

Microwave Path Data Sheet

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COMSEARCH

19700 Janelia Farm Boulevard, Ashburn, VA, 20147

(571)246-3097 www.comsearch.com

PCN Date: 10/09/2010

Job Number: 101009COMSFB02

Prev Job Num: 100928COMSFB05

RCN Number: 10100901

Administrative Information**MT ALLISON CA**

City/County /Alameda
 Status / License Basis Engineering Proposal / PRIMARY OPERATION
 Call Sign WQFN862
 Licensee Code SANPUB
 Licensee Name City & County of San Francisco PUC
 Radio Service / Station Class MW -- Microwave Public Safety Pool

CALAVERASDAM CA

/Alameda
 Engineering Proposal / PRIMARY OPERATION
 SANPUB
 City & County of San Francisco PUC
 FXO -- Fixed

Site Information

Latitude (NAD 83)	37 °29' 59.0" N	37 °29' <u>16.2</u> " N
Longitude (NAD 83)	121 °52' 18.5" W	121 °48 ' <u>57.8</u> " W
Ground Elevation (m/ft-AMSL)	795.53 / 2610.0	<u>341.68</u> / <u>1121.0</u>
Antenna Structure Registration #		
Path Azimuth (°)	<u>104.967</u>	<u>285.001</u>
Path Length (km / miles)		<u>5.104</u> / <u>3.171</u>

Transmit Antenna

87216A
 Manufacturer ANDREW CORPORATION
 Model VHLPX2-18B
 Gain(dBi) / Beamwidth(°) / Tilt(°) 38.9 / 2.10 / -5.33
 Centerline (m / ft - AGL) 24.38 / 80.0

87216A
 ANDREW CORPORATION
 VHLPX2-18B
 38.9 / 2.10 / 5.30
3.35 / 11.0

Receive Antenna

Same As Transmit

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

Diversity Receive Antenna

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

Radio Information

TEML39
 Aviat Networks, Inc.
 EH18-1OC3-64QAM-40
 ECLIPSE ODU 300 HP
 Emission Designator / Modulation 40M0D7W 64 QAM
 Loading 2016CH DIG 167000.000
 Stability (%) 0.001

Nominal	Coordinated	Maximum
	16.5	
	<u>-37.8</u>	
	55.4	

TEML39
 Aviat Networks, Inc.
 EH18-1OC3-64QAM-40
 ECLIPSE ODU 300 HP
 40M0D7W 64 QAM
 2016CH DIG 167000.000
 0.001

Nominal	Coordinated	Maximum
	16.5	
	<u>-37.8</u>	
	55.4	

Power (dBm)
 Received Level (dBm)
 EIRP (dBm)

0.0 / 0.0

Free Space Loss (dB)

132.1**Transmit Frequencies (MHz)**

19360.0000H(3)

19440.0000V(5)

17800.0000H(3)

17880.0000V(5)

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CALAVERASDAM CA
City/County /Alameda
Status / License Basis Engineering Proposal / PRIMARY OPERATION
Call Sign
Licensee Code SANPUB
Licensee Name City & County of San Francisco PUC
Radio Service / Station Class MW -- Microwave Public Safety Pool

CALAVERAS WA CA

City/County /Alameda
Status / License Basis Engineering Proposal / PRIMARY OPERATION
Call Sign
Licensee Code SANPUB
Licensee Name City & County of San Francisco PUC
Radio Service / Station Class FXO -- Fixed

Site Information

Latitude (NAD 83)	37 °29' <u>16.2</u> " N	37 °29' 37.7" N
Longitude (NAD 83)	121 °48' <u>57.8</u> " W	121 °49' 23.5" W
Ground Elevation (m/ft-AMSL)	<u>341.68</u> / <u>1121.0</u>	249.63 / 819.0
Antenna Structure Registration #		
Path Azimuth (°)	<u>316.397</u>	<u>136.392</u>
Path Length (km / miles)		<u>0.915</u> / <u>0.569</u>

Transmit Antenna

Manufacturer	87216A	87216A
Model	ANDREW CORPORATION	ANDREW CORPORATION
Gain(dBi) / Beamwidth(°) / Tilt(°)	VHLPX2-18B	VHLPX2-18B
Centerline (m / ft - AGL)	38.9 / 2.10 / <u>-5.50</u>	38.9 / 2.10 / <u>5.49</u>
	<u>2.13</u> / <u>7.0</u>	6.10 / 20.0

Receive Antenna

Same As Transmit

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

Diversity Receive Antenna

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

Radio Information

Manufacturer	TEML39	TEML39
Model	Aviat Networks, Inc.	Aviat Networks, Inc.
Model Description	EH18-1OC3-64QAM-40	EH18-1OC3-64QAM-40
Emission Designator / Modulation	ECLIPSE ODU 300 HP	ECLIPSE ODU 300 HP
Loading	40M0D7W 64 QAM	40M0D7W 64 QAM
Stability (%)	2016CH DIG 167000.000	2016CH DIG 167000.000
	0.001	0.001
	Nominal Coordinated Maximum	Nominal Coordinated Maximum
Power (dBm)	16.5	16.5
Received Level (dBm)	<u>-22.8</u>	<u>-22.8</u>
EIRP (dBm)	55.4	55.4
Fixed Loss: Tx / Common (dB)	0.0 / 0.0	0.0 / 0.0
Free Space Loss (dB)		<u>117.1</u>

Transmit Frequencies (MHz)	18000.0000V(8)	18120.0000H(11)	19560.0000V(8)	19680.0000H(11)
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