EMERGENCY RESPONDER RADIO UPGRADE

RESPONSE FOR:

WAHKIAKUM COUNTY SHERIFF'S OFFICE

February 17, 2024

Presented by
Jason Kester
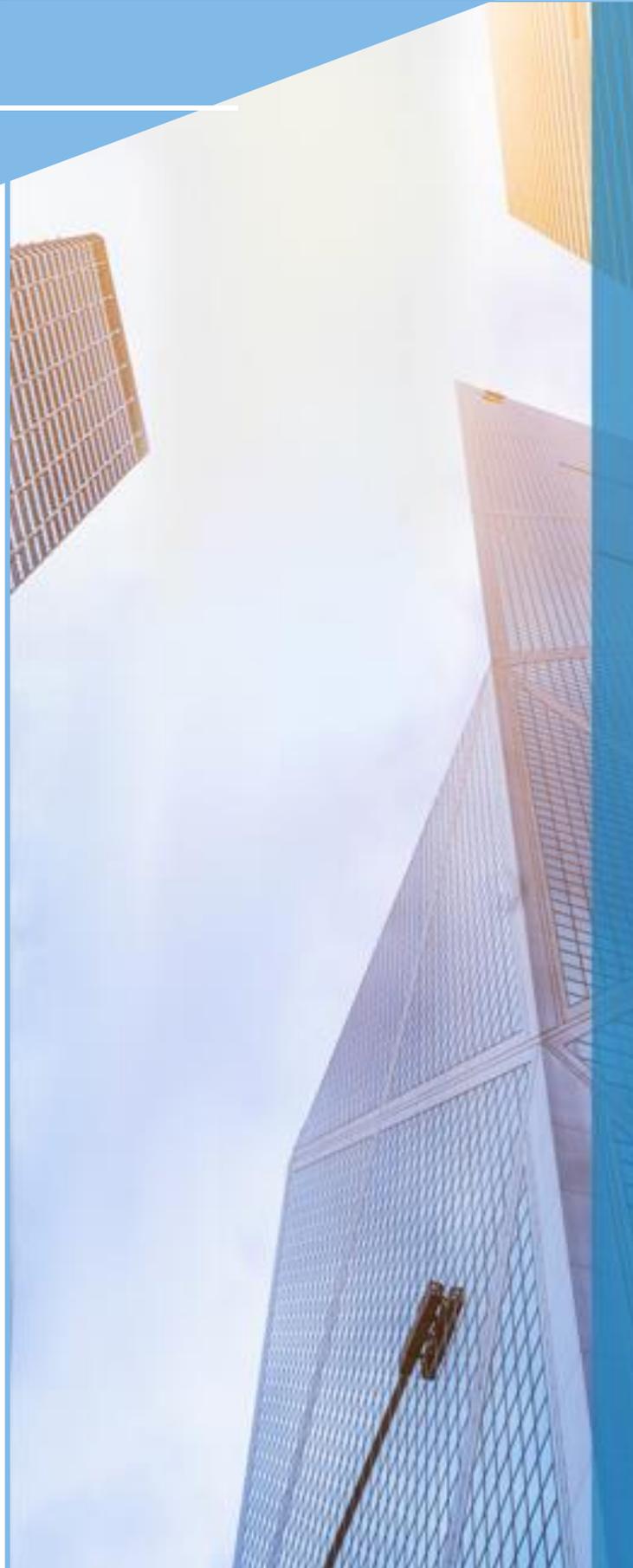Wireless System Sales Representative

Day Wireless Systems
39 International Way
Longview, WA 98632

(503) 310-1401
jkester@daywireless.com

DAY
WIRELESS SYSTEMS

www.daywireless.com
30 Offices in Six
Western States
200+ Tower Locations

February 15, 2024

Beau Renfro
Emergency Technology Coordinator
Wahkiakum County Sheriff's Office

Dear Mr. Renfro,

Day Wireless Systems is pleased to offer the following response to the Wahkiakum County Sheriff's Office request for Emergency Radio Repeater and Infrastructure Project Upgrades. We have extensive experience providing microwave backhaul platforms, VHF repeater systems, radio dispatch consoles, and end-user radio equipment and would be pleased to partner with Wahkiakum County on this project.

This proposal includes the following:

- Overhaul of the existing obsolete radio system in four segments
  - **Segment 1:** Microwave/ Fiber Optic Site Links- six sites
  - **Segment 2:** Replacement of five current standalone VHF sites and estimate for the addition of a fifth repeated channel pair
  - **Segment 3:** Replacement of two obsolete radio dispatch consoles with three new consoles and backend radio infrastructure
  - **Segment 4:** Replacement of portable and mobile radios, as well as base stations

Day Wireless intends to pay Prevailing Wage rates as of 2/19/2024 and agrees that the pricing listed below is valid for 60 days from date of proposal.

When the County is ready to proceed, Day Wireless Systems is able to provide this project solution. For additional information please reach out to Wireless System Sales Representative Jason Kester by telephone at (503) 310-1401 or email at jkester@daywireless.com. For contracting concerns, please email contracts@daywireless.com. We look forward to working with you on this important communications project.

Sincerely,

Mackenzie Day

Mackenzie Day
Chief Executive Officer
Day Wireless Systems

EXECUTIVE SUMMARY

The Wahkiakum County Sheriff's Office Dispatch currently serves as the only Public Safety Answering Point (PSAP) for all of Wahkiakum County and is operating on an obsolete radio system. To continue ensuring the safety of the County's 4,700 residents, an overhaul of the existing system is needed including the following:

- Four (4) New Microwave Links in a Ring Configuration Partnered with the County's Operational Fiber Optic Connections
- Five (5) VHF Simulcast Repeater Sites, and Prime Site in Dispatch to vote the (4) Simulcasted channels
- Three (3) Radio Dispatch Consoles directly interfaced to the Simulcast system with backup wireless radio access
- Replacement of:
  - 104 Portables
  - 194 Mobiles
  - 15 Base Stations
  - One (1) Vehicle Repeater

The County also requires an additional updated dispatch console and the option to add a fifth repeater channel pair if it can be accommodated under the existing licensing.

The proposed systems would be installed, optimized, and tested by certified radio frequency technicians from the Day Wireless Longview office. As one of the largest Wireless Services Specialists in the Western United States, we are uniquely positioned and highly qualified to handle all aspects of this project, including but not limited to: system design, configuration and installation, and ongoing maintenance and support.

2/17/2024
Confidential to
Wahkiakum County
Sheriff's Office

DAY
WIRELESS SYSTEMS

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PROFILE OF FIRM

Day Wireless Systems, a DBA of Day Management Corporation, is a premier provider of wireless solutions for voice, data, and video. The company designs, installs, and supports systems for government, public safety, healthcare, commercial, and education customers.

Day Wireless Systems Headquarters

Founded in 1969, the company is based in the Bend, Oregon, area and now operates from 30 locations in six Western States. We have more than 400 employees including nearly 300 technical staff made up of engineers, senior technicians, and skilled installers. The company is privately held and led by third generation family members. Day Wireless Systems is affiliated with Reliance Connects, a provider of telephone, cable, and Internet services with operations in Oregon and Nevada.

Day Wireless Systems is one of the largest wireless service organizations in the country and a major provider of the leading brands in wireless system applications. We are one of the largest wireless integrators in the Western United States.

Day Wireless Systems serves its customers throughout the West from 30 locations in six states.

When you call Day Wireless, you get answers. Whether you are seeking a Motorola Two-Way Radio System or need solutions for your complex communication challenge, we can help. Dedicated to service excellence and technical innovation, the experts at Day Wireless Systems are ready to solve problems.

Our average employee has been with us over eight years, so you can be confident we have the know-how and ability to solve your toughest challenges. We know that culture matters and proudly trace our company heritage over one hundred years to the founding of Estacada Telephone in 1905, and Day Wireless since 1969.

REGIONAL OFFICE PROFILE

Serving the Southwest Washington area is the Longview regional office of Day Wireless.

The Longview service center holds the highest technical service status awarded by Motorola – Service Elite Specialist. We must adhere to this rigorous standard of technical and customer service to maintain the highest levels of Motorola systems certification.

The Day Wireless Longview office adheres to the business practices of the Electronics Technician Association (ETA) for high standards of technical ability, business operations, ethics, safety and customer service. It means clean, organized, and professional technical spaces and service vehicles.

39 International Way
Longview, WA 98632
Phone: 360-423-3690

Our Longview regional office is currently fielding twelve active projects and is supported by Area Service and Sales professionals, our Engineering and Design Team, and our Operations departments. Customers of Day Wireless benefit from the personal attention of a local service shop and with the full backing and expertise of the overall company.

FINANCIAL INFORMATION

Day Wireless Systems, a DBA of Day Management Corporation, is a privately-owned S-Corporation first incorporated in the State of Oregon in 1969. As a privately-held company, we do not provide financial information to vendors. We do, however, provide the following bank and trade references, and our Dun and Bradstreet number.

Dba Name: **Day Wireless Systems**

- **Tax ID:** 93-0681623
- **Type of Corp:** S-Corp
- **State of Incorporation:** Oregon
- **Dun and Bradstreet:** 09-700-2273

- **Bank Account Name:** Day Management Corp.
- **Bank Name:** Wells Fargo
- **Bank account Number:** 4725902217
- **Routing or ABA number:** 121000248
- **Swift code:** WFBIUS6S

PROJECT APPROACH

Day Wireless utilizes the following plans to ensure we meet our customer's goals:

PROJECT KICK OFF

Upon receiving the Notice to Proceed (NTP), the Day Wireless Systems' project manager shall schedule a meeting to review and update the Project Management Plan which is a compilation of the following plans:

- Responsibility Matrix: Illustrates who is responsible to complete what task.
- Scope Plan: Defines in greater detail how the work will be completed.
- Schedule Plan: Defines the baseline schedule, what and how changes can be made to the base line.
- Testing Plan: Defines what tests must be executed, how and when The Project Management Plan is considered a living document. As the project progresses, more detailed information may necessitate a change or addition to the plan. All changes will be reviewed prior to implementation updated electronic copies will be submitted to the team.

THE PROJECT PLAN

The purpose of this plan ensures we perform the project in a timely and successful manner by defining how the project is executed, monitored, controlled, and closed. Upon award of the Project DWS will initiate the drafting of the this plan it shall be completed and approved during the Design Phase of the project. This document shall be considered a living document as it will change over time as more information becomes available to the project. The Project Plan is comprised of several plans specifically:

COMMUNICATIONS PLAN

The purpose of this plan is to set the communications framework for this project. It will serve as a guide for communications throughout the life of the project and will be updated as communication needs change. This plan identifies and defines the roles of persons involved in this project. It also includes a communications matrix which maps the communication requirements of this project. An in-depth guide for conducting meetings details the communications rules and how the meetings will be conducted, ensuring successful meetings. A project team directory is included to provide contact information for all stakeholders directly involved in the project.

PROJECT MANAGEMENT

Day Wireless Systems will minimize costs to Wahkiakum County to implement this project by using our experienced radio technicians, tower climbing ability, and the security and video surveillance experience of our quality control lead to reduce the time required to achieve what Wahkiakum County is requesting.

Day Wireless Systems does not anticipate issues or conflicts in the performance of this project. However, if issues do arise, we will immediately inform Wahkiakum County and work quickly and collaboratively to resolve the issue.

In order to ensure the quality-control standards Wahkiakum County requires, Day Wireless Systems' quality control lead will inspect and approve the installation and configuration after installation to verify performance.

In addition, a formal Acceptance Test Plan will be completed upon award. A checklist of items to test will be prepared and a representative from Wahkiakum County and Day Wireless will conduct the test together. Upon completion of the ATP, the system will be considered accepted, and a project completion certificate will be signed.

QUALITY ASSURANCE/ QUALITY CONTROL

Day Wireless Systems is committed to providing top-tier customer service with high levels of quality assurance. To achieve those ends, we are pleased to be able to provide tremendous depth in the number of skilled managers and technicians with talents that can be made available to Wahkiakum County as needed to meet deadlines.

To support this project:

- We will assign a team composed of a tower project manager, a field supervisor, and certified installers.
- This group will work in concert with the assigned staff from Wahkiakum County as needed to execute this project.
- A project kickoff session will finalize the Statement of Work, project deliverables and schedule.
- Provide regular progress reports to the customer.
- Produce final deliverables as agreed.
- Close out the project.

IMPLEMENTATION PLAN

The purpose of this plan is to detail the project scope and define the how it will be accomplished effectively and efficiently. In general, includes the following.

- **Scope Statement**: The project scope includes all the work required, and only the work required to successfully complete the project.
- **Safety:** Day Wireless Systems holds safety as paramount and at no time shall any operation, task or evolution be undertaken or continued if deemed hazardous to the personnel, equipment or community. All safety practices shall be put in place and compliance with all local, state and federal laws and regulations shall be maintained.
- **Project Deliverables:** Each deliverable may contain one or more measurements that will indicate clear progress towards or achievement of the deliverable. The Project Manager will manage scope development and change to ensure the project deliverables remain the basis for defining the high-level to specific requirements needed to deliver the product or service.

COST MANAGEMENT PLAN

The purpose of this Plan is to ensure the project stays on budget:

- DWS will use Earned Value Management System to verify Cost Performance Index is within +/- .2 of budget goal.
- DWS will provide regular project status reviews to management.
- The Project Manager will be responsible for managing and reporting on the project's cost throughout the duration of the project. Responsible for accounting for cost deviations and presenting the Project Sponsor with options for getting the project back on budget.
- Documents to be used:
  - Implement cost adjustments or corrective actions such as the Change Order Request (COR)

QUALITY MANAGEMENT PLAN

The purpose of this process is to develop a reasonable and appropriate method for an objective review of how well the project is following the projects' plans and controls to deliver the requested product and meet the standards of the Manufacturer and Projects Sponsor's oversight requirements.

- Is to provide a sequence of steps that will enable the Reviewer to detect areas of insufficiency in the project's plan and processes, as well as insufficiency in the project's ability to carry out the plan.
- Includes recommendations for improvement for each QA finding Ensures that Quality is the responsibility of each team member.
- Provides target specific documents such as Motorola R56 site inspection checklist, manufactures acceptance test requirements, manufactures installation guidelines.

SCHEDULE MANAGEMENT PLAN

The purpose of this plan is to create a schedule baseline derived from resource requirements and availability, task durations and dependencies:

- The schedule shall be presented in MS Office Project format, Gant charts.
- Changes to schedule can only be made by the Project Manager
- Schedule Variance shall be calculated using earned value techniques. Variance of +/-.2 in the Schedule Performance Index (SPI) will require corrective action.

The final schedule will be prepared by the respective project managers upon award and final design. Some scheduling elements are not in control of Day Wireless, including but not limited to facility access, FCC license, site or facility permits, equipment delivery, and bad weather.

EQUIPMENT LIFECYCLE PLANS

The following statement was obtained from our contact at Avtec regarding their Lifecycle Expectancy:

- *"Avtec Scout is primarily a software-based dispatch console which allows for continual updates to stay current with modern operating systems and hardware. Due to this design, there is no expected date to end of life the Scout product."*

Please see Appendix A for Manufacturer's Lifecycle Plans for Cambium.

Please see Appendix B for Manufacturer's Lifecycle Plans for Zetron (Codan).

SCOPE OF WORK AND SPECIFICATIONS

Day Wireless excludes the following technical specifications from our proposal:

- Cable trays in use will not be modified, regardless of loading
- Innerduct in use will not be modified, regardless of loading
- Field service bulletins, software patches, and similar service and repair notices are beyond our local control and are excluded
- Computer floor cutouts are excluded
- Analysis and repair of deficient Site Bonding is excluded
- Data transmissions in voting comparators is excluded
- "Atomic" type frequency standard is excluded
- In-building coverage other than outdoor overlay is excluded
- VPN connection or SSL Web GUI is excluded
- Configuration of devices and network transport components integrated into a single "NM Client" is excluded
- Security and Fault Management are excluded
- Self-Diagnostic Capabilities are excluded
- Alarm Points, Indication, Attributes, Notification Media, Historical Data, and Protocols are excluded
- Attendance of public hearings and/ or tribe notifications is excluded

PROJECT TEAM

The following staff members will be assigned to this project:

SPENCER SALLEY- LONGVIEW SERVICE MANAGER

Spencer Salley is a two-way communications specialist with a focus in Commercial and Public Safety systems and prides himself on his skills as a Certified Service Manager and Customer Service Specialist. He is a graduate of Western Business College with a degree in Accounting and Business Management and has led multiple projects in Washington, including a large casino and hotel and a county-wide 911 dispatch project.

JASON ROSS- RADIO TECHNICIAN JOURNEYMAN

Jason Ross specializes in telecommunications work including tower construction and modification. He has over 10 years of extensive expertise in fiber optics, structured wiring, battery plants, microwave backhaul systems, two-way radio systems, radio networking, and RF systems. He was an integral member of a large 10g fiber backhaul project consisting of microwave backhaul, fiber, and PTMP wireless internet for 60 sites.

CHRIS FRALEY, SENIOR SERVICE TECHNICIAN

Chris Fraley has over 25 years of radio communications experience. He has experience in 911/ dispatch center support, conventional and digital repeater systems, and project management for system implementations.

Awards, Affiliations, and Certificates: Networking Essentials Motorola Communications Equipment, Astro 25 IV&D, K/L/M Core Install Technician

AARON ANDRUS, LOW VOLTAGE TECHNICIAN

Aaron Andrus has extensive experience in multiple bands of satellite communications and NIPR and SIPR networks. He has also been responsible for the installation, maintenance, and operations of HR, VHF, and UHF radio systems.

JOHN MARXMILLER, INSTALL TECHNICIAN JOURNEYMAN

John Marxmiller has over 35 years of experience as a radio technician starting as a radioman in the US Navy. He has worked for Chevron, GTE, and Verizon before coming to Day Wireless 17 years ago.

Awards, Affiliations, and Certificates: FCC-General Radiophone Operator License

JEFF SPRINGER, AREA SERVICE MANAGER

Expertise

- Mobile upfitting
- AC & DC Electrical application
- OSHA Compliance
- Safety practices
- Project Management
- Radio Systems
- Microwave Systems
- Subscriber Radios
- 911 PSAP Phone Systems

BIO

Jeff has a tremendous skill set in radio systems, microwave systems, dispatch consoles, 911 PSAP, mobile electronics, mobile radios, vehicle upfitting, and project management.

Jeff has been the in communications business for a combined 22 years. In 1995 Jeff took over as a shop manager in Sparks, NV for Sierra Electronics. There he managed a large service and installation team. He also worked one on one with customers to develop communications systems for public safety. In 2011 Jeff moved to Oregon and started working at Auto Additions as a mobile upfitting account manager.

In 2013 Jeff took over as the Salem Shop Manager for Day Wireless. He took over a team of 16 technicians, sales, and office staff. Since then, he has built the Salem shop to be one of the Leaders in the communications. He has developed professional relationships with Police, Fire and other Emergency personnel in Oregon, Washington, and California.

Jeff has continued to grow in leadership with Day Wireless and is currently the Oregon and Southwest Washington Area Service Manager. The team of 85 in the OR-SWW Area are very successful in implementation of projects large and small.

ROGER TAY – SENIOR TELECOM SYSTEMS ENGINEER

Expertise

- System Architecture Design
- Analog and Digital RoIP
- IP Networking
- RF Systems Design
- Radio Dispatch Consoles
- E911 Telephony Systems
- NICE and Verint Audio Logging
- Radio Data Applications

Awards, Affiliations, and Certificates

- CompTIA Network+

Education

- Bachelor of Science Electrical and Computer Engineering University of Illinois at Chicago

BIO

Roger Tay has worked in the communications industry since 2008. Early work concentrated in system staging, configuration, and optimization. His tasks progressed from post-sale systems implementation to pre-sales systems design, working with internal sales and business teams to qualify the customer with the most appropriate solution.

Roger carries extensive knowledge in public safety Land Mobile Radio Systems, Dispatch Consoles, Enhanced 911 networks, and Outdoor Coverage prediction. He also has exposure in IP Network planning, and Data Applications including GPS, Unit Tracking, and Network Monitoring.

He has trained and mentored team members in basic radio concepts, common architectures, and industry specific applications. Roger provided supplemental education in ways of the business and how the company aligns with customers, vendors, and partnered firms in the marketspace.

Experience
(Contact information available upon request)

- SOUTHERN CALIFORNIA GAS COMPANY (SOCAL GAS): FULL RF SYSTEM
  Roger served as the System Design Engineer for this project consisting of 131 Avtec consoles and 94 Motorola repeaters across 41 radio sites in Southern California.
- ADAMS SHERIFF'S OFFICE DISPATCH
  Roger served as the System Design Engineer for this project consisting of a K2 redundant core and MCC 7500 dispatch system. Day Wireless was the manufacturer's representative for Motorola.

DARIN DEMASTERS, PMP PROGRAM MANAGER

Expertise

- Program Management
- Project Management
- Strategic Business Planning
- HR Management & Leadership
- Dispatch Console design and deployment
- LAN/WLAN/Wireless Install & Upgrade
- Fiber Engineering & Construction
- Site Safety/OSHA Compliance

Awards, Affiliations, and Certificates

- Project Management Professional (PMP)#:1262368
- FCC License #:PGGB008924
- Motorola Certified – Centracom, Best Practices, ASTRO Saber, R56 Certificate in Lean Six Sigma

Education

Boston University – Project Management Professional Southern Illinois University - Vocational Education City College of Chicago – Business Administration Villanova University – Advanced Masters Certificate for Applied Project Management

BIO

As a member of the Day Wireless project team, Darin is assigned to various projects as needed and provides the capabilities for managing small and large projects.

Darin earned his PMP from the Project Management Institute. He also holds an Advanced Masters Certificate in Applied Project Management, and a Certificate in Advanced Strategic Project Management Practices.
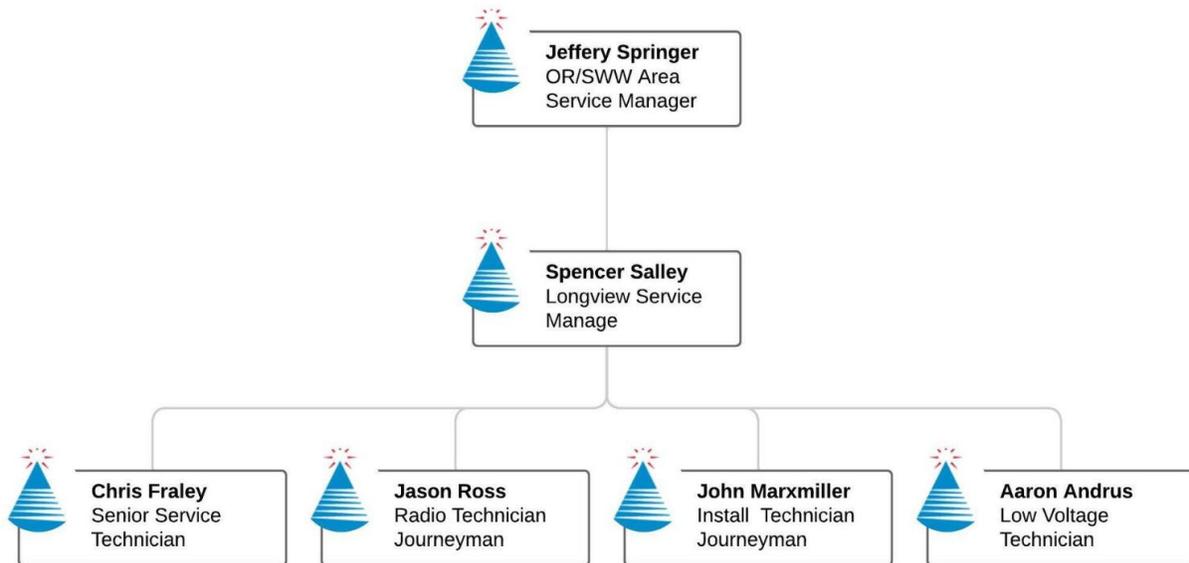
Darin also holds an FCC license.

His unique mix of wired, fiber, wireless and IT communications technical expertise adds extra value to his role as project manager. This allows him to be especially effective in leading advanced telecommunication system implementations.

Darin has led numerous projects involving sophisticated digital RF and IP integrated solutions. Examples include deployments for: Southern California Gas Company-39 Site deployed 4 dispatch centers 130 consoles, Arcata Police Department Console System, Humboldt State University Police Department Console System, Eureka Police Department Console System,, Adams County Sheriff's Office Console System, Post Falls Police Department Console System, Lawrence Livermore Labs Console System Four Dispatch Centers Five remote sites, Golden Gate National Recreation Area Console System 3 remote sites, Santa Clara Valley Transit Agency, ECSO Dispatch Center, Klamath Falls Console System, Yakima Sheriff Simulcast, Lincoln PUD digital radio and others.

ORGANIZATIONAL CHART

Jeffery Springer
OR/SWW Area
Service Manager

Spencer Salley
Longview Service
Manage

Chris Fraley
Senior Service
Technician

Jason Ross
Radio Technician
Journeyman

John Marxmiller
Install Technician
Journeyman

Aaron Andrus
Low Voltage
Technician

SEGMENT ONE SOLUTION

SOLUTION OVERVIEW

The proposed solution for Segment One is based on the Cambium PTP 820S. Cambium is one of the world's leading manufacturers of top-quality backhaul and other equipment. This solution consists of the following:

- 6GHz Microwave Link between KM Mountain and Clatskanie
- 6GHz Microwave Link between Radar Ridge and Clatskanie
- 11GHz Microwave Link between Radar Ridge and Wickiup
- 11GHz Microwave Link between Wickiup and Cathlamet Monopole Site
- 10 Years Day Wireless Microwave System Maintenance Plan
- Four (4) Years Cambium Care Plan

SYSTEM ELEMENTS

CAMBIUM PTP 820/850

The Cambium PTP 820/850 is a point-to-point licensed microwave backhaul platform that integrates leading networking functionality with the industry's most advanced microwave technologies, creating a superior microwave transport solution. Supporting licensed frequency bands ranging from 6 to 86 GHz, the PTP 820/850 series delivers a wide range of configurations to offer a tailored solution for any deployment scenario.

Composed of high-density multi-technology nodes and integrated radio units, the PTP 820/850 series offers flexibility in choosing all-indoor, split-mount, and all-outdoor configuration options. Exploiting unique Line of Sight (LOS) Multiple Input Multiple Output (MIMO) technology, modulation up to 4096 QAM and wider channel bandwidths ensures industry-leading throughput and spectral efficiency.

Combining technologies, equipment and services, PTP 820/850 enables network operators to meet accelerating demand for capacity cost-effectively under rapidly evolving conditions. PTP 820/850 also offers both Synchronous Ethernet (SyncE) and IEEEv2 synchronization protocols required for large ISP and MPLS networks.

Operations, Administration and Maintenance (OA&M) tools coupled with a full suite of network and element management systems (NMS and EMS) simplify network provisioning and monitoring, reducing operators' total cost of ownership and enabling them to meet the most stringent service level agreements.

CAMBIUM CARE

For more information on Cambium Care, please see the attached brochure

DAY WIRELESS MICROWAVE SYSTEM MAINTENANCE PLAN

The Day Wireless Maintenance Agreement is tailored as a companion to the Cambium Care Plan and includes:

- 24x7 Dispatch service
- Labor to repair equipment
- Acknowledgement of service call within one (1) hour
- Priority service: on site within 24 hours of service call for infrastructure issues
- Annual Preventative Maintenance (PM) of system infrastructure
- Operating software upgrade of infrastructure
- Discounted rates for above contract purchases and depot repairs
- OEM warranty and non-warranty re-installation of equipment

EQUIPMENT LIST

The proposed solution is based around the following key equipment:

Qty	Description
	RADAR RIDGE TO CLATSKANIE
4	PTP 820S RADIO 6LGHZ,TR252A,CH1W4,HI,6179.415-6304.015MHZ
1	PTP 820 OUTDOOR_DC_CBL_2X18AWG_DRUM, 305M
4	PTP 820/850 ACT.KEY - CAPACITY 500M WITH ACM ENABLED, PER TX CHAN
2	PTP 820 6' ANT,SP,6GHZ,RFU-C TYPE&STD UDR70 - ANDREW
	KM MOUNTAIN TO CLATSKANIE
4	PTP 820S RADIO 6LGHZ,TR252A,CH1W4,HI,6179.415-6304.015MHZ
1	PTP 820 OUTDOOR_DC_CBL_2X18AWG_DRUM, 305M
4	PTP 820/850 ACT.KEY - CAPACITY 300M WITH ACM ENABLED, PER TX CHAN
2	PTP 820 4' ANT,SP,6GHZ,RFU-C TYPE&STD UDR70 - ANDREW
	WICKIUP TO CATHLAMET
4	PTP 820S RADIO 11GHZ,TR500,CH1W6,HI,11185-11485MHZ
1	PTP 820 OUTDOOR_DC_CBL_2X18AWG_DRUM, 305M
4	PTP 820/850 ACT.KEY - CAPACITY 500M WITH ACM ENABLED, PER TX CHAN
1	SHP3 - 3' ANT, 11WGHZ WITH RADOME, SINGLE POL,RFU-C TYPE
1	PTP 820 4' ANT,SP,11GHZ,RFU-C TYPE&STD UBR100 - ANDREW
	RADAR RIDGE TO WICKIUP
4	PTP 820S RADIO 11GHZ,TR500,CH1W6,HI,11185-11485MHZ
1	PTP 820 OUTDOOR_DC_CBL_2X18AWG_DRUM, 305M
4	PTP 820/850 ACT.KEY - CAPACITY 500M WITH ACM ENABLED, PER TX CHAN
2	PTP 820 4' ANT,SP,11GHZ,RFU-C TYPE&STD UBR100 - ANDREW
	RECOMMENDED SPARES
1	PTP 820S RADIO 6LGHZ,TR252A,CH1W4,HI,6179.415-6304.015MHZ
1	PTP 820 6' ANT,SP,6GHZ,RFU-C TYPE&STD UDR70 - ANDREW
1	PTP 820 4' ANT,SP,6GHZ,RFU-C TYPE&STD UDR70 - ANDREW
1	PTP 820 RFU-C 6GHZ COUPLER KIT
1	PTP 820S RADIO 11GHZ,TR500,CH1W6,HI,11185-11485MHZ
1	SHP3 - 3' ANT, 11WGHZ WITH RADOME, SINGLE POL,RFU-C TYPE
1	PTP 820 4' ANT,SP,11GHZ,RFU-C TYPE&STD UBR100 - ANDREW
1	PTP 820 RFU-C 10_11GHZ COUPLER KIT
2	PTP 820/850 ACT.KEY - CAPACITY 500M WITH ACM ENABLED, PER TX CHAN
1	PTP 820/850 ACT.KEY - CAPACITY 300M WITH ACM ENABLED, PER TX CHAN

SEGMENT TWO SOLUTION

The proposed solution for Segment Two is based on the following equipment and services:

- Five (5) Motorola APX Consolettes
- Five (5) Codan Cascade Radio Systems
- Five (5) Newmar Centurion II Power Systems with Batteries
- One (1) Equature Logging Recorder Upgrade
- Ten Years Codan Care and Day Wireless Simulcast Maintenance Plan

MOTOROLA APX CONSOLETTES

When disaster threatens and your people are in danger; when a storm strikes and your teams are in the thick of it; when everything around you is chaos, you need a reliable way to connect everyone together.

That's why Motorola developed the APX Consolette.

This self-contained dispatch console gives you everything you need to stay connected, even when computer-based dispatch systems are unavailable.

It's a rugged, powerful desktop radio (single-band or multi-band) that works seamlessly with digital P25 or legacy analog systems, and it's optimized for battery revert operation as a standalone dispatch station. It is designed to manage smaller operations or to be a backup to a computer-based CAD system. APX Consolettes are designed for easy operation, with intuitive controls carefully placed where you need them to be.

The consolette's user interface is a familiar APX O5 Control Head, with options to customize the controls to suit your workflows and procedures. You can even configure the screen backlight to change color to indicate consolette status or lock-out controls to prevent unauthorized tampering.

CODAN VT-4E TRANSMITTER

The VT-4E VHF transmitter is an FM radio module capable of analog operation in 12.5 KHz (narrowband) or 25 KHz (wideband) channels. A firmware upgrade may be purchased to allow P25 digital operation. The VT-4E VHF transmitter operates over the frequency band from 136 to 174 MHz. A modular design allows each of the transmitter's internal modules to be individually assembled and tested. This facilitates construction, tuning and maintenance as well as troubleshooting procedures. The transmitter can be programmed with up to 2 banks of 16 channels each.

For more information on the Codan Cascade LMR Base Station/ Repeater Platform, please see the attached brochure.

EQUATURE LOGGING RECORDER

For more information on the Equature Logging Recorder Upgrade, please see the attached brochure.

CODAN CARE

For more information on Codan Care, please see the attached brochure.

DAY WIRELESS CODAN SIMULCAST MAINTENANCE PLAN

The Day Wireless Maintenance Agreement is tailored as a companion to Codan Care Plan and includes:

- 24x7 Dispatch service
- Labor to repair equipment
- Acknowledgement of service call within one (1) hour
- Priority service: on site within 24 hours of service call for infrastructure issues
- Annual Preventative Maintenance (PM) of system infrastructure
- Operating software upgrade of infrastructure
- Discounted rates for above contract purchases and depot repairs
- OEM warranty and non-warranty re-installation of equipment

EQUIPMENT LIST

The proposed solution is based around the following key equipment:

Qty	Description
APX consolettes	
2	SMT3000RM2UC SMARTUPS 3000VA
5	APX ALL BAND CONSOLETTE
EQUIP WICKIUP	
2	JL259A#ABA HPE ARUBA 2930F 24G 4SFP - SWITCH - 24 PORTS - MANAGED - RACK-MOUNTABLE
1	CODAN RADIO SYSTEM
1	COMBINER FF VHF 4CH DL 125W
1	MULTICOUPLER VHF 4N P-5 2 PORTS TBD
1	DC POWER PLANT CENTURION II
3	RECTIFIER
1	INVERTER 48V
12	100AH 12V BATTERY
1	10IN RACK 7FT

	EQUIP RADAR RIDGE
2	JL259A#ABA HPE ARUBA 2930F 24G 4SFP - SWITCH - 24 PORTS - MANAGED - RACK-MOUNTABLE
1	CODAN RADIO SYSTEM
1	COMBINER FF VHF 4CH DL 125W
1	MULTICOUPLER VHF 4N P-5 2 PORTS TBD
1	DC POWER PLANT CENTURION II
3	RECTIFIER
1	INVERTER 48V
12	100AH 12V BATTERY
1	10IN RACK 7FT
	EQUIP KM MOUNTAIN
2	JL259A#ABA HPE ARUBA 2930F 24G 4SFP - SWITCH - 24 PORTS - MANAGED - RACK-MOUNTABLE
1	CODAN RADIO SYSTEM
1	COMBINER FF VHF 4CH DL 125W
1	MULTICOUPLER VHF 4N P-5 2 PORTS TBD
1	DC POWER PLANT CENTURION II
3	RECTIFIER
1	INVERTER 48V
12	100AH 12V BATTERY
1	10IN RACK 7FT
	EQUIP CLATSKANIE TWR
2	JL259A#ABA HPE ARUBA 2930F 24G 4SFP - SWITCH - 24 PORTS - MANAGED - RACK-MOUNTABLE
1	CODAN RADIO SYSTEM
1	COMBINER FF VHF 4CH DL 125W
1	MULTICOUPLER VHF 4N P-5 2 PORTS TBD
1	DC POWER PLANT CENTURION II
3	RECTIFIER
1	INVERTER 48V
12	100AH 12V BATTERY
1	10IN RACK 7FT
	EQUIP CATHLAMET
2	JL259A#ABA HPE ARUBA 2930F 24G 4SFP - SWITCH - 24 PORTS - MANAGED - RACK-MOUNTABLE
1	CODAN RADIO SYSTEM
1	COMBINER FF VHF 4CH DL 125W
1	MULTICOUPLER VHF 4N P-5 2 PORTS TBD
1	DC POWER PLANT CENTURION II
3	RECTIFIER
1	INVERTER 48V
12	100AH 12V BATTERY
1	10IN RACK 7FT
	EQUIP EQUATURE LOGGER UPGRADE
1	EQUATURE LOGGING RECORDER IP GATEWAY LICENSE
6	PER CHANNEL UPGRADE

COVERAGE PREDICTION AND MAPS

The coverage predictions in this proposal use TSB-88 standard of DAQ 3.4 quality. The below table shows the signal levels associated with the DAQ value.

Modulation Type, (channel spacing)	Static[1]. $ref / \frac{C_s}{N}$	DAQ-3.0[2]. $BER\% / \frac{C_f}{(I+N)}$	DAQ-3.4[3]. $BER\% / \frac{C_f}{(I+N)}$	DAQ-4.0[4]. $BER\% / \frac{C_f}{(I+N)}$
Analog FM Radios				
Analog FM ± 2.5kHz (12.5 kHz)	12 dBS/7 dB	N/A/23 dB	N/A/26 dB	N/A/33 dB
Analog FM ± 4kHz (25 kHz) [5]	12 dBS/5 dB	N/A/19 dB	N/A/22 dB	N/A/29 dB
Analog FM ± 5kHz (25 kHz)	12 dBS/4 dB	N/A/17 dB	N/A/20 dB	N/A/27 dB
Digital FDMA Radios				
C4FM (IMBE) (12.5 kHz) [6]	5%/5.4 dB	2.6%/15.2 dB	2.0%/16.2 dB	1.0%/20.0 dB
C4FM (IMBE) (12.5 kHz) [7]	5%/7.6 dB	2.6%/16.5 dB	2.0%/17.7 dB	1.0%/21.2 dB
C4FM (VSELP)[8] (12.5 kHz) [7]	5%/7.6 dB	1.8%/17.4 dB	1.4%/19.0 dB	0.85%/21.6 dB
CQPSK (IMBE) LSM, 9.6 kb/s (12.5 kHz)	5%/6.5 dB	2.6%/15.7 dB	2.0%/17.0 dB	1.0%/20.5 dB
CQPSK (IMBE) WCQPSK, 9.6 kb/s (12.5 kHz)	5%/6.5 dB	2.6%/15.4 dB	2.0%/16.8 dB	1.0%/20.2 dB
Digital TDMA Radios				
ETSI DMR 2 slot TDMA (AMBE +2) (12.5 kHz)	5%/5.3 dB	2.6%/14.3 dB	2.0%/15.6 dB	1%/19.4 dB
F4GFSK (AMBE) OpenSky®2-slot	5%/11.0 dB	3.5%/17.0 dB	2.5%/19.0 dB	1.3%/22.0 dB
F4GFSK (AMBE) OpenSky®4-slot	5%/11.0 dB	1.3%/22.0 dB	0.9%/24.0 dB	0.5%/27.0 dB
H-DQPSK 12 kb/s (AMBE+2) (P25 TDMA DL)	5%/7.3 dB	3.1%/15.2 dB	2.4%/16.4 dB	1.2%/19.8 dB
H-CPM 12 kb/s (AMBE+2) (P25 TDMA UL)	5%/9.0 dB	3.3%/17.5 dB	2.6%/18.7 dB	1.4%/21.6 dB

A Covered Area Reliability (CAR) of 97% was used in these predictions. This metric of reliability has been used in many system designs for Public Safety customers. Per the request for a description of the methods used to calculate coverage and propagation models, prediction of coverage maps for Segment Two have been attached as Appendix C. Full details of site and station information are available via summary documentation upon request.

SEGMENT THREE SOLUTION

SYSTEM ELEMENTS

The Avtec Scout EX is a software-based dispatch solution that provides seamless integration, with flexible user interface that can be tailored to your dispatch needs. Day Wireless Systems is pleased to offer all of the equipment and professional services required for this Avtec solution including:

- Three (3) Scout EX Tier 1 Consoles
- Three (3) Scout EX PCs
- Gateways and Endpoint Hardware
- Associated Audio Accessories
- Recommended Spare Equipment
- Optional Outpost Plus Interface and Hardware
- Ten Years Day Wireless Avtec Maintenance Plan

AVTEC SCOUT CONSOLE SYSTEM

Avtec's Scout console system is a completely distributed, fully redundant, VoIP platform designed for round-the-clock mission-critical environments. Unlike traditional TDM-based dispatch systems, Scout does not rely on centralized hardware, but instead is comprised of modular IP-based components. This architecture allows the Scout components to be deployed locally and/or anywhere within an enterprise network.

Legacy dispatch systems fostered a single-site approach to communications. Historically, these TDM or hybrid TDM-IP systems required centralized backroom equipment, were dependent on copper leased lines, and made disaster recovery planning hardware-intensive and costly. Each agency or site within an organization was an isolated island, unable to easily share resources. Scout's pure IP console technology has helped migrate many dispatch centers to a more distributed architecture while maintaining operational continuity and seamless functionality across multiple centers. Geographical separation of consoles and radio interfaces with Scout provides a natural immunity to emergency events that can impact a communications center.

The Avtec's Scout EX dispatch console is designed to meet the needs of customers who need a scalable, reliable solution for single and multi-site distribution. Connection to a variety of Land Mobile Radio (LMR) platforms through standards-based protocols and proprietary systems, as well as connectivity to Push-to-Talk over Cellular (POC), and telephony technologies, means your dispatch center is poised for optimal communications. A fully customizable and intuitive interface enables your dispatchers to set their screens up to meet their exact needs. The Avtec Scout system's scalable architecture allows you to easily expand your system to meet the changing demands of your dispatching operations.

OUTPOSTS PLUS RADIO GATEWAY
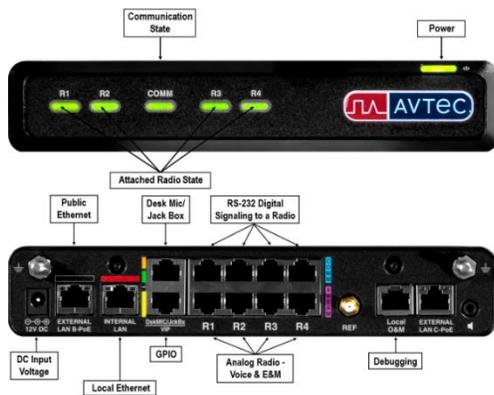
Avtec's second generation Radio over IP gateway, the Outpost Plus, integrates with Avtec's VoIP Protocol Gateway (VPGate). VPGate communicates with Scout consoles giving dispatchers the ability to simultaneously control, monitor, and transmit to connected radio resources. Each Outpost Plus connects up to four analog or digital radios. Each radio resource port connects independently to one VPGate endpoint.

The Outpost Plus is configured using the Outpost Plus Configuration Manager (OPCM). This documentation explains the installation of the OPCM as well as the setup, configuration, and use of the Outpost Plus through this tool. The OPCM, which can be located anywhere on the IP network or locally using an Ethernet connection, provides the following services for Outpost Plus devices:

- System Configuration
- Outpost Plus device configuration
- Outpost Plus interface configuration
- Firmware updates
- Audio monitoring

DAY WIRELESS AVTEC MAINTENANCE PLAN

AVTEC SCOUTCARE

ScoutCare is Avtec's licensed, post-warranty maintenance and support program. It gives you the assurance and peace of mind that your console investment will always be protected. ScoutCare keeps your team up and running today, with 24/7/365 on-demand support, while keeping an eye on tomorrow, as we continually develop new features, enhancements and integrations to meet your changing requirements.

ScoutCare includes hardware repair services for the first year and software upgrades as necessary, as long as the ScoutCare subscription is active. ScoutCare includes hardware repair services for the first year and software upgrades as necessary, as long as the ScoutCare subscription is active.

One (1) year of Avtec ScoutCare Hardware and one (1) year of Avtec ScoutCare Software subscription are included, which allows for regular software updates and technical support. Pricing has also been included for nine (9) additional years of support.

For more information, please see the attached Avtec ScoutCare Software Maintenance and Support Program brochure.

DAY WIRELESS MAINTENANCE

The Day Wireless Maintenance Agreement is tailored as a companion to Avtec's ScoutCare Plan and includes:

- 24x7 Dispatch service
- Labor to repair equipment
- Acknowledgement of service call within one (1) hour
- Priority service: on site within 24 hours of service call for infrastructure issues
- Annual Preventative Maintenance (PM) of Dispatch Console equipment
- Operating software upgrade of infrastructure
- Discounted rates for above contract purchases and depot repairs
- OEM warranty and non-warranty re-installation of equipment

EQUIPMENT LIST

The proposed solution is based around the following key equipment:

Qty	Description
DISPATCH NETWORKING AND RACK	
2	JL259A#ABA HPE ARUBA 2930F 24G 4SFP - SWITCH - 24 PORTS - MANAGED - RACK-MOUNTABLE
2	SMT3000RM2UC SMARTUPS 3000VA
CONSOLE OP POSITION HARDWARE/SOFTWARE	
3	SCOUTEX TIER 1 WITH IRR
3	SCOUTEX PC
6	NENA HEADSET/HANDSET JACKBOX
GATEWAYS AND ENDPOINT HARDWARE	
1	REDUNDANT VPG SOFTWARE 24 ENDPOINTS, UP TO 12 "B" LICENSES
2	1 RACK UNIT (1RU) SERVER SOLID STATE HARD DRIVE, WINDOWS 2022 SERVER OS
5	SUPPLEMENTARY VPGATE MOTOROLA IP LINK ENDPOINT LICENSE,
1	SUPPLEMENTARY VPGATE P25 DFSI ENDPOINT LICENSE
1	24 INPUT PACKAGE FOR SCOUT
1	24 OUTPUT PACKAGE FOR SCOUT
RACK EQUIPMENT	
1	1RU LCD KVM
OUTPOST PLUS INTERFACE AND HARDWARE	
3	OUTPOSTPLUS RADIO GATEWAY, VOIP, 2 PORT, POE,
5	OUTPOSTPLUS KIT TO ADD SUPPORT FOR (1) MDC1200 ENDPOINT. INCLUDES SOFTWARE LICENSE. OUTPOSTPLUS PURCHASED SEPARATELY.

SEGMENT FOUR SOLUTION

The solution for Segment Four consists of replacing the County's existing subscribers with the following equipment:

- 104 Motorola APX 4500 Single-Band P25 Mobile Radios
- 15 Motorola APX 4500 Base Stations
- 194 Motorola APX 900 Single-Band P25 Two-Way Radios
- One (1) Pyramid P250 P25 Twenty-Channel Digital Vehicular Repeater

APX 4500 SINGLE-BAND P25 MOBILE RADIO/ BASE STATIONS

You need a P25 radio to communicate and collaborate effectively with other P25 radio users. And you need the performance and reliability of an APX™ radio. That is why we built the APX 4500 single-band mobile radio.

Everyone has something to like with the APX 4500. We've paired it with our rugged O2 Control Head for confident, reliable radio communication that can stand up to everyday use.

The compact form factor simplifies vehicle installation. Integrated hardware encryption protects your mission-critical communication. Impact detection automatically alerts dispatch to keep its users safer and integrated Wi-Fi helps to keep you current with fast and easy software updates. Integrated Bluetooth provides wireless communication with Commercial off the shelf (COTS) Bluetooth accessories.

APX 900 SINGLE BAND TWO-WAY RADIO

The APX 900 is designed for public works, government services and education organizations who need essential communication at an affordable price. It delivers great core features, with an efficiency-focused design – including Bluetooth wireless connectivity.

SVR P250 P25 TWENTY-CHANNEL DIGITAL VEHICULAR REPEATER

The SVR-P250 is the next generation vehicular repeater from Pyramid Communications that is fully compliant with the APCO Project 25 Phase 1 Digital Common Air Interface (CAI) protocol. Advanced features include secure communications with P25 portable radios, AES and DES encryption, and emergency signaling from portable to dispatch. PC programmable for up to 20 channels, with P25, wideband/narrowband, CTCSS/DCS, and emergency signaling on a per channel basis.

The SVR-P250 utilizes the new ESP™ priority structure that resolves priority conflicts during repeater idle time rather than at the critical start of a conversation. With ESP™, priority vehicles are assigned without user intervention to ensure uninterrupted communications when users exit their vehicles. ESP™ also ensures a quick recovery if two vehicles get in a priority mode at one scene.

The SVR-P250 is both P25 and analog capable and can interface to analog or P25 mobiles providing flexible inter-operability between systems that wouldn't normally be able to communicate. The SVR-P250 will interface to analog, digital, conventional or trunking mobiles and is capable of operating with SkyTerra (formally MSV) mobile satellite phones. In trunking mode, the SVR-P250 ensures proper acquisition of the trunking channel and uses the Smart Trunking Access™ mechanism of alerting the portable users of trunking status information.

EQUIPMENT LIST

The proposed solution is based around the following key equipment:

Qty	Description
194	APX900, VHF, MODEL 2, P25, 3Y
104	APX4500 MOBILE, VHF, DASH, SPKR, ANT, O2, MIC,
15	APX4500 BASE, VHF, PS, O2, DESKMIC, P25
1	PYRAMID VEH RPTR P25, VHF

WARRANTY

DAY WIRELESS SYSTEMS WARRANTY POLICY

Following is the warranty policy for Day Wireless. No other warranty policy applies unless stated in writing and agreed to by Day Wireless and the End User. Warranty is for product and for services provided.

SCOPE

Day Wireless may provide material and service of its own or may act as the provider of a supplied system to the End User. A system is defined as infrastructure product from Original Equipment Manufacturers (OEM) and services from Day Wireless that are configured and installed to make a functioning system for the End User.

EQUIPMENT WARRANTY

Warranty for the OEM product is the responsibility of the specific OEM for each product in the system. OEM warranty begins on receipt of the equipment and invoice from the OEM, whether to the End User or to Day Wireless on behalf of the End User. Warranty from an OEM is customarily one year but may be more or less. The product must be returned to the OEM for repair or replacement per their specific warranty and the cost of freight to the OEM is borne by the End User. The OEM will normally pay for the cost of freight to return the product to the End User.

Cost of field service to assist the End User with in-warranty support of OEM product shall be borne by the End User. Such services may include: troubleshoot, repair if possible, remove and return product to the OEM, re-install, configure and optimize, update documentation and return the system to normal usage. Field services for OEM support are billed to End User on time and material at published service rates. Day Wireless will notify the End User if the specific OEM provides reimbursement for in-warranty field services.

SERVICES WARRANTY

Warranty for services and craftsmanship supplied by Day Wireless is 12 months. Craftsmanship consists of the labor tasks such as defects in design, programming and installation performed to implement the system. This warranty begins on the date of a Certificate of Acceptance signed by the End User. Should the system be put into beneficial use by the End User prior to completion of a Certificate of Acceptance, the warranty for services and craftsmanship will begin on the date of beneficial usage.

Warranty for installation and repair service of mobile, portable and other basic subscriber equipment is 90 days from completion.

Day Wireless can provide field support on a time and material basis at published service rates Monday – Friday, 8 am to 5 pm. Service is available after hours on an overtime rate of 1.5 time's normal rate. Services can also be supplied on a Maintenance Agreement with negotiated rates and priority handling.

LIMITATIONS

Total liability for Day Wireless arising out of or related to this warranty is limited to the price of the supplied system. It is at the option of Day Wireless to repair, replace or refund purchase price of the OEM product or supplied services. OEM warranty and craftsmanship warranty may be void if the system is altered, neglected or misused by End User or any third party.

Day Wireless is not responsible for any ancillary product or service applied to the system not supplied by Day Wireless.

Day Wireless is not responsible for defects due to weather, accident, or natural phenomena.

Day Wireless has no authority to make warranty policy on behalf of the OEM and bears no liability for performance and specifications stated by the OEM.

RELEVANT EXPERIENCES

Recently, Day Wireless completed similar projects for Grant and Harney counties in Oregon covering Sheriff, EMS, and multiple Fire Departments, both city and rural.

The following services were provided for Grant County:

- Codan VHF Repeaters and RF infrastructure
- Connectivity from Dispatch to MW Sites
- Infrastructure and Combining Equipment
- Avtec Consoles
- Subscribers
- APX Mobiles and Portables
- 25-foot Tower Construction

The following services were provided for Harney County:

- Codan VHF Repeaters and RF infrastructure
- Optional P25 Upgrade for Fire
- Infrastructure and Combining Equipment
- Subscribers

REFERENCES

We invite Wahkiakum County to reach out to our references listed below for additional information and their experience partnering with Day Wireless Systems.

Grant County Sheriff's Office	
Contact	Sheriff Todd McKinley
Phone	(541) 575-1131
Email	mckinleyt@grantcounty-or.gov
Harney County Sheriff's Office	
Contact	Sheriff Dan Jenkins
Phone	(541) 573-6153
Email	summers@co.skamania.wa.us
Columbia 911 Communications District	
Address	PO Box 998 St. Helens, OR 97051
Contact	Mike Fletcher
Phone	(503) 366-6971
Email	mfletcher@columbia911.com
Cowlitz 911 Public Authority	
Address	312 1st Avenue Kelso, WA 98626
Contact	Deanna Wells
Phone	(360) 431-4712
Email	wellsd@cowlitz911.org
Skamania County Sheriff	
Address	200 Vancouver Avenue Stevenson, WA 98648
Contact	Sheriff Summer Scheyer
Phone	(509) 427-9490
Email	summers@co.skamania.wa.us

BUDGET

SEGMENT ONE

Description	Quote
Equipment & Shipping	$120,889.64
Professional Services	$155,424.50
Maintenance Plan	$124,480.00
Subtotal	**$400,794.14**
Estimated Tax (7.8%)	$31,261.94
TOTAL	**$432,056.09**

SEGMENT TWO

Description	Quote
Equipment & Shipping	$790,075.31
Professional Services	$385,969.45
Maintenance Plan	$1,432,350.44
Subtotal	**$2,608,395.20**
Estimated Tax (7.8%)	$203,454.83
TOTAL	**$2,811,850.03**

SEGMENT THREE

Description	Quote
Equipment & Shipping	$177,168.08
Professional Services	$41,082.62
Maintenance Plan	$215,599.60
Subtotal	$433,850.30
Estimated Tax (7.8%)	$33,840.32
TOTAL	$467,690.62

SEGMENT FOUR

Description	Quote
Equipment & Shipping	$764,329.83
Professional Services	$80,616.57
Subtotal	$844,946.40
Estimated Tax (7.8%)	$65,905.82
TOTAL	$910,852.22

OPTIONAL ADDITION OF FIFTH REPEATED CHANNEL PAIR

Description	Quote
Equipment & Shipping	$149,799.52
Professional Services	$16,463.11
Subtotal	$166,262.63
Estimated Tax (7.8%)	$12,968.49
TOTAL	$179,231.12

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OTHER

Description	Quote
After Hours Call Out Rate	$255.00/ hour

Please note that the pricing listed above includes estimated taxes. Final tax rates, if any, will be calculated at time of purchase.

TERMS AND CONDITIONS

Unless otherwise negotiated, the following shall apply: Payment terms shall be Net 30. We accept check or funds transfer. Payments made by card will be charged a fee of up to 3.5% of the transaction total. Payments will be for services as performed with monthly progress billing beginning with the receipt of ordered equipment by DWS.

Work will begin upon receipt of a countersigned agreement referencing this document with its Statement of Work and Financial Detail. Any additional expenses will be reviewed with the customer prior to being incurred.

This quote will expire 90 days from the proposal date. The customer shall notify DWS of any concerns in writing within 10 business days of project completion.

SCHEDULE

Final schedule will be prepared by the respective project managers upon award and final design. Some scheduling elements are not in control of Day Wireless, including but not limited to: facility access, FCC license, site or facility permits, equipment delivery, and bad weather.

ACCEPTANCE TEST PLAN (ATP)

A formal Acceptance Test Plan will be completed upon award. A checklist of items to test will be prepared and a representative from the customer and Day Wireless will conduct the test together. Upon completion of the ATP, the system will be considered accepted, and a project completion certificate will be signed.

Acceptance test Methodology for Wahkiakum County RFP 2024

Our approach to Acceptance in this extremely tight Proposal (and Buildout) Deadline is to acknowledge that throughout the Staging and Deployment of this System there will be a significant amount of Baseline testing and alignment that will be documented. A significant portion of these measurements and tests would be unaffected post deployment I.E. RX sensitivity/TX Power Etc.

Our intention would be to field verify performance in a mutually agreed upon fashion.

We do also note the RFP requirement for ½ mile grid testing throughout the County, this is a virtually impossible task firstly due to the County terrain, and secondly because of the overly burdensome and costly nature, we must except this requirement.

We would prefer however post award to discuss and formulate a version of Baseline Coverage testing to verify acceptable RF System operation.

Acceptance test Proposed for Wahkiakum County RFP 2024

1. Console Site Subsystem
   a. Demonstrate successful call making ability on all Console Radio Resources
      i. Including Primary Simulcast Channels and All Base Radios
   b. Perform Console Patch and Multiselect of Radio Resources
      i. Verify Capability
   c. Demonstrate effective acoustic Cross Muting between Console positions
      i. Multiselect resources and attempt a Feedback loop
   d. Verify Logging functionality
      i. Confirm IP Capture and Playback through Equature interface
   e. perform Console System switchover to Site Controller 2 (if equipped)
      i. confirm effective transition, operation, and recovery

2. Simulcast Radio System
   a. Confirm All Sites operational through Codan Controller interface
   b. Confirm no Alarms present
   c. Verify Simulcast overlaps between Sites has been Optimized
   d. Verify All Sites in Phase and Timing/Frequency/Level Aligned
   e. Coverage verification tests

3. Microwave transport and IP networking
   a. Demonstrate Transport stability and resiliency on a per Site Basis
      i. Perform physical failover testing of each side of the Layer 2 Network
      ii. Confirm Site stability via Ping and bandwidth tests utilizing industry standards
      iii. Verify radio system operation at each Site in single transport Redundant mode
   b. Demonstrate via built in Manufacturer performance metrics and Status
      i. No Major Alarms
      ii. Performance to Engineered RSL Values +/- 4dB per Cambium installation report
      iii. Firmware confirmed via GUI to be at current Rev.
      iv. Bandwidth and Modulation (MRMC) at Specified rate

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TIMELINE

Please see below for Day Wireless expected timeline for completion of this project.

It should be noted that while DWS will make every effort to meet the schedule listed below, portions of this scope of work depend on third-party equipment and services that are not subject to Day Wireless' scheduling plan.

Task Name	Duration	Start	Finish
Wahikiakum Co. System Upgrade	**175 days**	**Mon 2/26/24**	**Wed 10/30/24**
Contracting	1 wk	Mon 2/26/24	Fri 3/1/24
Complete necessary Site Visits	2 wks	Mon 2/26/24	Fri 3/8/24
FCC Licensing	6 mons	Mon 2/26/24	Tue 8/13/24
SEGMENT 1: PTP System	**105 days**	**Mon 3/4/24**	**Tue 7/30/24**
Equipment Order: PTP	12 wks	Mon 3/4/24	Fri 5/24/24
Inventory and Stage PTP Equipment	1 wk	Tue 5/28/24	Mon 6/3/24
Cathlamel PTP Install	2 wks	Tue 5/28/24	Mon 6/10/24
Radar Ridge PTP Installs	3 wks	Tue 6/11/24	Mon 7/1/24
Wickiup PTP Installs	3 wks	Tue 6/11/24	Mon 7/1/24
Clatskanie PTP Installs	3 wks	Tue 7/2/24	Tue 7/23/24
KM PTP Installs	3 wks	Tue 7/2/24	Tue 7/23/24
Cutover and ATP	1 wk	Wed 7/24/24	Tue 7/30/24
SEGMENT 2: Five Site Simulcast System	**170 days**	**Mon 3/4/24**	**Wed 10/30/24**
Equipment Order: 5 Site System	12 wks	Mon 3/4/24	Fri 5/24/24
Inventory and Stage: 5 Site System	5 days	Wed 8/14/24	Tue 8/20/24
Cathlamet Simulcast System	9 days	Wed 8/21/24	Tue 9/3/24
Radar Ridge Simulcast System	9 days	Wed 9/4/24	Mon 9/16/24
Wickiup Simulcast System	9 days	Tue 9/17/24	Fri 9/27/24
Clatskanie Simulcast System	9 days	Mon 9/30/24	Thu 10/10/24
KM Simulcast System	9 days	Fri 10/11/24	Wed 10/23/24
Cutover and ATP	1 wk	Thu 10/24/24	Wed 10/30/24
SEGMENT 3: Dispatch Consoles	**121 days**	**Mon 3/4/24**	**Wed 8/21/24**
Equipment Order: Consoles	8 wks	Mon 3/4/24	Fri 4/26/24
Inventory and Stage Consoles	1 day	Wed 7/31/24	Wed 7/31/24
Console Implementation	2 wks	Thu 8/1/24	Wed 8/14/24
Cutover and Training on Consoles	1 wk	Thu 8/15/24	Wed 8/21/24
SEGMENT 4: Subscribers	**125 days**	**Mon 3/4/24**	**Tue 8/27/24**
Equipment Order: Subscribers	8 wks	Mon 3/4/24	Fri 4/26/24
Base Station Installs	2 wks	Mon 4/29/24	Fri 5/10/24
Mobile Radio Installation	2 wks	Mon 4/29/24	Fri 5/10/24
Program Radios	1 wk	Wed 8/21/24	Tue 8/27/24

EXCEPTIONS

Day Wireless Systems will not be responsible for the following items:

- Cost of diagnosing problems with existing equipment

- Cost of diagnosing problems with existing antenna systems

- Cost of diagnosing problems with existing connectivity

- Cost of diagnosing or eliminating interference. Note that unlicensed frequencies interference is fairly common and performance can't be predicted/guaranteed. Licensed paths interference is extremely rare and means someone is operating illegally since licensed paths are coordinated by FCC.

- Our proposal assumes sufficient cable management system is in place to support proposed microwave system cabling from inside the shelter to the tower (cable trays, ladders, entry ports, etc.) If required, any unforeseen additions or modifications may be billed as a change order.

- Permits or inspections

- Structural upgrades or grounding upgrades

- Any electrical work

- Any necessary roof/facility penetrations

- Fiber Connection from Wahkiakum County PSAP to KM Mountain is to be completed by others

- Fiber Connection from Wahkiakum County PSAP to Cathlamet Monopole School Repeater is to be completed by others

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APPENDIX A

Cambium Networks
3800 Golf Road, Suite 360
Rolling Meadows, IL 60008

Jan 27th, 2022

To Whom It May Concern:

The purpose of this letter is to provide information regarding MTBF of PTP 8xx Radios. PTP 8xx was released to market since 2015. Based on the RMA and engineering build, these are the MTBF for PTP 8xx products.

Products	MTBF
PTP 820S	Over 20 years
PTP 820C	Over 20 years
PTP 820C HP	Over 20 years
PTP 820E	Over 20 years
PTP 820G	Over 20 years
PTP 820F	Over 20 years
RFU-C	Over 20 years
RFU-D	Over 20 years
RFU-E	Over 20 years
PTP 850C	Over 20 years
PTP 850E	Over 20 years
PTP 850S	Over 20 years

Regards,

Sagar Deshpande
Product Manager for PTP 8xx
Cambium Networks

ZETRON

Summarize Zetron product discontinuation policy

Discontinuation Policy

- *Available versions*: All hardware and software version information will be provided as part of the site inventory documentation at the time of project implementation.
- *End of Sale Date:* At the time of writing this document, there are no plans to discontinue the MT-4E product in the foreseeable future.
- *End of Software Development Date*: At the time of writing this document, there are no plans to discontinue the development of software in support of the MT-4E product line in the foreseeable future.
- *End of Support Date*: As per Zetron policy, products are guaranteed to be supported seven (7) years after product discontinuation; as mentioned above, there are currently no plans for discontinuation of the MT-4E product line.

Reasons for Discontinuation

A product may be discontinued at Zetron's discretion at any time, for any of the following reasons:

- Planned phase-out due to new replacement product.
- Uncompetitive product.
- Noncompliance with new standards.
- Obsolete components.
- Development objectives change / emphasis on new product.
- Manufacturing issues.
- Etc.

Announcement of Discontinuation

- The discontinuation announcement will be sent directly to the designated system managers, and will have two components:
- 1. Initial Notice (Last Time Buy). Written announcement that the product is being discontinued and there is a limited quantity and a limited time to buy these products (3-12 months or until stock lasts). The reasons for the discontinuation will be provided.
- 2. Second Notice (Support End). Sometime after the completion of the last-time buy period, a second notice is given announcing that service and support for the product is being discontinued. This includes repair and spare parts. This will be a seven (7) year period after the initial notice.

Customer Last-Time Buy

• Upon announcement of the product's discontinuation and if product is available, customers are given a final opportunity to buy the product. This last-time enables customers to complete their network, order spares and any other equipment they anticipate requiring.

Cambium Care

Best-in-class 24 x 7 hardware and software support to keep your network running smoothly and efficiently.

QUICK LOOK:

Cambium Care is Cambium's brand of technical support, software support, and hardware support services. Cambium Care consists of three technical- and hardware-support offerings: Cambium Care Pro, Cambium Care Advanced, and Cambium Care Prime. In addition, two standalone hardware support programs are also offered: Extended Warranty and All Risks Advance Replacement. These offerings provide flexible options to fit a customer's business operations and internal technical expertise.
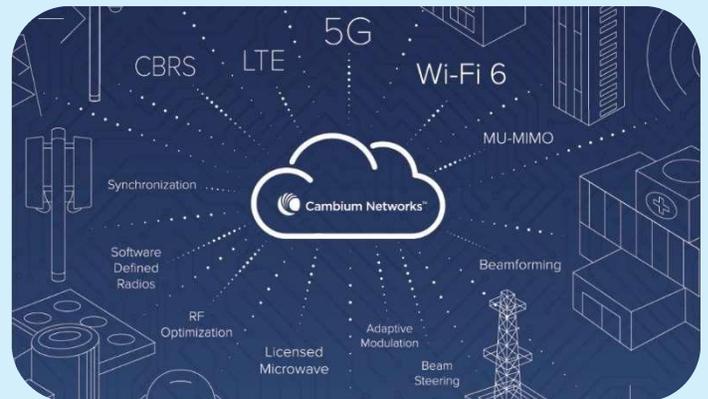
Key Highlights

Hardware Support

Cambium provides industry-leading standard warranty coverage across its product lines. It offers extended warranty for selected product families to lengthen warranty coverage. We offer All Risks Advance Replacement for many products for rapid advance replacement for most types of hardware failure, even weather damage.

Software Support

The Support Team is tightly integrated with the Cambium product teams to ensure rapid diagnosis and repair of software issues. The product teams produce frequent delivery of software updates with new functionality and the latest fixes to extend the life of your investment in Cambium products.

Technical Support

We provide 24 x 7 availability of skilled Support Engineers. The Support Team is certified in all of the products they support and receive up-to-date training from the product teams to keep them current. They are skilled in wireless networking concepts and are familiar with many third-party networking products.

- ❖ **Global Team** – Located in five contents. The Level 3 Support Team is co-located with Cambium developers and testers for rapid collaboration when diagnosing and fixing issues.

- ❖ **Product Specialization** – Separate Support Teams focus on Enterprise and Fixed Wireless Broadband products and their respective deployment scenarios. This allows the teams to be more focused not only on specific products but also on how they are used in customer networks in the real world.

- ❖ **Certification** – All Support Engineers are certified in the products they support and achieve CCNA and CWNA certification.

- ❖ **Complete Labs** – Located at the Technical Assistance Center (TAC) and core support sites. Allows for rapid problem replication and for staff training.

- ❖ **Forward Stocking Locations** – Located worldwide for rapid delivery of advance replacements.

Enterprise and 60 GHz cnWave

Cambium Care Advanced

- 24 x 7 support for basic and complex technical questions
- All software updates included
- Assistance with hardware diagnosis
- Accelerated access to Level 2 and Level 3 engineers
- Next business day shipment hardware replacement

Available for Enterprise Wi-Fi, cnMatrix Switches, and 60 GHz cnWave only

Cambium Care Pro

- 24 x 7 support for basic and complex technical questions
- All software updates included
- Assistance with hardware diagnosis
- Accelerated access to Level 2 and Level 3 engineers
- Warranty hardware support

Fixed Wireless Broadband

Cambium Care Prime

- SLA-bound 24 x 7 support for basic and complex technical questions
- All software updates included
- Direct escalation to Level 2 and Level 3 engineers
- All Risks Advance Replacement for infrastructure hardware with next business day shipment[1]
- Chat support

Quarterly reviews with reports, optimization guidance, and ongoing software advisory available with $10,000 USD annual spend

Dedicated Level 2 engineers and Service Account Manager available with $20,000 USD annual spend

[1]Available for Fixed Wireless Broadband products only (PMP, PTP, cnRanger, cnReach, and cnVision; not available for ePMP)

Cambium Care Pricing Models

Cambium Care pricing and part number formation is different for Enterprise/60 GHz cnWave and Fixed Wireless Broadband.

CAMBIUM CARE FOR ENTERPRISE AND 60 GHz CNWAVE These products are supported by Cambium Care Pro and Cambium Care Advanced. Pricing is based on Device Model and Subscription Term (1-, 3-, and 5-year). Cambium Care Advanced Upgrade is available for cnMaestro X customers who use Wi-Fi 6 Access Points, cnPilot E-Series Wi-Fi Access Points and 60 GHz cnWave devices.

Example product number: CCPRO-SUP-E700-3 (Cambium Care Pro for cnPilot e700 for 3-year term)

CAMBIUM CARE FOR FIXED WIRELESS BROADBAND These products are supported by Cambium Care Pro and Cambium Care Prime. Coverage is available for one-year terms. Pricing is based on Service Category and Price Tier. Each Cambium Device Model is assigned to a Service Category according to the number and complexity of its software and hardware features. There are five Price Tiers per Service Category. The Price Tiers provide unit price reductions as the size of a network grows. See the *Cambium Services and Support BOM Configurator* for Device Model/Service Categories mappings and for the range of device quantities per Price Tier.

Example product number: CC-PRO40T1-WW (Cambium Care Pro for Service Category 50, Price Tier 1)

Mapping of Product Families and Pricing Model Factors to Available Cambium Care Offerings:

Product Family	Pro	Advanced	Prime	Pricing Model Factors
Wi-Fi 6	X	X		Device Model 1-, 3-, and 5-Year Term
cnPilot E-Series	X	X		
cnMatrix EX	X	X		
60 GHz cnWave	X	X		
PMP/PTP 450x	X		X	Service Category Price Tier 1-Year Term Only
cnRanger	X		X	
ePMP	X		X	
cnVision	X		X	
cnReach	X		X	
PTP 550/6XX/700	X		X	
PTP 820/850	X		X	

Configuring Cambium Care Support for Your Network

Cambium offers the **Services BOM Configurator** and the **Cambium Care Ordering Guide** (see the *Useful Links* section below) to assist customers and channel partners with selecting and configuring the best Cambium Care support plan to match the network device mix and the customer's own support skills and requirements for responsiveness. The configurator includes standalone Cambium Care options, Extended Warranty, and All Risks Advance Replacement as well as cnMaestro X and cnMaestro X upgrade to Cambium Care Advanced. The configurator includes MSRP pricing.

To learn about the specific details of each of the Cambium Care support plans, refer to the **Cambium Care Services Guide** (see the *Useful Links* section below).

Cambium Services BOM Configurator with Sample Device Quantities and Standalone Support Selections:

cnMaestro X and XMS Network Management Systems with Cambium Care

cnMaestro X is a simple yet sophisticated next-generation network management solution for Cambium Networks wireless and wired solutions. It has extensive management features not included with its no-fee counterpart, cnMaestro Essentials. *cnMaestro X also includes Cambium Care Pro* (cnMatrix Switches are excluded). *An upgrade to Cambium Care Advanced can be purchased for Enterprise Wi-Fi Access Points and 60 GHz cnHeat devices.* For more details, see "Managing Networks with cnMaestro X" referenced in the *Useful Links* section below.

XMS-Cloud is a powerful management solution for deploying and managing Cambium Networks Wi-Fi and cnMatrix Switching portfolios with complete control and visibility. *XMS-Cloud includes Cambium Care Advanced.* XMS-Enterprise is its on-premises version counterpart. *XMS-Enterprise customers are required to purchase Cambium Care Advanced.* For more details, see "XMS-Cloud Management" and "XMS-Enterprise On-Premises Management" referenced in the *Useful Links* section below.

cnMaestro X with Cambium Care Pro

XMS Cloud & XMS Enterprise with Cambium Care Advanced

Ordering and Activating Cambium Care and Hardware Support Services

End-customers may order Cambium Care and hardware support services from a Cambium ConnectedPartner or Distributor in the same way as any other Cambium product. Likewise, ConnectedPartners and Distributors follow the normal ordering processes using applicable discounts. The method of order fulfillment is done in one of the following ways:

- **Cambium Care Pro and Cambium Care Prime for Fixed Wireless Broadband** – You will be contacted by a representative from Cambium's Global Services team to confirm your order. If it is a new order you'll be asked for information required to set up your account and enter the details into Cambium's ticketing system. Cambium Care for Fixed Wireless Broadband is intended to cover your network and is purchased for all infrastructure devices in your network to ensure proper coverage. A minimum annual spend of $500 USD is required to be covered under Cambium Care Prime.

- **Cambium Care Pro and Cambium Care Advanced for Enterprises and 60 GHz cnWave** – Cambium delivers proof of coverage via an entitlement in an email sent to the Distributor. The Distributor will forward to the end-customer. The end-customer will activate the entitlement via Cambium's Support Center web portal. See the "Cambium Care Ordering Guide" in the *Useful Links* section below for details.

- **cnMaestro X, XMS, Extended Warranty, and All Risks Advance Replacement** – These orders are delivered as entitlements via email as described above.

What Happens if You Don't Purchase Cambium Care?

Cambium provides 8 x 5 access to the Cambium Technical Support Center (TAC) for customers who have not purchased Cambium Care. Assistance is provided on a best-effort basis for network issues and hardware issues. Depending on device model, software updates may be limited to bug fixes only. If your device has a hardware issue that cannot be resolved via configuration change, Cambium's warranty terms will apply if the device is still covered by warranty. If the issue is not covered by warranty, we are able to provide for-fee hardware repair for many Cambium devices. If your issue is an emergency, it will be addressed with urgency. Otherwise priority is given to tickets for customers who are covered by Cambium Care.

Extended Warranty

Cambium's standard warranty coverage is industry-leading. See the *Useful Links* section below for links to the warranty coverage details for each Product Family and for Cambium's Standard Warranty and Limited Lifetime Warranty terms. In most cases Cambium offers extended warranty for additional years of coverage.

All Risks Advance Replacement

All Risks Advance Replacement provides hardware and replacement for hardware defects covered by Standard Warranty and additionally covers other types of equipment damage, including:

- Lightning damage
- Weather damage
- Dropped unit
- Fire damage
- Vandalism

All Risks Advanced Replacement provides shipment of replacement product from Cambium Networks on the next business day after receipt of a confirmed Return Materials Authorization (RMA) from the Cambium Technical Assistance Center (TAC). Delivery time will depend upon ship-to location and any customs clearance time. Refer to the "Extended Warranty Product Mapping" link in the *Useful Links* section below for a list of products covered by Extended Warranty and All Risks Advance Replacement.

Opening a Ticket with Cambium Support

The Cambium Support Center is the entryway to a wide variety of post-sales resources for Cambium products and services. To open a Support ticket, log in and then click "Submit a request". Or click the "Contact" link to find a phone number to call open a ticket live with an agent. If it is a technical issue or question you will be asked for diagnostic information to assist the assigned technical support engineer with your request. The ticket will then be routed to the Technical Support team with expertise in the issue or question you have presented.

Hardware issues may require further troubleshooting to confirm that it is a hardware issue and not related to a software or configuration issue. An agent will confirm warranty status or enrollment in the applicable Cambium Care program before processing an RMA. In some situations where a hardware replacement is appropriate, you may be referred to the Distributor that originally shipped the device.
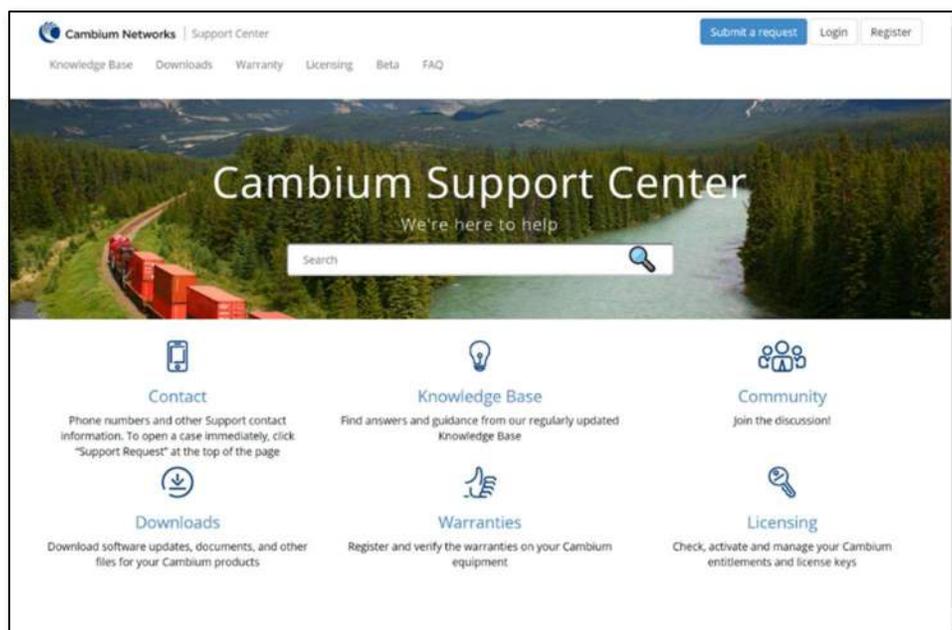
Useful Links

- Cambium Care Support on camiumnetworks.com: https://www.cambiumnetworks.com/support/cambium-care
- Cambium Support Center: https://support.cambiumnetworks.com
- Cambium Care Services Guide: https://www.cambiumnetworks.com/support/cambium-care
- Cambium Services BOM Configurator: https://www.cambiumnetworks.com/support/cambium-care
- Cambium Care Ordering Guide: https://www.cambiumnetworks.com/support/cambium-care
- Cambium Networks Standard Warranty (includes Limited Lifetime Warranty and other warranty-related topics): https://www.cambiumnetworks.com/support/standard-warranty
- Extended Warranty Product Mapping (includes All Risks Advance Replacement): https://www.cambiumnetworks.com/support/ew-product-mapping
- Managing Networks with cnMaestro X: https://www.cambiumnetworks.com/products/software/cnmaestro-x
- XMS-Cloud Management: https://www.cambiumnetworks.com/products/software/xms-cloud
- XMS-Enterprise On-Premises Management: https://www.cambiumnetworks.com/products/software/xms-enterprise
- Browse Cambium Networks' Courses & Learning Plans: https://learning.cambiumnetworks.com/learn

ABOUT CAMBIUM NETWORKS

Cambium Networks empowers millions of people with wireless connectivity worldwide. Its wireless portfolio is used by commercial and government network operators as well as broadband service providers to connect people, places and things. With a single network architecturespanning fixed wireless and Wi-Fi, Cambium Networks enables operators to achieve maximum performance with minimal spectrum. End-to-end cloud management transforms networks into dynamic environments that evolve to meet changing needs with minimal physical human intervention. Cambium Networks empowers a growing ecosystem of partners who design and deliver gigabit wireless solutions that just work.

cambiumnetworks.com

LMR REPEATER
CASCADE

CASCADE

CODAN

POWER   ALARM

CODAN
COMMUNICATIONS

BE HEARD

Hardware Performance

The Codan Cascade is engineered to deliver the same exceptional performance that ha[s] become synonymous with the Codan LMR name.

CODAN CASCADE
LMR BASE STATION/REPEATER PLATFORM

The Codan Cascade is our new software-defined Base Station/Repeater platform that has been engineered from the ground up with a focus on IP-networked radio solutions. This all-inclusive package features two variable-power 100W P25 repeaters mounted inside a 4RU subrack complete with network interface and power supply.

Key Features:

- Networked product ideal for conventional Voting and Simulcast applications. Designs for Linear Simulcast Modulation (LSM) for improving performance in Simulcast environments

- Hardware ready for future support of P25 Phase I and Phase II trunked radio

- Rack space efficient: 2x 100W only occupies 4RU

- Supports P25 Digital, analog narrowband and mixed operating modes

- Built-in IP-based remote configuration and remote site monitoring

- Built-in logging and alarming, with user-definable automated failure mitigation behaviors

- Built-in testing and calibration functionality

- Supports open standard P25 CAI and IP Protocols

- Meets or exceeds industry standard regulatory guidelines for performance in a Public Safety LMR system

OUR PROCESS

Solving challenging requirements is what we do best

ASSESS

Our specialists conduct a detailed assessment of:
- Existing infrastructure
- Operational environment
- Opportunities and challenges
- Stakeholder needs
- Budget and existing investments
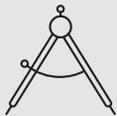
DESIGN

Our experts design a custom solution for those challenges, using the right technology from Codan or one of our partners.

DEPLOY

Wherever you are, our engineers get your system up and running quickly.

TRAIN

We train your operators and staff on the technology – to maximize easy-to-use systems and interfaces.

SUPPORT

Whether we're out in the field with you, or in our support center, we're always on hand for any assistance you require.

CONTACT US

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UAE: +971 44 53 7201

Equature

In a World Where Seconds Save Lives®
Equature Helps You In Real Time

> When danger is present, everyone runs away from it while first responders run towards it. These brave men and women deserve to have real-time assistance and interaction to help them perform better, stay safe and prevent public misinformation.

Interactive Response...

POLICING | FIRE/EMT | MILITARY | GOV'T PATROL | PRIVATE SECURITY

Increase First Responder & Citizen Safety & Satisfaction

Equature provides real-time technology platforms to police, first responders, government agency officers, military and private security organizations. Through our interactive response management systems, we increase operational success, reduce operating costs, improve safety and maximize citizen satisfaction for first responders. Our Equature suite of offerings integrates NG9-1-1 command and control dispatch recorder management platforms to real-time video and audio camera mobile devices to bring simultaneous visibility and communication to all emergency events as they happen.

Managing operational safety, citizen satisfaction and protecting your investments' return are key success drivers that we focus on to help you and your organization maximize its first responder command and control dispatch recording platform success. Due to the NG9-1-1 Public Safety Answering Points (PSAPs) technology requirement changes driven by FirstNet and first responder body worn video department evolving polices, emergency response centers need flexible technology and business partners who work with them in tandem to help them manage the transition.

As the largest U.S. based privately-held dispatch recorder manufacturer and a national leader in interactive response systems, Equature works with **NASA, NSA, U.S. Border Patrol, Homeland Security** and over 1,500 PSAPs.

Increase Command & Control Response With Real-Time Interaction

Safety team member's ability to quickly and correctly respond to developing emergency events as they happen requires instantaneous communication between responders in the field, supporting geography-based peers and command and control leadership. Equature's Interactive modules transmits body worn cameras and devices into real-time audio and video display into command and control dispatch recorder systems and operational management. Our real-time emergency response platform creates an interactive system that helps maximize command leadership direction, improve crisis issue clarity, enhance first responder communication and safety, , capture incident and witness testimony instantly, reduce first responder paperwork, identify better asset resource assignment and improves citizen support and response.

Equature's real-time interactive modules are designed for command and control leadership organizations seeking to build an agile tactical team connected to an agile leadership team that works iteratively in real time in tandem and as emergency events occur.

Command & Control
DISPATCH MANAGEMENT

Equature Search Suite

Drive intelligent decisions with Equature Performance Suite. All captured content is searchable including words and phrases in your voice recordings. Equature Content Search is a searching framework that allows you to search 100% of your captured content.

Content Search

Equature provides full 100% content search on all textual data in the repository. Words and phrases can be searched and found in your voice recordings as well. For example, searches for "Shots Fired & Detroit"...

- Will display phone calls and video content where Shots Fired & Detroit were said
- Will highlight in real time text and MSRP messages when Shots Fired & Detroit are found and will match any text in the system.
- Will display phone calls with Detroit phone numbers and exchanges

Live Search

Equature is a real-time intelligent portal. Live Search allows users to have instant access to the data they need, when they need it. Through our system, criteria that is important to you based on your investigative needs is available for you on our dashboard.

Proactive Search

Equature's proactive search capabilities is an operating function that allows authorized users to be notified when relevant interactions meet their information criteria. Like Google Alerts, users can set up multiple alerts and search criteria investigations ahead of time to help them receive specific information when it becomes created.

Equature Management Suite
Capture | Analyze | Act

Quality Assessment Module

Equature's Quality Assurance module increases team member engagement with functional quality assessments and performance scorecards. Our Q/A offering is a command and control management success tool that allows you to evaluate all recorded interactions throughout your organization and intuitively increase operational efficiencies. The module is totally customizable to fit your individualized operational needs by enabling you to create unlimited questions, management metrics and grading forms. Citizen safety driven organizations need the ability to monitor team member performance and trending skill-sets over time to help organizations boost staff capabilities. With Equature, public safety organizations can achieve this objective.

Real-Time Interactive Access

Equature is a real-time, interactive public safety management application. All transmissions and operating data from multiple sources of media including live audio, live video and RSS are all available instantly in your command and control dispatch recorder platform. Data that needs to be shared with all team members including the dispatch center, facility management, mobile leadership and in the field first responders can be shared and reviewed as needed.

Learning on Demand

Equature's Learning on Demand program provides critical operational training management content for dispatchers to improve their performance. Our on-demand learning program is available 24x7x365. Our curriculum is segregated into 20-minute video educational segments that are focused on teaching through examples. Research shows this format improves team learning retention by over 70% of traditional learning methods. Our courses include a broad range of command and control dispatch management subjects including:

- Active Shooter
- Critical Incident
- Total Disaster Response
- Liability in the Communication Center
- Critical Incident Stress

...and many more.

NG9-1-1
DISPATCH RECORDER MANAGEMENT PLATFORM

Mandate Ready Command & Control

Equature's NG9-1-1 recorder platform is designed for PSAPs, Command and Control Centers, law enforcement and government agencies, and private security groups.

Designed as a fully integrated solution that doesn't require third-party add-on applications, Equature Dispatch Recorder Management system helps first responder leadership collect, analyze and act upon real-time mission critical information as it happens.

Using an integrated application process, Equature's Dispatch Recorder Management Suite includes:

TDM

Traditional telephony interfaces include Analog, Digital & T1/E1. All major 911, radio and phone systems are supported. Triggering includes VOX, Contact Closure, Voltage, Light/Button Events and API.

VoIP

Voice Over IP interfaces include VOX RTP, Active SIP, SipRec (NG9-1-1), Passive SIP, SCCP and H323. These protocols support all major vendors including Cisco, Avaya, Siemens, Mitel, Asterisks and Shortel.

RoIP

Radio Over IP interfaces include Project 25 Inter RF Subsystem Interface (P25 ISSI), Motorola MCC7500 Astro P25 AIS interface and SIP based radio capture. These protocols support all major vendors including Motorola, Airbus, Harris, Zetron, EF Johnson and Avtec.

Video

Video Camera Capture is supported from IP-based cameras and Analog cameras. The supported protocols are MJPEG and RTSP. These captures support flexible frame rate and triggering options to optimize your video capture environment. Axis cameras are supported for both audio and video.

Screen

Screen capture is a management training and education tool. This capture module allows leadership to record computer screens of your agents and dispatchers and play them back with calls. The screen capture module supports multiple computer monitors and can be configured with flexible frame rates based on your operational needs.

SMS/MMS

This interface is supported for NG9-1-1 applications. RTT (Real-Time Text) and MSRP is supported. This allows users to record and playback in real time the full text conversations.

Email

Email recording supports Microsoft Exchange capture. Equature de-duplicates the emails and provides single instance storage. All emails are full text searchable along with the attachments.

Mobile

Our patent pending mobile recording interface is state of the art. Smart device capture allows for call recording, video recording, text recording with instant upload to Equature Server. This module is unique to Equature and will revolutionize the recording industry.

In a World Where Seconds Save Lives®
Equature Helps You In Real Time

About Equature

Equature is an international technology leader in helping public safety organizations increase operational efficiencies, accelerate first responder communication and improve citizen satisfaction and security.

Equature offers an integrated technology platform that links Next Generation 911 (NG9-1-1) Command and Control Dispatch Recorder systems in real time to mobile video and audio cameras worn in the field by first responders. When deployed, our Interactive Policing system creates a multi-sensory information communications solution that allows law enforcement and their command and control team to work together holistically in tandem as events are developing in real time.

Since 1969, Equature has worked with thousands of Public-Safety Access Point (PSAP) and law enforcement locations as well as state and federal government agencies like NASA and the Customs and Border Patrol to help improve their security responses and operational intelligence. Additionally, Equature works with province and governmental operations in Japan, Canada, Italy and Mexico helping them accelerate security responses and emergency preparedness.

ENHANCE YOUR LMR SYSTEM WITH CODANCARE

Ideal for customers who prefer to rely on personalized attention and service providing peace of mind and reliable operations.

CodanCare Operations Support Center

CODANCARE CUSTOMERS RECEIVE

- 8AM to 8PM EST Monday through Friday Live Helpdesk & Phone Support
- Prioritized troubleshooting with free expedited roundtrip shipping
- Phone-based setup and configuration assistance
- Advanced replacements in event of failure
- Complimentary upgrades to new software features
- Version management tracking your configurations and releases
- Alerts to available Codan software patches and maintenance updates
- Troubleshooting of 3rd-party technology purchased as part of a Codan solution
- A factory training session with a three+ year contract
- Discounts on system design and on-site services
- Additional savings on future CodanCare contracts and system upgrades

ADDITIONAL OPTIONS

- 24/7 support
- Onsite Troubleshooting and Preventive Maintenance
- Security patching where Information Assurance compliance is a requirement

CODANCARE EXTENDED SERVICE

CODAN COMMUNICATIONS

	Basic Warranty	CodanCare
Helpdesk Support	While under warranty	Dedicated 8am to 8pm EST
Codan Repair for Manufacturing Defect	Up to 3 year	Included
Priority Troubleshooting	No	Yes
Phone-based Setup and Configuration Assistance	No	Yes
Advanced RMA	No	Yes
Free Round-trip RMA Shipping	No	Yes
Complimentary upgrades to future software features	No	Yes
Version Management of Your Configurations	No	Yes
Alerts to Updates	No	Yes
Troubleshooting of 3rd-party Technology	No	Yes
Factory Training with 3+ Year Contract	No	Yes
Discounts on System Design and On-site Services	No	Yes
Savings on Future CodanCare Contracts	No	Yes
Additional Savings on System Upgrades	No	Yes
CodanCare Add-Ons		
On-site Preventive Maintenance	NA	Optional
On-site Troubleshooting	NA	Optional
24/7 Helpdesk	NA	Optional
Information Assurance	NA	Optional

CONNECT

CODANCOMMS.COM/LMR

LMRSALES@CODANCOMMS.COM

(250) 382-8268

Coverage Prediction

Legend

- 97% Area outbound   Portable
- 97% Area inbound   Portable

Tiles © ArcGIS
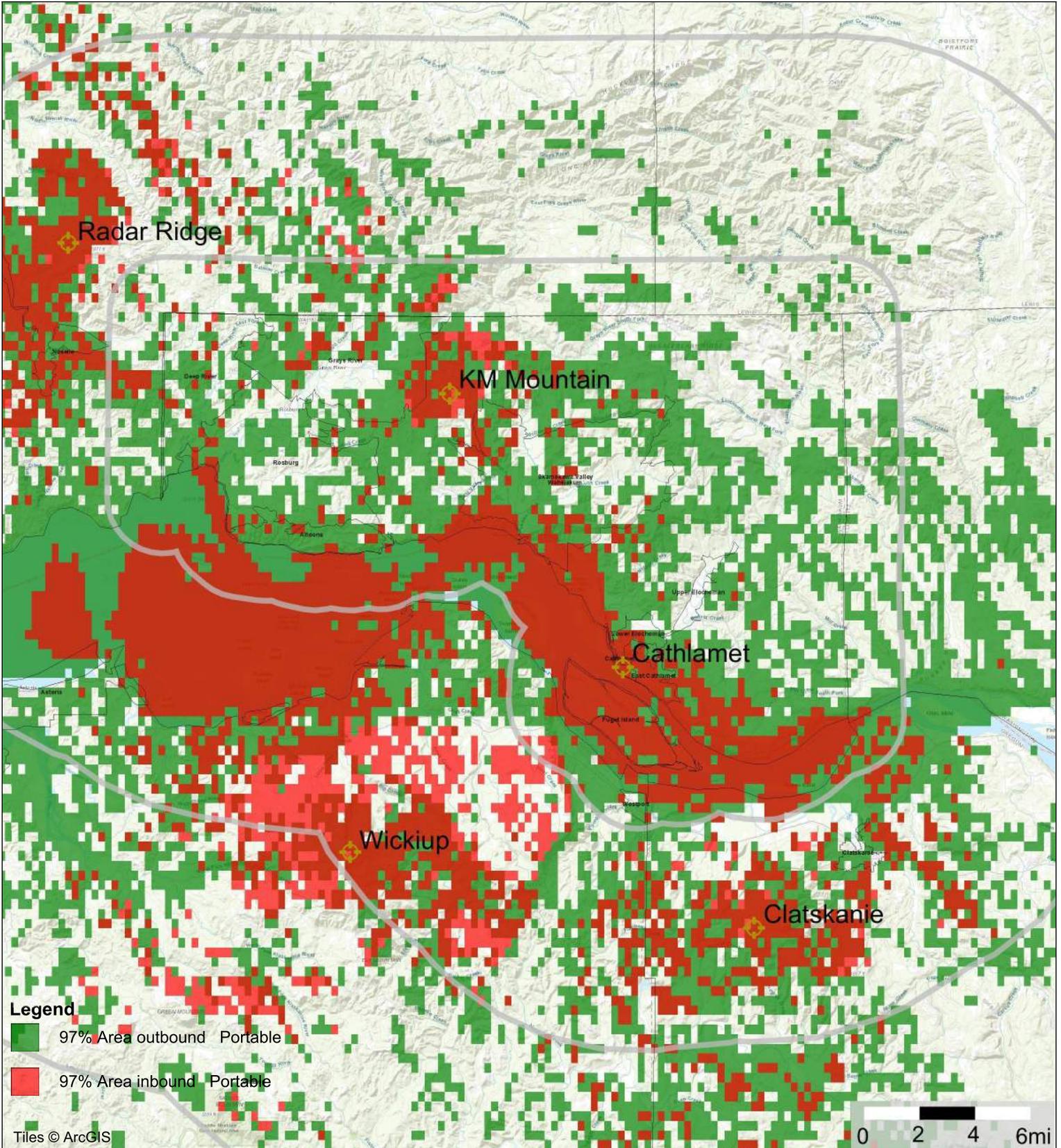
Printed: 2/16/2024
System version: 3.1.2.1

Portable In-building
Belt Clip w/ Speaker Mic

Solution: Wahkiakum County
Project: Simulcast
Design: Design 7 Portables In Out Bldg Loss
rtay@daywireless.com

This map in intended solely for the equipment configuration stated above.
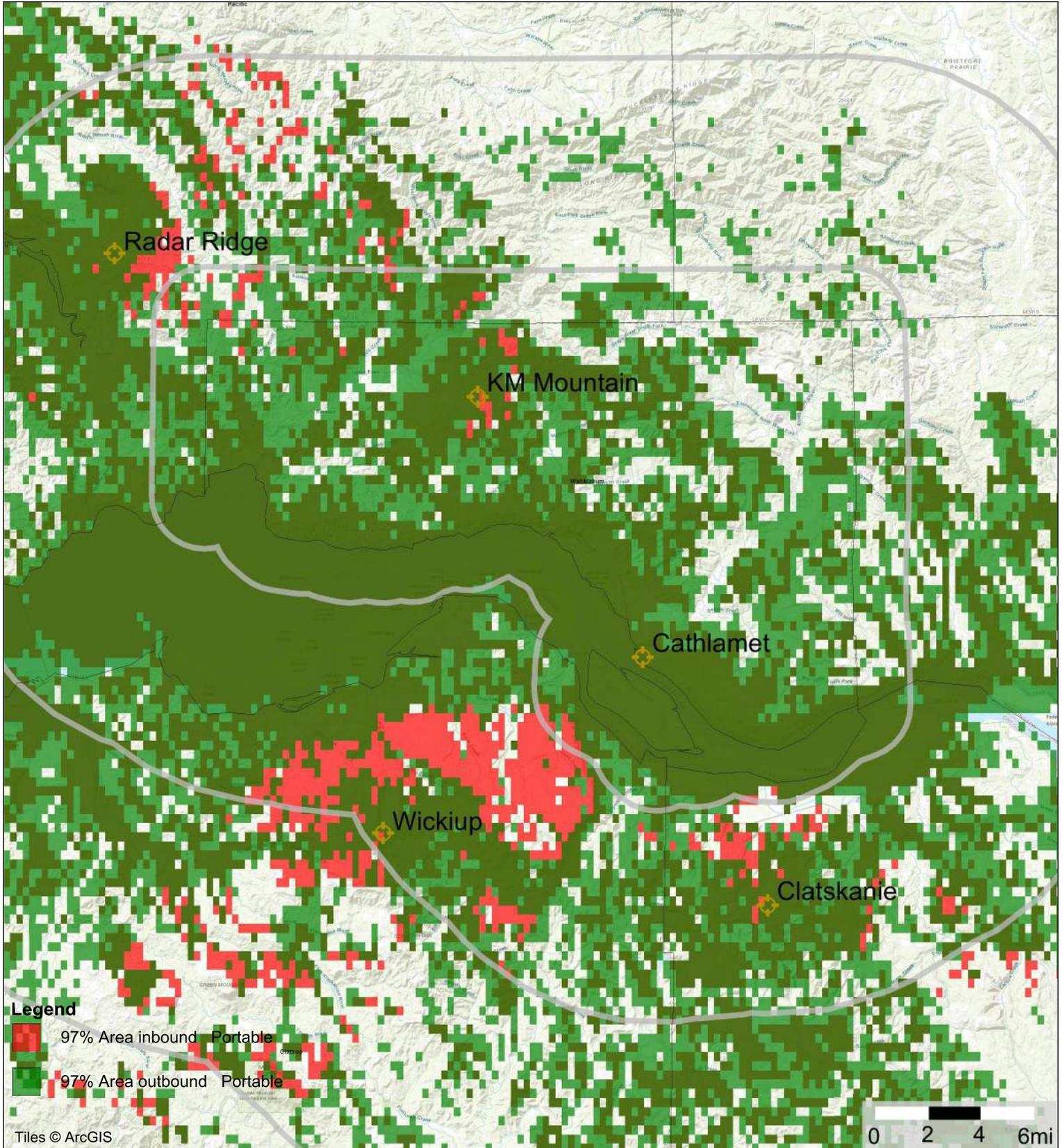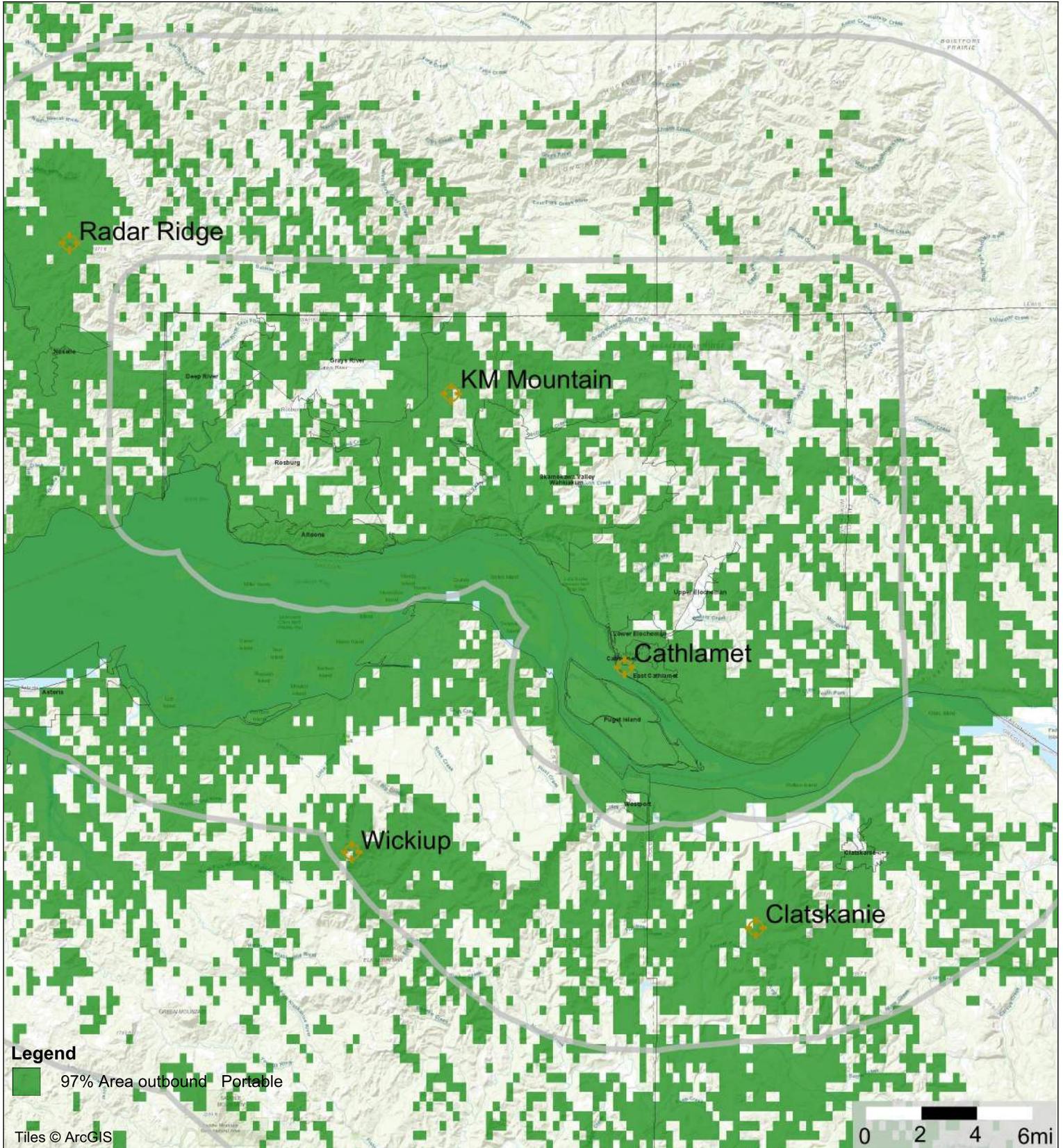Coverage can vary significantly if different configurations are used.

Wahkiakum County

Coverage Prediction

MOTOROLA
SOLUTIONS

Radar Ridge

KM Mountain

Cathlamet

Wickiup

Clatskanie

Legend

97% Area inbound   Portable

97% Area outbound   Portable

Tiles © ArcGIS

0   2   4   6mi

Printed: 2/16/2024
System version: 3.1.2.1

Portable Outdoor
Belt Clip w/ Speaker Mic

Solution: Wahkiakum County
Project: Simulcast
Design: Design 11 Portables In Out 97
rtay@daywireless.com

This map in intended solely for the equipment configuration stated above.
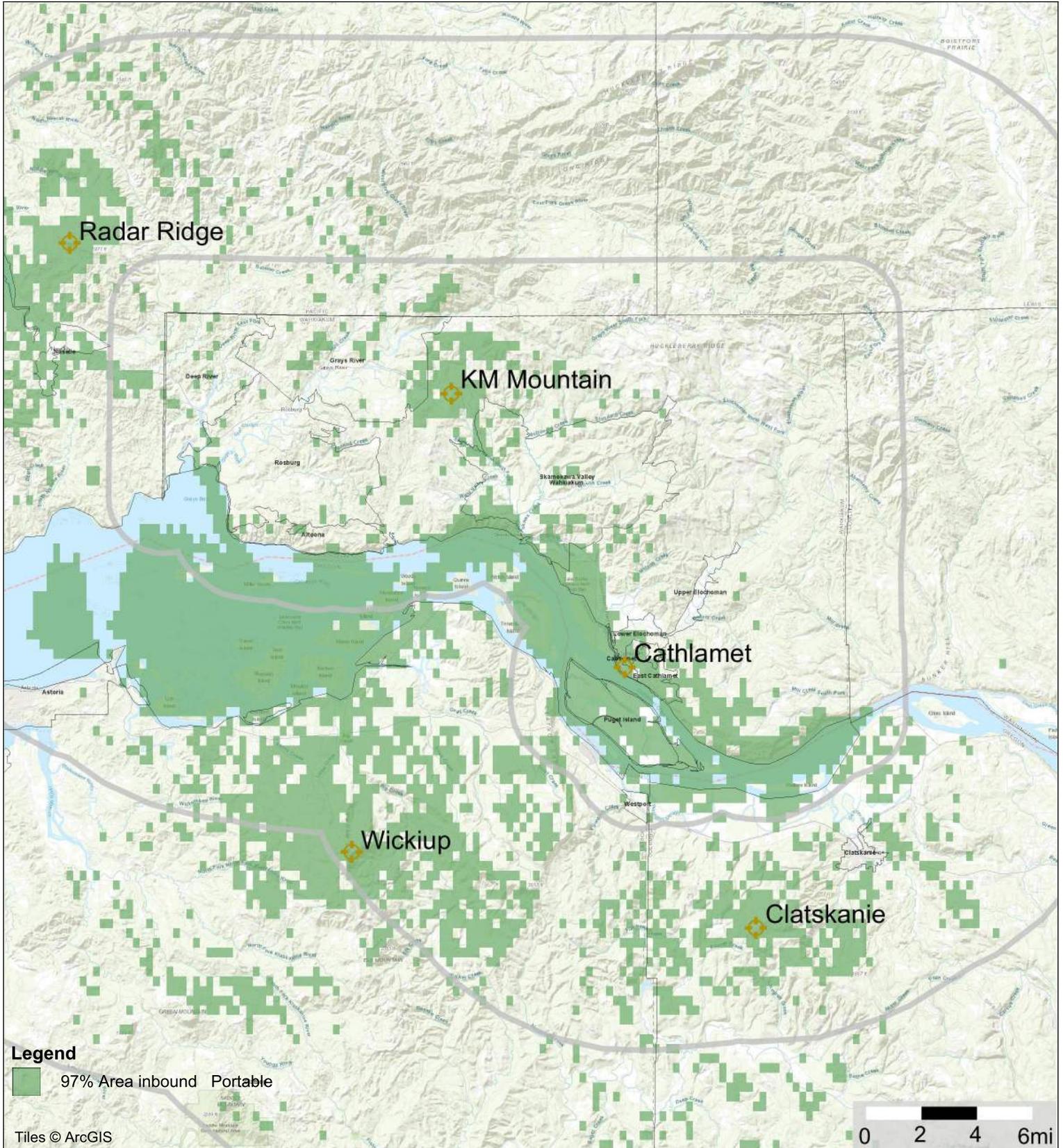Coverage can vary significantly if different configurations are used.

MOTOROLA
SOLUTIONS

Radar Ridge

KM Mountain

Cathlamet

Wickiup

Clatskanie

Legend

97% Area outbound Portable

Tiles © ArcGIS

0   2   4   6mi

Printed: 2/16/2024
System version: 3.1.2.1

Portable Outbound In-building

Solution: Wahkiakum County
Project: Simulcast
Design: Design 7 Portables In Out Bldg Loss
rtay@daywireless.com

This map in intended solely for the equipment configuration stated above.
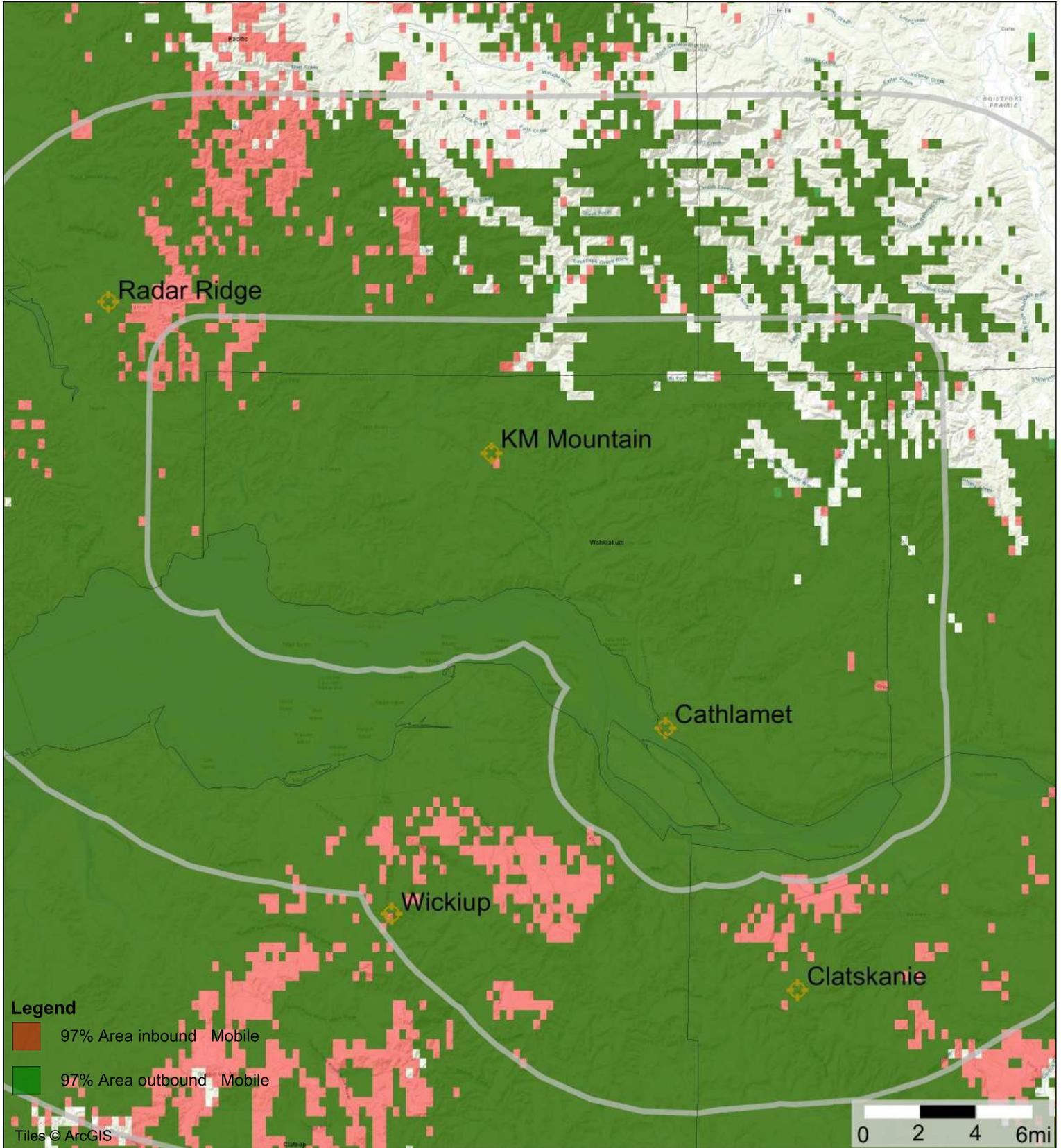Coverage can vary significantly if different configurations are used.

Wahkiakum County

Coverage Prediction

Radar Ridge

KM Mountain

Cathlamet

Wickiup

Clatskanie

Legend

97% Area inbound   Portable

Tiles © ArcGIS

0   2   4   6mi

Portable Inbound In-building

Solution: Wahkiakum County
Project: Simulcast
Design: Design 7 Portables In Out Bldg Loss
rtay@daywireless.com

This map in intended solely for the equipment configuration stated above.
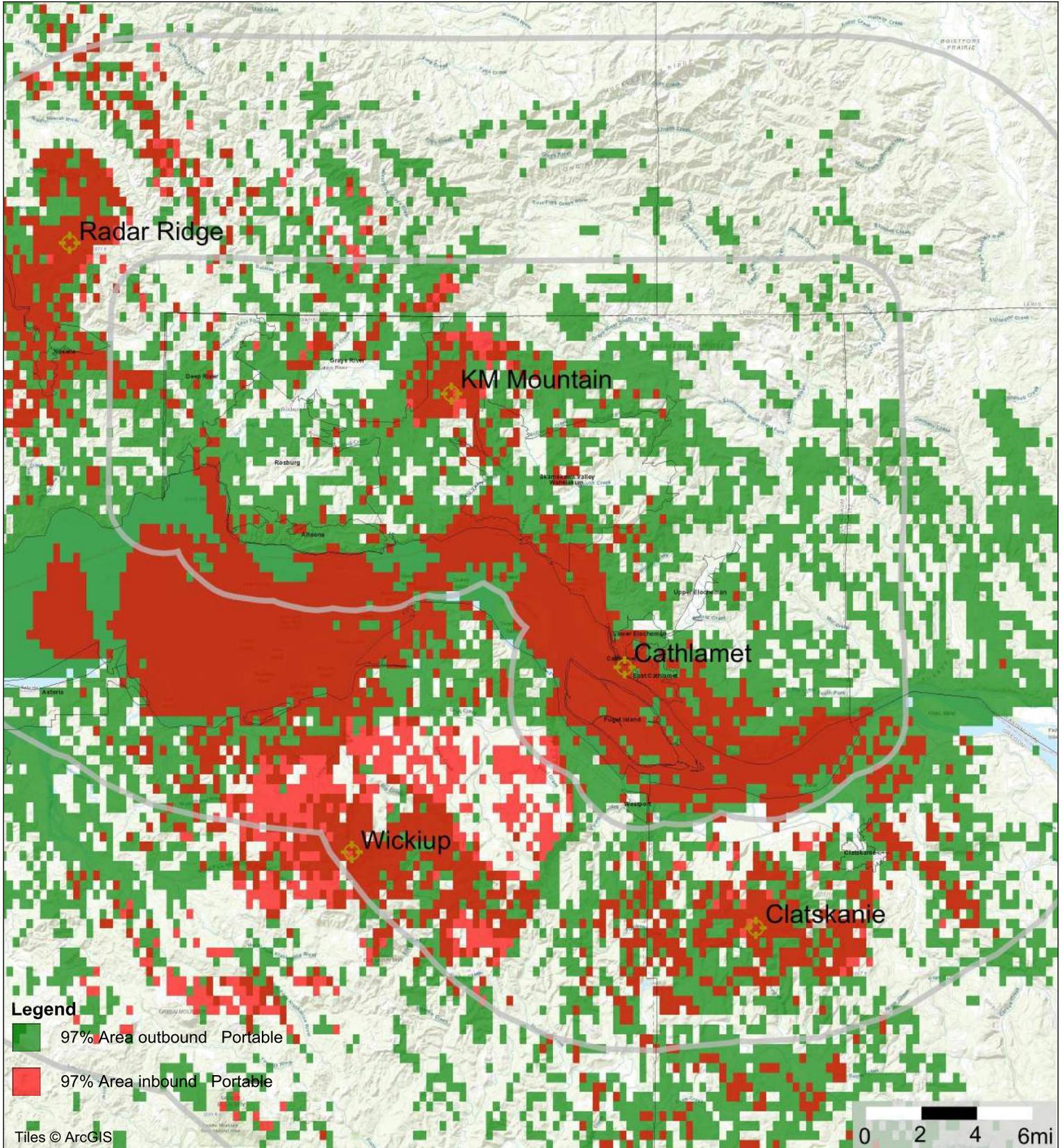Coverage can vary significantly if different configurations are used.

Wahkiakum County

MOTOROLA
SOLUTIONS

Coverage Prediction

Radar Ridge

KM Mountain

Cathlamet

Wickiup

Clatskanie

Legend

97% Area inbound   Mobile

97% Area outbound   Mobile

Tiles © ArcGIS

0   2   4   6mi

Printed: 2/16/2024
System version: 3.1.2.1

Mobile with Roof Mounted Antenna

Solution: Wahkiakum County
Project: Simulcast
Design: Design 10 Mobiles In Out Roof 97
rtay@daywireless.com

This map in intended solely for the equipment configuration stated above.
Coverage can vary significantly if different configurations are used.

Wahkiakum County

Coverage Prediction

MOTOROLA
SOLUTIONS

Legend

- 97% Area outbound   Portable
- 97% Area inbound   Portable

Radar Ridge

KM Mountain

Cathlamet

Wickiup

Clatskanie

Tiles © ArcGIS

0   2   4   6mi

Portable Outbound In-building
Belt Clip w/ Speaker Mic

Solution: Wahkiakum County
Project: Simulcast
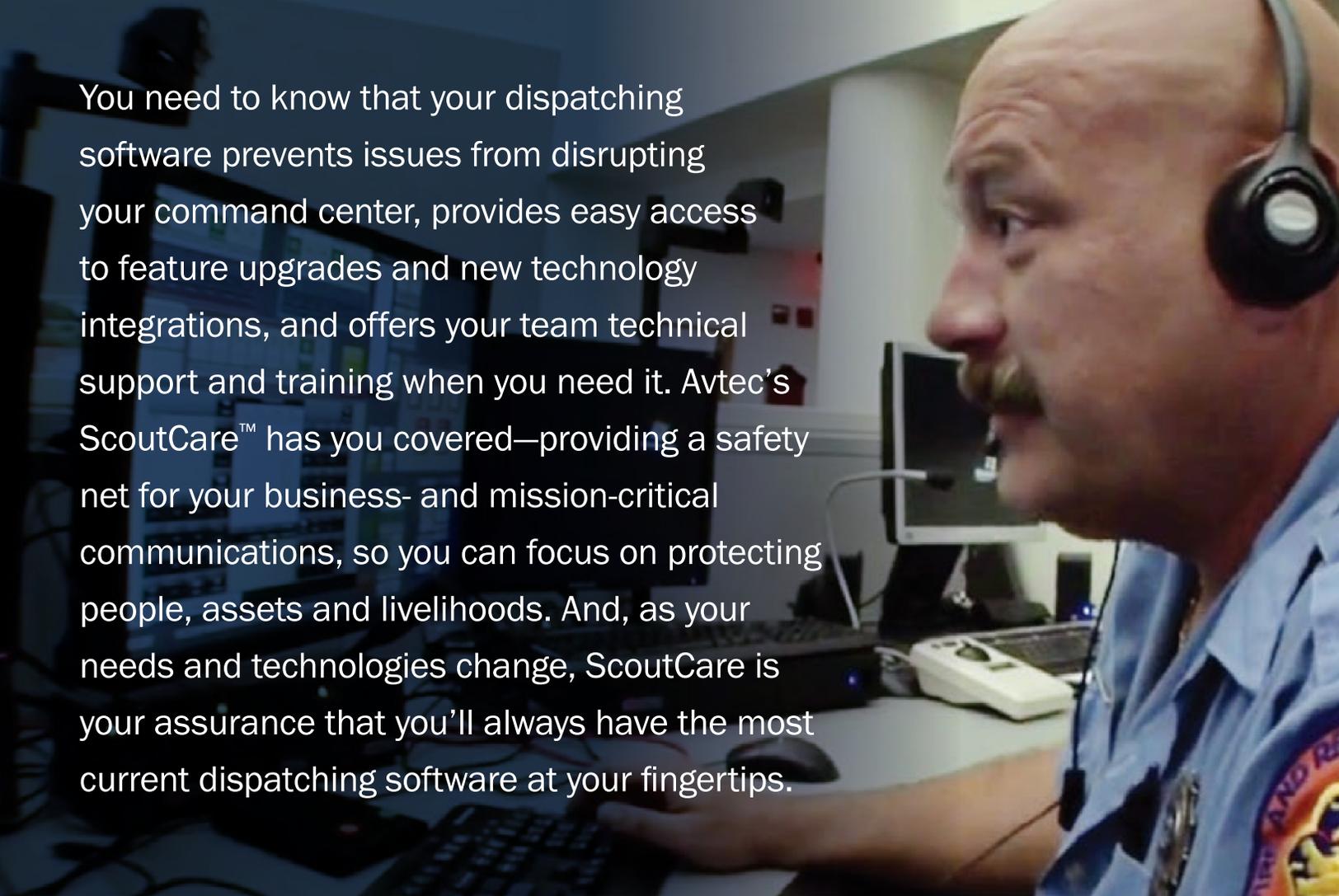Design: Design 7 Portables In Out Bldg Loss
rtay@daywireless.com

This map in intended solely for the equipment configuration stated above.
Coverage can vary significantly if different configurations are used.
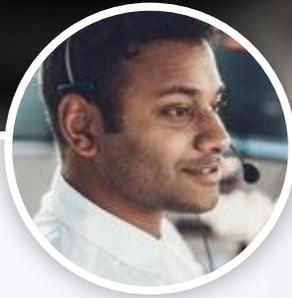
Avtec ScoutCare

SOFTWARE MAINTENANCE AND SUPPORT PROGRAM

You need to know that your dispatching software prevents issues from disrupting your command center, provides easy access to feature upgrades and new technology integrations, and offers your team technical support and training when you need it. Avtec's ScoutCare™ has you covered—providing a safety net for your business- and mission-critical communications, so you can focus on protecting people, assets and livelihoods. And, as your needs and technologies change, ScoutCare is your assurance that you'll always have the most current dispatching software at your fingertips.

PROVEN

Major U.S. airlines, Class I railroads, Fortune 500 companies, and public safety agencies count on ScoutCare's licensed, post-warranty software maintenance and support program to keep their dispatching and command centers running smoothly. ScoutCare provides continual software enhancements, protects consoles against unforeseen issues and cyberthreats, and gets your system back online quickly if something goes wrong.

SCALABLE

Whether you have one Scout™ console or hundreds, you covered. Your ScoutCare license can grow with y helping you control costs and increase efficiency by advance for maintenance and upgrades. Access the and software enhancements at no additional charge

RELIABLE

Avtec's Scout software is constantly enhanced with such as access control, encryption and audit trails a vulnerabilities to keep up with the latest cybersecur ScoutCare, you can be certain that you are benefitir class protection for your dispatch technology investr

WHY CHOOSE AVTEC SCOUTCARE?

ScoutCare is Avtec's licensed, post-warranty maintenance and support program. It gives you the assurance a[...] of mind that your console investment will always be protected. ScoutCare keeps your team up and running to[...] 24/7/365 on-demand support, while keeping an eye on tomorrow, as we continually develop new features, e[...] and integrations to meet your changing requirements.

SCOUTCARE GIVES YOU

24/7/365 TECHNICAL SUPPORT

ScoutCare's ongoing software updates help you prevent issues before they impact your comma[...] And should the unexpected occur, ScoutCare ensures incidents are resolved quickly, with mini[...] on your resources. Your ScoutCare subscription means you and your team can count on immed[...] technical support from our experts, any hour of any day.

REDUCED SECURITY RISK

With our team focused on software development and testing best practices, you can rely on Sc[...] help keep your consoles secure and mitigate ever-changing cybersecurity threats.

CONTINUAL SOFTWARE UPGRADES

You'll always have the latest Scout releases and patches—they are included as part of your Sc[...] subscription. These ongoing improvements and product enhancements mean the leading voice communications tools and technologies are always at your disposal and will integrate wit[...] your entire dispatch communications system.

TECHNICAL TRAINING AND KNOWLEDGE BASE

As part of your ScoutCare license, your team receives two seats each year to attend Scout trai[...] either at our facility in Lexington, South Carolina, or online. Plus, you'll have access to Avtec C[...] our web-based information portal featuring product documentation, software release notes, tr[...] videos and other helpful data.

LOWER TOTAL COST OF OWNERSHIP

ScoutCare allows you to set your console maintenance and support budget in advance. And wit[...] the program's continual security updates and feature enhancements, you extend the life span of your technology investment.

HARDWARE MAINTENANCE OPTIONS

If desired, you can add on ScoutCare's hardware support program that provides for repair and [...] replacement of Avtec hardware products and accessories. We'll even provide advance replacement equipment and expedited shipping options in the event that an urgent repair take[...] your hardware out of service.

"With ScoutCare, we have 24/7/365 post-warranty technical suppo
an evergreen product because of the continual software updates. V
relationship with Avtec as a true partnership."

—TERRY LAVALLEY,
   RADIO TECHNOLOGY SERVICES DIRECTOR
   VERMONT DEPARTMENT OF PUBLIC SAFETY
   AND VERMONT STATE POLICE

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