

Friday to Mount Constitution

This shot consists of 4 separate radio systems transmitting through 2 separate antennas at each location. The additional pages in this spreadsheet contain screen shots of the summary pages for each system.

Indications of a properly operating link:

No Alarms

RSL within ± 3 dB of calculated

$E_b/N_0 \geq 19$ dB

Signal to Noise Ratio (SNR) ≥ 24 dB

Equalizer Stress typically 30, but < 150

Each radio indicates a properly operating link, despite the ATPC Alarm indication. That alarm indicates that the Automatic Transmit Power Control circuit is off, which is the normal operating condition for microwave radio systems operating within CTL.

Currently, Radio Systems 2 & 3 have zero thruput, while Radio 1 has approximately 18 Mbps thruput and Radio 3 has approximately 126 Mbps thruput.

Systems 2 & 3 are set up to take service in case of a fiber cut, thus the zero thruput.

**** The Tower Inspection Forms are embedded in the sixth and seventh sheet and consists of three pages that can be scrolled through.****

**** Double click within the word doc window to scroll. A scroll wheel on a mouse works best.****

DragonWave HORIZON WEB MANAGEM

HOME PERFORMANCE CONFIGURATION DIAGNOSTICS ALARMS TOOLS CONTACTS

Modem	Up
Radio	Up
Wireless Link:	Up
Radio Tx	On
Tx Power	19.0 dBm
RSL	-44.9 dBm
SNR	39.21 dB
Eb/No	30.50 dB
Equalizer Stress	32
Atpc Status	Off
Loopback	Off
AAM	Off
HAAM	Off
RLS	Off
Redundancy	off
Alarms:	No

Refresh every seconds

Notes: 0 turns off the self-refresh.

System Licensed Speed	300 Mbps
System Current Speed	300 Mbps
System Mode	hc40_277_256qam
Software/Hw Inventory	Software/Hw inventory
Unit Serial Number	DW108AHE1003
Network Management Interface port	port2
RLS ShutDown	Off
Telnet Access	On
SNMP Access	Off
SSH Server Status	Ready
IP Address	10.64.32.101
Subnet Mask	255.255.255.0
Gateway	10.64.32.1
Radio Band	fcc11_2_40
Tx Frequency	11055000 KHz
Rx Frequency	11545000 KHz

[More information:](#)

[System Name:](#) Friday Harbor - Mt. Constitution

[System Location:](#) Friday Harbor - A1- Upper Dish - Left

[Manage your Peer Horizon@ system:](#) 10.64.120.165

DragonWave HORIZON WEB MANAGEM

HOME PERFORMANCE CONFIGURATION DIAGNOSTICS ALARMS TOOLS CONTACTS

Modem	Up
Radio	Up
Wireless Link:	Up
Radio Tx	On
Tx Power	19.1 dBm
RSL	-45.5 dBm
SNR	39.91 dB
Eb/No	31.20 dB
Equalizer Stress	30
Atpc Status	Off
Loopback	Off
AAM	Off
HAAM	Off
RLS	Off
Redundancy	off
Alarms:	No

System Licensed Speed	300 Mbps
System Current Speed	300 Mbps
System Mode	hc40_277_256qam
Software/Hw Inventory	Software/Hw inventory
Unit Serial Number	DW107AHE1003
Network Management Interface port	port2
RLS ShutDown	Off
Telnet Access	On
SNMP Access	Off
SSH Server Status	Ready
IP Address	10.64.120.165
Subnet Mask	255.255.255.0
Gateway	10.64.120.161
Radio Band	fcc11_2_40
Tx Frequency	11545000 KHz
Rx Frequency	11055000 KHz

Refresh every seconds

Notes: 0 turns off the self-refresh.

[More information:](#)
System Name: Mt. Constitution - Friday Harbor
System Location: Mt. Constitution - A1 - Upper Dish - Left
Manage your Peer Horizon@ system: 10.64.32.101

8:48 AM
12/21/2015

http://10.64.32.102/ Horizon® - 10.64.32.102

File Edit View Favorites Tools Help

Suggested Sites

DragonWave HORIZON WEB MANAGEM

HOME PERFORMANCE CONFIGURATION DIAGNOSTICS ALARMS TOOLS CONTACTS

Modem Up
Radio Up
Wireless Link: Up

Radio Tx On
Tx Power 19.1 dBm
RSL -44.5 dBm
SNR 40.04 dB
Eb/No 31.30 dB
Equalizer Stress 38
[Atp.c Status](#) Off
[Loopback](#) Off
[AAM](#) Off
[HAAM](#) Off
[RLS](#) Off
[Redundancy](#) off

[Alarms:](#) No

Refresh every seconds

Notes: 0 turns off the self-refresh.

System Licensed Speed	300 Mbps
System Current Speed	300 Mbps
System Mode	hc40_277_256qam
Software/Hw Inventory	Software/Hw inventory
Unit Serial Number	DW108AHE1002
Network Management Interface port	port2
RLS ShutDown	Off
Telnet Access	On
SNMP Access	Off
SSH Server Status	Ready
IP Address	10.64.32.102
Subnet Mask	255.255.255.0
Gateway	10.64.32.1
Radio Band	fcc11_2_40
Tx Frequency	11015000 KHz
Rx Frequency	11505000 KHz

[More information:](#)

[System Name:](#) Friday Harbor - Mt. Constitution

[System Location:](#) Friday Harbor - A2 - Upper Dish - Right

[Manage your Peer Horizon® system:](#) 10.64.120.166

DragonWave HORIZON WEB MANAGEMENT

HOME PERFORMANCE CONFIGURATION DIAGNOSTICS ALARMS TOOLS CONTACTS

Modem	Up
Radio	Up
Wireless Link:	Up
Radio Tx	On
Tx Power	19.2 dBm
RSL	-44.3 dBm
SNR	39.61 dB
Eb/No	30.90 dB
Equalizer Stress	35
Atpc Status	Off
Loopback	Off
AAM	Off
HAAM	Off
RLS	Off
Redundancy	off
Alarms:	No

Refresh every seconds

Notes: 0 turns off the self-refresh.

System Licensed Speed	300 Mbps
System Current Speed	300 Mbps
System Mode	hc40_277_256qam
Software/Hw Inventory	Software/ Hw inventory
Unit Serial Number	DW107AHE1002
Network Management Interface port	port2
RLS ShutDown	Off
Telnet Access	On
SNMP Access	Off
SSH Server Status	Ready
IP Address	10.64.120.166
Subnet Mask	255.255.255.0
Gateway	10.64.120.161
Radio Band	fcc11_2_40
Tx Frequency	11505000 KHz
Rx Frequency	11015000 KHz

[More information:](#)

[System Name:](#) Mt. Constitution - Friday Harbor

[System Location:](#) Mt. Constitution - A2 - Upper Dish - Right

[Manage your Peer Horizon@ system:](#) 10.64.32.102

8:52 AM
12/21/2015

The screenshot shows a web browser window with the address bar set to <http://10.64.32.103/>. The page title is "Horizon® - 10.64.32.103". The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The page header features the DragonWave logo and the text "HORIZON WEB MANAGEM". Below the header is a navigation menu with links for HOME, PERFORMANCE, CONFIGURATION, DIAGNOSTICS, ALARMS, TOOLS, and CONTACTS.

The main content area is divided into two columns. The left column displays system status for various components:

- Modem: Up
- Radio: Up
- Wireless Link: Up
- Radio Tx: On
- Tx Power: 19.0 dBm
- RSL: -42.7 dBm
- SNR: 39.52 dB
- Eb/No: 30.80 dB
- Equalizer Stress: 33
- Atp.c Status: Off
- Loopback: Off
- AAM: Off
- HAAM: Off
- RLS: Off
- Redundancy: off
- Alarms: No

Below this list is a "Refresh every" field set to 0 seconds and a "Notes: 0 turns off the self-refresh." message.

The right column contains a table of system parameters:

System Licensed Speed	400 Mbps
System Current Speed	400 Mbps
System Mode	hc40_277_256qam
Software/Hw Inventory	Software/Hw inventory
Unit Serial Number	DW108AGM1002
Network Management Interface port	port2
RLS ShutDown	Off
Telnet Access	On
SNMP Access	Off
SSH Server Status	Ready
IP Address	10.64.32.103
Subnet Mask	255.255.255.0
Gateway	10.64.32.1
Radio Band	fcc 11_2_40
Tx Frequency	10975000 KHz
Rx Frequency	11465000 KHz

Below the table is a "More information:" section with the following details:

- System Name:** Friday Harbor to Mount Constitution
- System Location:** Friday Harbor - Lower - B1
- Manage your Peer Horizon® system:** 10.64.120.167

The Windows taskbar at the bottom shows icons for Internet Explorer, File Explorer, and other applications.

DragonWave HORIZON WEB MANAGEM

HOME PERFORMANCE CONFIGURATION DIAGNOSTICS ALARMS TOOLS CONTACTS

Modem	Up
Radio	Up
Wireless Link:	Up

Radio Tx	On
Tx Power	18.9 dBm
RSL	-42.5 dBm
SNR	39.06 dB
Eb/No	30.40 dB
Equalizer Stress	33
Atpc Status	Off
Loopback	Off
AAM	Off
HAAM	Off
RLS	Off
Redundancy	off
Alarms:	No

System Licensed Speed	400 Mbps
System Current Speed	400 Mbps
System Mode	hc40_277_256qam
Software/Hw Inventory	Software/Hw inventory
Unit Serial Number	DW107AGM1002
Network Management Interface port	port2
RLS ShutDown	Off
Telnet Access	On
SNMP Access	Off
SSH Server Status	Ready
IP Address	10.64.120.167
Subnet Mask	255.255.255.0
Gateway	10.64.120.161
Radio Band	fcc11_2_40
Tx Frequency	11465000 KHz
Rx Frequency	10975000 KHz

[More information:](#)

System Name: Mt. Constitution - Friday Harbor

System Location: Mt. Constitution-Lower-B1

Manage your Peer Horizon® system: 10.64.32.103

Refresh every seconds

Notes: 0 turns off the self-refresh.

8:54 AM
12/21/2015