

PCN Date: 05/11/2011
Job Number: 110511COMSDS02

Prev Job Num: M0701809
RCN Number: 11051113

Administrative Information Monterey Bay CA

City/County /Monterey
Status / License Basis Engineering Proposal / PRIMARY OPERATION
Call Sign WQHA454
Licensee Code S62499
Licensee Name Monterey Bay Aquarium Reasearch Ins
Radio Service / Station Class MG -- Microwave Industrial/Business Pool

TEMPY RX CA

/Monterey
Engineering Proposal / PRIMARY OPERATION
S62499
Monterey Bay Aquarium Reasearch Ins
MO --- Mobile

Site Information

Latitude (NAD 83)	36 °00' 00.0" N	37 °00' 00.0" N
Longitude (NAD 83)	121 °45' 00.0" W	123 °15' 00.0" W
Ground Elevation (m/ft-AMSL)	0.00 / 0.0	0.00 / 0.0
Antenna Structure Registration #		
Path Azimuth (°)	<u>356.484</u>	<u>176.462</u>
Path Length (km / miles)		<u>53.296 / 33.117</u>

Operating within a rectangular area of operation

Transmit Antenna

63294S
Manufacturer SEA TEL INC
Model 3294
Gain(dBi) / Beamwidth(°) / Tilt(°) 31.0 / 4.00 / -0.17
Centerline (m / ft - AGL) 10.67 / 35.0

Receive Antenna

6SAR7S
Manufacturer SEA TEL INC
Model SAR72
Gain (dBi) / Beamwidth (°) 36.5 / 3.70
Centerline (m / ft - AGL) 16.76 / 55.0

Diversity Receive Antenna

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

Radio Information

Manufacturer	<u>TENK45</u>	999999
Model	<u>Aviat Networks, Inc.</u>	RECEIVE
Model Description	<u>EHU6-70DS1-128Q-20</u>	ONLY
Emission Designator / Modulation	<u>20M0D7W</u> <u>128 QAM</u>	
Loading	<u>1 CH DIG 117800.000</u>	<u>1 CH DIG 117800.000</u>
Stability (%)	<u>0.001</u>	<u>0.001</u>
	Nominal Coordinated Maximum	Nominal Coordinated Maximum
Power (dBm)	<u>24.5</u>	
Received Level (dBm)		<u>-55.7</u>
EIRP (dBm)	<u>51.0</u>	
Fixed Loss: Tx / Common (dB)	4.5 / 0.0	0.0 / 0.0
Free Space Loss (dB)		<u>143.2</u>

Transmit Center Frequency (MHz) 6487.5H(3) 6512.5V(4)

PCN Date: 05/11/2011
Job Number 110511COMSDS02

Prev Job Num:
RCN Number: 11051113

Administrative Information MT TORO CA

City/County /Monterey
Status / License Basis Engineering Proposal / PRIMARY OPERATION
Call Sign WNEX706
Licensee Code S62499
Licensee Name Monterey Bay Aquarium Reasearch Ins
Radio Service / Station Class MG -- Microwave Industrial/Business Pool

TEMPY RX CA

/San Benito
Engineering Proposal / PRIMARY OPERATION
S62499
Monterey Bay Aquarium Reasearch Ins
MO --- Mobile

Site Information**Operating within a 48.3 Km radius around MT Toro site**

Latitude (NAD 83)	36 °32' 15.8" N	36 °32' 11.4" N
Longitude (NAD 83)	121 °37' 35.4" W	121 °5' 13.7" W
Ground Elevation (m/ft-AMSL)	0.00 / 0.0	0.00 / 0.0
Antenna Structure Registration #		
Path Azimuth (°)	90.000	270.321
Path Length (km / miles)	48.299 / 30.012	

Transmit Antenna

63294S
Manufacturer SEA TEL INC
Model 3294
Gain(dBi) / Beamwidth(°) / Tilt(°) 32.0 / 4.00 / -0.16
Centerline (m / ft - AGL) 6.10 / 20.0

Receive Antenna

6SAR7S
Manufacturer SEA TEL INC
Model SAR72
Gain (dBi) / Beamwidth (°) 36.5 / 3.70
Centerline (m / ft - AGL) 6.10 / 20.0

Diversity Receive Antenna

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

Radio Information

Manufacturer	<u>TENK45</u>	999999
Model	<u>Aviat Networks, Inc.</u>	RECEIVE
Model Description	<u>EHU6-70DS1-128Q-20</u>	ONLY
Emission Designator / Modulation	<u>ECLIPSE ODU 300 HP RAC 30 40 3X 4X</u>	
Loading	<u>20M0D7W</u> <u>128 QAM</u>	
Stability (%)	<u>1 CH</u> <u>DIG 117800.000</u>	<u>1 CH</u> <u>DIG 117800.000</u>
	<u>0.001</u>	<u>0.001</u>
	Nominal Coordinated Maximum	Nominal Coordinated Maximum
Power (dBm)	<u>24.5</u>	
Received Level (dBm)		<u>-49.4</u>
EIRP (dBm)	<u>56.5</u>	
Fixed Loss: Tx / Common (dB)	0.0 / 0.0	0.0 / 0.0
Free Space Loss (dB)		142.4

Transmit Center Frequency (MHz) 6437.50H(1)
