

P25 TAC Agenda

March 17, 2022



Nevada Shared Radio System Update

Agenda Item #5



- Microwave Installations
 - Microwave Design Package review approved November 2021
 - Microwave System Shipping April 20th April 28, 2022
 - Inventory May 2, 2022
- Microwave Deployment 1 (EXPECT OUTAGES)
 - Spectrum to Red Peak 5/16/22-5/20/22
 - Spectrum to Edison 5/23/22-5/26/22
 - Ophir to Spectrum 5/27/22-6/2/22
 - Fox to Virginia Peak 6/3/22-6/9/22
 - Red Peak to Virginia Peak 6/10/22-6/15/22



Microwave Deployment 2 (Expect Outages)

- Peavine to Sparks Dispatch (7/11/22-7/15/2022)
- Peavine to Cold Springs (7/18/2022-7/22/2000)
- Virginia Peak to Peavine (7/25/2022-7/28/2022)
- Slide to Ophir (7/29/2022-8/4/2022)
- Slide to Rose (8/5/2022-9/30/2022)
- Microwave Deployment 3(Expect Outages)
 - Poito to Fox (9/12/2022-9/16/2022)
 - Marble Bluff to Poito (9/19/2022-9/23/2022)
 - Virginia Peak to Marble (9/26/2022-9/30/2022)



- Microwave Deployment 4 (Expect Outages)
 - Red Peak to Smokey Quartz (7/17/2023-7/21/2023)
 - Red Rock (Seven Lakes) to Peavine (7/24/2023-7/28/2023)
 - Incline to Snowflake (7/31/2023-8/7/2023)
 - Snowflake to Biltmore (8/8/2023-8/15/2023)
 - Biltmore to Slide (8/16/2023-8/23/2023)
 - Yellow Peak (Bally) to Fox Mountain (8/24/2023-9/1/2023)
- Microwave Backhaul testing (9/5/2023-9/28/2023)



Greenfield Site builds Northern Washoe Area

- Red Rock(July 2023-October 2023) will provide radio coverage to Red Rock
 - Red Rock's name will be changed to Seven Lakes Communication Site
 - BLM registration number assigned, BLM has assigned Resource- Geotechnical Study completed.
 - Archaeological Reports are permitted to begin
 - NEW plan of development will rename site and include Road work necessary to improve direct roads to site.
- Yellow(July 2023- November 2023) Will provide radio coverage to north of Gerlach, into Sheldon Nation Wildlife refuge. Yellow Peak is being renamed to Bally Mountain Communication Site
 - We have found Land owner willing to lease space to us for \$2500/ month
 - Looking at 3 locations within land owner's property
 - 2164
 - Barrel Springs Rd.
 - Mosquito Lake
 - P25 Coverage same if not better at first 2 sites
 - April 21-22 Site Visit planned
 - Contract Drafted



- Greater Reno-Sparks Green field Site
 - Cold Springs(5/13/2022-7/14/2022)
 - NVE power design 100%- Should received final pricing before next JOC meeting in April
 - Code Adjustments made and approved by Planning Commission on March 1st, 2022, Will submit to Board of County Commissioners (BCC) April 13 & April 26
 - Special Use Permit will be submitted
 - This site provides radio coverage along Hwy 395 North into Cold Springs and Back side of Reno Sparks Indian Colony (RSIC)
 - Red Peak (5/12/2022-5/17/2022) -
 - working on Lease agreement
 - Smokey Quartz (9/15/2022-11/8/2022)
 - NVE Working power design, Working with City of Sparks on Administrative review.
 - This site will provide radio coverage for city of Sparks around the Pah Rah Interloop, where coverage was limited.



Project Update

P25 Implementations

- Red Peak (4/20/2022-5/17/2022)
- Ophir (6/7/2022-6/13/2022)
- Fox Mountain (5/19/2022-6/20/2022)
- Virginia Peak (6/9/2022-6/29/2022)
- Cold Springs (6/23/2022-7/14/2022)
- Peavine (6/30/2022-7/29/2022)
- Snowflake (7/26/2022-8/17/2022)
- Slide Mountain (7/27/2022-8/25/2022)
- Mount Rose (8/4/2022-9/1/2022)
- Poito Mountain (9/1/2022-10/3/2022)
- Marble Bluff (9/13/2022-10-5/2022)
- Smokey Quartz (11/2/2022-11/16/2022)
- Seven Lakes (3/7/2023-3/24/2023)
- Bally Mountain (7/21/2023-8/2/2023)
- Biltmore (8/11/2023-9/1/2023)



Project Update

- Washoe County Dispatch
 - Airport
 - Sparks PD
 - Washoe County Court Complex
 - Washoe County Detention
 - WCRCS Radio Shop (Started*)
 - Washoe County School District
 - Washoe County Sheriffs Office
 - Surveys have been conducted on some of the dispatch centers. Work to include upgrading all Dispatch consoles to Windows 10, as well as add information to cut over to new P25 System.
- Radio shop will move into Building 224 Edison Way next to WCRCS Summer 2022 to make room for Harris to assist in radio personalities and mobile and portable deployment.
- Fleet Mapping
- Personality development
- Programming
- Mobile Installation

- September 2022- October 2022
- October 2022- November 2022
 - November 2022- October 2023
- November 2022- October 2023
- Agencies will want to make sure they purchase any mobile radios prior to this date in order to have mobile radios installed by Harris on site.
- New portable radios should also be purchased in this time frame to make sure radios have the P25 "touch-up" programming completed. YOU ARE PAYING for "Touch up" with every purchase.

January 2023-March 2023



Project Update- Training

• Train-the-Trainer Program Training

- System Admin Training
- Radio Infrastructure Training
- Radio Subscriber Training
- Console Configuration, O&M Training
- User Radio Equipment Training
- On-line training

October 6, 2023- October 23, 2023 October 23, 2023- November 20, 2023 November 21, 2023 – December 5, 2023 December 6, 2023 – January 11,2024 January 12, 2024 – January 23, 2024 Available now

- (Please contact Melissa Lawney <u>mlawney@washoecounty.us</u> for Usernames and Passwords for online training)
- Functional Testing
- Coverage Testing
- Region #2 Cut-Over
- Reliability Testing

June 26, 2023- November 14, 2023 September 7, 2023- March 11, 2024 March 11, 2024 - April 12, 2024 April 12, 2024 – July 11, 2024



Project Update

- Region 3-
 - DDR
 - Implementation
 - Subscribers
 - Acceptance Testing
 - Training
 - Reliability & System acceptance (April 2025 July 2025)
- Members Acceptance
 - Region 1
 - Region 2
 - Region 3
 - Contract Close

(April 2024) (July 2024) (July 2025) (July 2025-October 2025)

(January 2023 - March 2023) (August 2023 - October 2023) (November 2023 - January 2025) (April 2024 - March 2025) (November 2024 - January 2025)



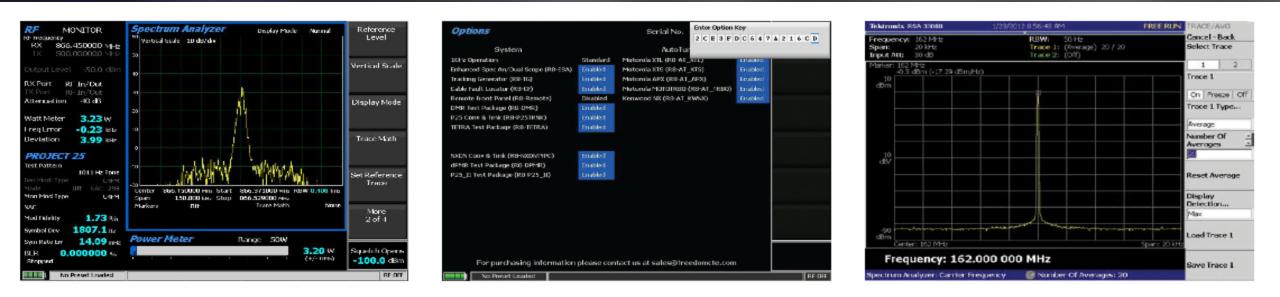
WCRCS Purchase of equipment for P25 site Alignments and Maintenance

Agenda Item #6



Freedom R8200

- WCRCS teams needs equipment that include the P25 protocols prior to system cut over in order to Verify all L3 Harris Tests are Valid
- Research was conducted to find the right equipment for the job
- Freedom R8200 was highly recommended by the APCO Project 25 committee as well as the Harris User Group



SUPERIOR EXPANDABLE AND SPECTRUM ANALYZER UPGRADABLE

LOW PHASE NOISE AND MONITOR & CONTROL INTERFACE



Freedom R8200

- Capable of digital and analog LMR
- RF network characterization
 - DTF Distance to Failure
 - Return Loss
 - Voltage Standing Wave Ratio (VSWR)
 - Phase
- Spectrum Analyzer
- Signal Strength Meter
- Audio Counter
- Modulation Scope
- AC/DC Voltmeter





Freedom R8200

- AM Modulation Meter
- FM Deviation Meter
- RF Signal Generator
- Protocol Generator
- Cable Fault locator
- Display
 - Spectrum Analyzer
 - SINAD meter
 - Oscilloscope
 - Distribution Plots
 - Constellation display
 - Power profile

- Protocols
 - P25 Conventional
 - P25 Trunking
- WCRCS requests 800 MHz Users group to make the recommendation to the JOC for the purchase of 4- R8200 Freedom Test systems for a costs not to exceed \$220,000



Questions?

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