1

Radio Code	Model	Model Description	Emission Designator	Modulation	Loading (Mbps)	Stability (%)	Coordinated Power (dBm)
TEPA49	E18F732-1560X1-256Q-30MHZ	EXTENDAIR G2 RC18020	30M0D7W	256 QAM	1 CH DIG 196.0	0.0007	19.0
TEPA53	E18F732-1560X1-128Q-30MHZ	EXTENDAIR G2 RC18020	30M0D7W	128 QAM	1 CH DIG 171.0	0.0007	19.0
TEPA59	E18F732-1560X1-64Q-30MHZ	EXTENDAIR G2 RC18020	30M0D7W	64 QAM	1 CH DIG 147.0	0.0007	19.0
TEPA69	E18F732-1560X1-32Q-30MHZ	EXTENDAIR G2 RC18020	30M0D7W	32 QAM	1 CH DIG 122.0	0.0007	19.0
TEPF33	E18F732-1560X1-16Q-30MHZ	EXTENDAIR G2 RC18020	30M0D7W	16 QAM	1 CH DIG 98.0	0.0007	19.0
TEPF37	E18F732-1560X1-4Q-30MHZ	EXTENDAIR G2 RC18020	30M0D7W	QPSK	1 CH DIG 48.0	0.0007	19.0

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PCN Date: 01/15/2016
Job Number: 160115COMSDS03

Prev Job Num: 090807COMSDS03
RCN Number: 16011520

Administrative Information	CANNERY ROW CA	MT TORO CA
City/County	Pacific Grove/MONTEREY	/MONTEREY
Status / License Basis	Engineering Proposal / PRIMARY OPERATION	Engineering Proposal / PRIMARY OPERATION
Call Sign	WQKW254	WNTG789
Licensee Code	S62499	S62499
Licensee Name	Monterey Bay Aquarium Research Inst	Monterey Bay Aquarium Research Inst
Radio Service / Station Class	MG -- Microwave Industrial/Business Pool	FXO -- Fixed

Site Information

Latitude (NAD 83)	36 °37' 6.3" N	36 °32' 16.2" N
Longitude (NAD 83)	121 °54' 6.1" W	121 °37' 35.3" W
Ground Elevation (m/ft-AMSL)	3.05 / 10.0	958.30 / 3144.0
Antenna Structure Registration #		
Path Azimuth (°)	109.870	290.034
Path Length (km / miles)	26.206 / 16.283	

Transmit Antenna	GB1040	MB1112
Manufacturer	GABRIEL ELECTRONICS	MILLIFLECT MICROWAVE ANTENNA SPECIALISTS
Model	HED4-180	TM1872DA
Gain(dBi) / Beamwidth(°) / Tilt(°)	44.7 / 0.90 / 1.99	48.5 / 0.60 / -2.16
Centerline (m / ft - AGL)	9.75 / 32.0	3.96 / 13.0

Receive Antenna

Manufacturer	Same As Transmit
Model	
Gain (dBi) / Beamwidth (°)	
Centerline (m / ft - AGL)	

Diversity Receive Antenna

Manufacturer	
Model	
Gain (dBi) / Beamwidth (°)	
Centerline (m / ft - AGL)	

Radio Information	X18147 ¹	X18147 ¹
Manufacturer	EXALT COMMUNICATIONS INC.	EXALT COMMUNICATIONS INC.
Model	E18F732-1560X1-256Q-30MHZ	E18F732-1560X1-256Q-30MHZ
Model Description	EXTENDAIR G2 RC18020 256QAM-QPSK	EXTENDAIR G2 RC18020 256QAM-QPSK
Emission Designator / Modulation	30M0D7W 256 QAM	30M0D7W 256 QAM
Loading	1 CH DIG 196000.000	1 CH DIG 196000.000
Stability (%)	0.0007	0.0007
	Nominal Coordinated Maximum	Nominal Coordinated Maximum
Power (dBm)	19.0	19.0
Received Level (dBm)	-38.3	-38.3
EIRP (dBm)	61.6	65.4
Fixed Loss: Tx / Common (dB)	0.0 / 2.1	0.0 / 2.1
Free Space Loss (dB)		146.3

Transmit Frequencies (MHz)	17755.0000V(1)	19315.0000V(1)
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