



WCRCS System Radio Counts, End of Life Notices and Replacement Options

Agenda Item #5

- 2,581 radios ordered out of 5097 contractual commitment of the P25 Radios
 - We have reached 50% of our contractual obligation
 - Reminder Harris to be onsite for installation Oct 2022- Dec 2023
 - EVERY Radio in our system requires the One-Touch "Make ready" for new system
 - Mobile Installations (Don't forget your warranty is on hold until the device goes into service).
 - Please have radios purchased prior to these events to be ready for the System cut-over.



XG-15P, XG-25P, XG-75P & P7300 End of Life

 The 700/800 MHz P7300 and XG Portable series radios, introduced in 2009 are reaching the end of product life.

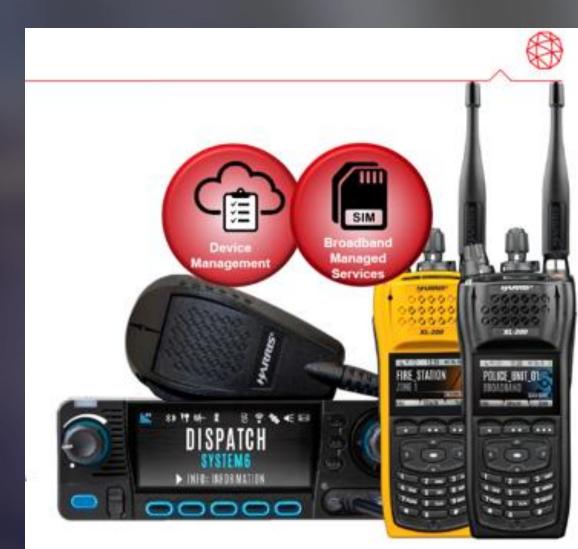
MILESTONE	DESCRIPTION	DATE
End-of-Manufacturing announcement	Sales Connection Mailing	8/02/2021
Equipment last-time-buy date (Last date for shipments from L3Harris facilities)	P7300	No LTB Offered
	XG-75P/Pe	11/30/2021
	XG-25P	11/30/2021
	XG-15P	11/30/2021
End-of-Firmware Support	XG Portables	11/30/2022
End-of-service parts support* *Limited availability	The end date for purchasing service parts, hardware maintenance support and TAC support.	11/30/2026

- XL Connect 95P Order Number: XN-PF78M, Portable, XL-95P, 7/800 MHz, Black Web: https://www.l3harris.com/all-capabilities/xl-connect-95p-portable-radio
- XL Connect™ 45P Order Number: XK-PF78B, Portable, XL-45P, 7/800 MHz, Gray Web: https://www.l3harris.com/all-capabilities/xl-connect-45p-portable-radio



Replacement Options

- L3 Harris is here to brief us on the options available to us.
 - I would like to introduce you to
- Andrew Bosshart
- National Technical Advisor
 - Mobile/Portable/System Products
 - P/C: 320-217-9332
 - Andy.Bosshart@L3Harris.com





Nevada Shared Radio System Update

Agenda Item #6



- Microwave Installations
 - Microwave Design Package review approved November 2021
 - Microwave System Shipping April 20 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)

P25 Project Update

- 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

P25 Project Update

- 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.



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)



Washoe County Dispatch

January 2023-March 2023

- 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 September 2022- October 2022
- Personality development
 October 2022- November 2022
- Programming
 November 2022- October 2023
- Mobile Installation
 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.



- 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
 - (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

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

June 26, 2023- November 14, 2023

September 7, 2023- March 11, 2024

March 11, 2024 - April 12, 2024

April 12, 2024 – July 11, 2024



• Region 3-

• DDR (January 2023 - March 2023)

Implementation (August 2023 - October 2023)

Subscribers (November 2023 - January 2025)

Acceptance Testing (April 2024 - March 2025)

Training (November 2024 - January 2025)

Reliability & System acceptance (April 2025 - July 2025)

Members Acceptance

Region 1 (April 2024)

• Region 2 (July 2024)

• Region 3 (July 2025)

Contract Close (July 2025-October 2025)

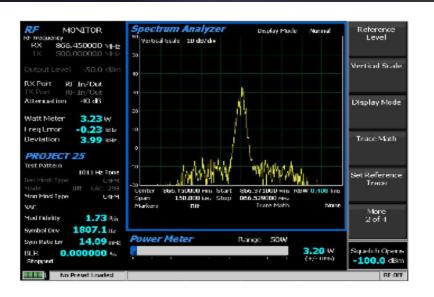


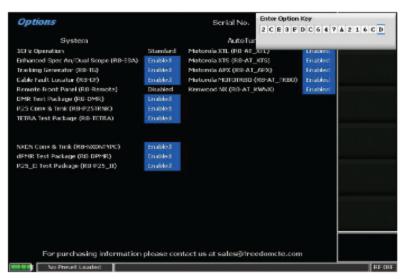
WCRCS Purchase of equipment for P25 site Alignments and Maintenance

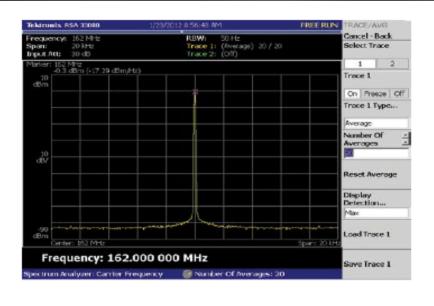
Agenda item #7



- 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 SPECTRUM ANALYZER

EXPANDABLE AND UPGRADABLE

LOW PHASE NOISE AND MONITOR & CONTROL INTERFACE



- 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





- 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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775-771-4241
775-858-5952

