ALMR INSIDER

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Proper Programming of the "E-button" Function

A recent inadvertent activation of an emergency button (E-button), on a Region B subscriber unit programmed to alert dispatch and other units on Region A Hail, points out the continuing need for all agencies programming the function to ensure their subscriber units E-button are appropriately programmed.

The E-button function on Alaska Land Mobile Radio (ALMR) Communications System radios is intended to allow a user to advise their dispatch center, and other users, of their need for immediate assistance. In the interests of ensuring the proper programming and usage of this function, the Operations Management Office developed an emergency button activation policy and procedure which was approved by the ALMR User Council in November of 2013.

The policy and procedure are available on the web site (www.alaskalandmobileradio.org). It is highly recommended agencies review these documents prior to programming the E-buttons in their radios.

In all cases, if you have your agency's emergency alarm go to a dispatch center or another agency other than your own, you must ensure you have executed a memorandum of agreement (MoA) between your agency and the dispatch center/agency monitoring your alarms.

The Operations Management Office (OMO) will facilitate the coordination and execution of any MoAs between the consenting dispatch center/agency to ensure all necessary documentation is properly completed and maintained. This process includes keeping a current list of subscriber units/users on file with the monitoring dispatch center, so the individual having the emergency can be identified immediately and necessary response dispatched. Please contact the OMO if you require additional clarification or information.

(Submitted by the Mr. Del Smith, ALMR Operations Manager.)

Bi-Directional Amplifier Systems to be Added in Courthouses

State of Alaska, Enterprise Technology Services (ETS), in cooperation with World Wide Technologies and North Slope Telecom Inc., recently completed the survey and design phase for a bi-directional amplifier (BDA) and distributed antenna system (DAS) for the Nesbett and Boney Courthouses in Anchorage. This will allow for reliable ALMR and Anchorage Wide Area Radio Network (AWARN) in-building coverage throughout the courthouse facilities.

National fire codes for this type of system require signal strengths within buildings meet 99 percent coverage at -95dBm or better and must also support local emergency responders. Recent testing confirmed the Nesbett and Boney courthouses fell well short of the requirement. Both Alaska State Trooper Judicial Services and the Anchorage Police Department Warrant Section have offices within the buildings and have suffered with poor signal quality and unreliable communications in critical areas. The new system will give them reliable operational coverage and will also support other local emergency responders, such as fire and emergency medical services, who enter the building during a crisis situation.

Construction should begin before the end of the year and is expected to take approximately 30 days to complete. Upon completion, ETS will have the capability to remotely monitor the "health" of the BDA system and respond to irregularities/outages in a timely manner.

This dual-band system will be the first of its kind deployed by the State and will be used as a model for future projects, such as the Rabinowitz Courthouse and Fairbanks International Airport. The Anchorage International Airport BDA system, installed several years ago, has proven to provide good coverage based on tests conducted by the OMO.

(Article submitted Mr. Patrick Thornton, State of Alaska, Enterprise Technology Services.)

Wireless Priority Service and Government Emergency Telephone Service

Three times in the past year, authorities in the Seattle area have requested the public limit use of cell phones to allow for emergency 911 calls during large public events due to potential overload of available commercial cell systems. Although these involved non-emergency events, should emergencies or other events occur in Alaska that limit cell and landline phone availability, there are two Department of Homeland Security programs that would allow priority service for emergency response personnel.

They are the Wireless Priority Service (WPS) and the Government Emergency Telephone Service (GETS). Please note, these services are not intended to replace your agency subscribers operating on the Alaska Land Mobile Radio (ALMR) Communications System, but could be used as additional emergency response methods.

ETS and WPS have also demonstrated value with high reliability during recent incidents of extreme network traffic or network disruption ranging from the Joplin tornado disaster, the Boston Marathon bombing, Hurricane Sandy, the I-5 Skagit River Bridge collapse, and the Seattle Super Bowl victory parade.

However, even under normal traffic load, there may be unidentified local telecom partner network switch issues, incorrect settings in your internal network, or just plain user unfamiliarity with using GETS and WPS tools that may prevent your call from going through. You can only find out about such local variable issues through testing, so you can identify and fixed before a big event happens.

These tools are not magic and do not create a telecomm network where none exists or when all dial tone is out, but when competing for access to a heavily loaded network, both GETS and WPS offer a very real, enhanced communications option to consider in emergency plans.

WPS: As indicated by its title, WPS is intended for emergency personnel needing to make cell phone calls as part of the response to an incident. During emergencies, cellular networks can experience congestion due to increased call volumes and/or damage to network facilities, hindering the ability of emergency personnel to complete calls. WPS provides priority access and prioritized processing in all nationwide, and several regional, cellular networks, greatly increasing the probability of call completion. WPS is only intended to be used in an emergency or crisis situation when cellular networks are congested. WPS is an add-on feature subscribed to on a monthly per-cell-phone basis. It is deployed by cellular providers throughout the United States. WPS calls receive priority over normal cellular calls;. However, WPS calls do not preempt calls in progress or deny the general public the use of cellular networks. Talk to your cell service provider first to see if they have WPS capability and what fee they charge for the service. Participation in the WPS program by cell providers is voluntary.

GETS: To address the impact of emergencies on landline phone systems, the GETS supports national leadership of Federal, State, local, tribal and territorial governments and other authorized emergency

Fiscal Year 2015 ALMR Training Now Offered

The State of Alaska (SOA) fiscal year (FY) 2014 ALMR Training Program is now complete and once again it offered the opportunity for no cost training to ALMR agencies. The following are the results:

Locations Visited:	23
Classes Conducted:	29
Students Trained:	510

Classes by Region:

Region A – Southeast:	3
Region B – MatSu/Valdez	2
Region D – Fairbanks:	1
Region E – Kenai Peninsula	19
Region F – Anchorage	4

While the FY14 program was very successful, several lessons were learned and several trends emerged. These will be implemented into the goals for FY15. They are:

- Expand outreach efforts into Regions A, B and D
- Conduct scheduled classes throughout the State in addition to agency-specific sessions
- Conduct regional planning classes to build upon radio operations training
- Develop streaming media to post to the ALMR website to augment face-to-face training
- Develop training aids and quick reference materials to supplement and reinforce face-to-face training

ALMR agencies who wish to obtain training for their personnel should call Mr. Joe Quickel at 907-227-5048 or email joequickel@5starteam.net. Training will be scheduled according to an agency's availability, as well as to the type of equipment utilized. Agencies may also contact the OMO at 907-269-8408 with their training requests.

(Article by Ms. Sherry Shafer, ALMR Documentation Specialist, with excerpts from the FY14 ALMR User Training Final Report, July 8, 2014, written by Mr. Joe Quickel.)

Tech Corner: ALMR Infrastructure Inspections/Maintenance

The primary goal of maintenance of a communications system, such as ALMR, is to avoid or mitigate the consequences of failure of equipment.

The ALMR System Management Office (SMO) is contracted by the State of Alaska (SOA) and Department of Defense (DOD) through the Infrastructure Operations and Maintenance Services (IOMS) contract for maintenance/repair services of the ALMR System. SMO Original Equipment Manufacturer (OEM) trained technicians are required to perform periodic maintenance inspections (PMIs) at every ALMR site annually.

These inspections include testing, measurements, adjustments and parts replacement, as necessary, to prevent failures from occurring. All readings are recorded so that any System deterioration can be tracked and addressed before there is a System/site failure. Planned maintenance and condition-based maintenance is designed to preserve and restore equipment reliability by replacing worn components before they actually fail.

The ALMR Operations Management Office (OMO) is contracted to observe 25 percent of the SMO PMIs annually to provide third party compliance oversight of the maintenance contract and ensure the requirements in the ALMR Service Level Agreement (SLA) are met. Reports are generated for each site visit, which includes test results, site photos and a list of any site discrepancies. The report and photos are forwarded to the appropriate SOA or DOD entity for any corrective action.

An updated listing of site discrepancies is maintained by the OMO and referred to prior to travel to the sites to ensure that previously reported discrepancies have been addressed and corrective action taken.

All this occurs with the goal of minimum interference to day-to-day ALMR System operations.

(Article submitted by Mr. Rich Leber, ALMR Technical Advisor)

How Project 25 Improves Interoperability

Mission-critical interoperability cannot be resolved by broadband alone. Project 25 (P25) land mobile radio (LMR) will continue to provide the primary push-to-talk (PTT) voice solution for public safety agencies for years to come.

Much of the recent attention regarding mission-critical communications has been captured by the future nationwide public safety broadband network that will hopefully provide all the capabilities public safety practitioners need to support all of their operational needs. Until that network is realized, P25 will continue to provide that capability to public safety agencies at all levels of government in the U.S and in many countries throughout the world. Over the past 20 years, P25 has improved interoperability among those agencies and continues to increase operability as well by working with the P25 User Needs Subcommittee to increase the number of features and functions available for mission-critical communications.

Project 25 technology provides opportunities to public safety agencies that were otherwise unavailable, including compatibility across technologies, multi-platform and multi-band operation, and inter-system connectivity. P25 provides compatibility between analog frequency modulation (FM), frequency division multiple access (FDMA) and time division multiple access (TDMA) solutions and it allows communications between conventional and trunked users at the subscriber unit level. In some cases, the Inter-radio frequency subsystem interface (ISSI) has allowed users to communicate over wide area networks and between networks independent of system manufacturer, configuration, or frequency band. In addition, P25

has provided a means to effectively implement a secure interoperability solution for users. While encryption may be considered by some to inhibit interoperability, standardized encryption technology and management has made secure interoperability a reality within the P25 standard.

Broadband can eventually provide the flexibility public safety needs, but that may be years to come. There is no doubt broadband is ideal for data-intensive applications in infrastructure rich areas of the country, but may not provide a workable, reliable, secure mission-critical PTT solution in the near or mid term. Public safety practitioners who look to broadband to solve communications gaps should think in terms of the evolution of LMR as it relates to interoperability, not the revolution that broadband represents, as some have recently predicted.

Most agree that Mission Critical PTT voice is an essential requirement that currently can only be satisfied with some form of LMR technology that supports radio-to-radio direct, repeater and trunked solutions. That is why it is important to continue to support P25 standards now and for the foreseeable future, to continue to enhance interoperability and to provide multiple sources with standards compliant technology. In other words, LMR will be with us for a long time to come and we need to continue with a working technology that provides interoperability and cost effectiveness.

(Article by Ms. Sherry Shafer, ALMR Documentation Specialist, with excerpts taken from Mission Critical article by Mr. Jack Doane, P25 Steering Committee Vice Chair, NASTD Representative, dated August 14, 2013.)

WPS and GETS (continued from page 2)

preparedness user organizations in performing their national security and emergency preparedness (NS/EP) missions. GETS is intended for an emergency or crisis situation when the landline network is congested and the probability of completing a normal call is reduced. There is no charge to subscribe to GETS; the only charge is for usage for calls within the United States and its territories. GETS calls are currently billed at a rate of seven to ten cents per minute, depending on the carrier and other factors.

Requesting GETS and WPS: GETS and the WPS programs are companion services for priority calling offered by the Office of Emergency Communications (OEC). OEC recommends that individuals requesting WPS also request a GETS card. The registration process will allow you to request both services at the same time.

Most organizations have a single point of contact (POC) who is able to submit GETS and WPS requests online. However, large or geographically disbursed organizations may elect to establish multiple POCs.

For additional information and/or assistance in applying for WPS or GETS please contact either Mr. Jordan Halden, Coordinator Office of Communications and Technical Systems, State of Alaska - Division of Forestry (DOF), 907-451-2810 or jordan.halden@alaska.gov or Mr. Bruce Richter, Region X Coordinator, Office of Emergency Communications (OEC), Department of Homeland Security (DHS), 202-603-3841 or bruce.richter@hq.dhs.gov.

(Article submitted by Mr. Del Smith, ALMR Operations Manager with excerpts taken from information provided by Mr. Bruce Richter., OEC Region X Coordinator.)

Help Desk In Anchorage Bowl: 334-2567

Toll Free within Alaska: 888-334-2567

Fax: 907-269-6797

Email: almr-helpdesk@ inuitservices.com

Website: http://www. alaskalandmobileradio.org

Funny River Fire After Action Review

Mr. Del Smith, Mr. Rich Leber, Mr. Joe Quickel, all of ALMR, Mr. John Lynn, ETS, and Mr. Jordan Halden, DOF, attended the Funny River Fire after action review on August 21, where they met with responders from the Kenai and Soldotna areas. Although ALMR was not an issue, an additional channel is still planned for the Pipeline site on the Kenai Peninsula to help alleviate site busies.

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