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7.13 Software Migration

As reported in the July Insider, contracts are in place by the Department of Defense (DOD) and the State of Alaska (SOA) to update the Alaska Land Mobile Radio (ALMR) Communications System from Motorola system software version 7.1.1 to 7.13. The upgrade project will bring ALMR to the latest available Motorola LMR technology. When completed, the project will include software updates, replacement of the zone controllers at Tudor Road and Birch Hill and some hardware at ALMR sites. At this time, the Municipality of Anchorage is still in the process of identifying funding to update their Anchorage Wide Area Radio Network (AWARN) system to 7.13 to ensure continued interoperability with ALMR user agencies.

Motorola personnel conducted a two-day project kick-off meeting in Anchorage on August 13 and 14. During the kick-off, Motorola personnel conducted several presentations including an overview of the project timeline. Completion of the migration is expected to take approximately 12 months.

A substantial amount of work needs to be completed over the next 12 months by Motorola personnel working in conjunction with the ALMR staff, SOA Enterprise Technology Services personnel and DOD personnel involved with the ALMR sites on the military installations. This includes site walks, inventory of system equipment, gathering current configuration reports, audits of power and space at ALMR sites and completion of a system design and equipment lists.

In coordination with the ALMR staff, Motorola will identify maintenance operations and cutover events that could impact ALMR System operations during the migration. Plans and operational contingencies will be developed to address potential impacts and to mitigate those impacts to the greatest extent possible for those agencies utilizing the System.

Despite the enormous tasks ahead, migrating the ALMR to the 7.13 platform will result in a state-of-the-art LMR system that takes advantage of evolving technology to provide robust communications capabilities to System member agencies.

ALMR/AWARN Prove Reliability During Severe Windstorm

A severe windstorm, bringing gusts up to 130 miles per hour, hit areas stretching from the Anchorage bowl to the Matanuska-Susitna Valley on the evening of September 4 and continued into the early morning hours of September 5 causing extended power outages, which wreaked havoc on local cellular services.

While the State of Alaska Service Center was reporting that 3 GSM, 5 UMTS and 3 LTE sites in Anchorage and the surrounding areas were down and customers on the affected sites could experience failed calls or degraded/no service, the public safety first responders operating on ALMR/AWARN had no interruption in service.

As power outages and communication blackouts enveloped the Municipality of Anchorage and the surrounding areas, and emergency vehicle sirens blared in every direction, backup generators at both State of Alaska Telecommunications System (SATS) and AWARN sites kicked in ensuring microwave connectivity, and thereby, continuous operation for critical ALMR and AWARN communications.

Catastrophic natural events of this magnitude continue to put emphasis on the importance of, and need for, a reliable public safety system. If responders had to rely upon local cellular service networks during this event in order to place and relay emergency calls, it's hard to imagine what issues might have occurred.

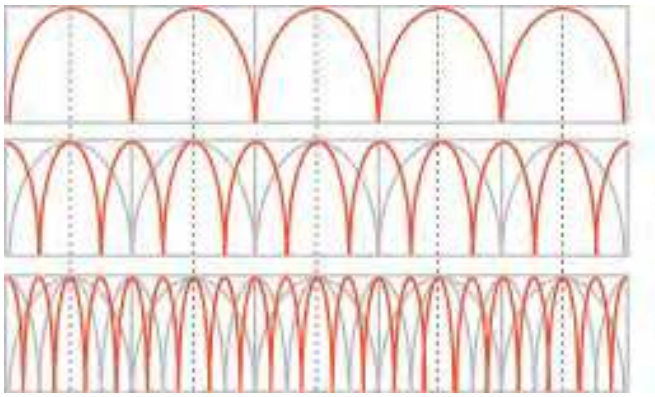
Narrowbanding Phases 1 & 2: What it Means to You

Overtime, the term "narrowbanding" has become synonymous with the requirement of the FCC that —

"On or before January 1, 2013 — all existing licensees on the VHF and UHF spectrum implement equipment designed to operate on channel bandwidths of 12.5 kHz or less, or that meets a specific efficiency standard."

On that date, all licensees are required to have converted or replaced existing VHF and UHF wideband (25 kHz) land mobile radio systems with technology capable of 12.5 kHz. This is known as Phase 1 of the narrowband implementation.

Phase 2 of the narrowband mandate requires systems and subscriber equipment to be capable of operating within 6.25 kHz bandwidth. At this time, no date as been established as to when systems and radios will have to operate within 6.25 kHz. However, many radio manufacturer's are already marketing radios they claim are either Phase 2 capable now or Phase 2 "ready" (i.e. flash upgradeable).



<u>For this reason, it is imperative when purchasing new mobile/portable subscriber equipment, agencies verify the equipment is Phase 2 capable or can be flash upgraded</u> when the requirement is mandated in the future

Current the Alaska Land Mobile Radio (ALMR) System Acceptance Test Procedures (ATP) for approved System use, only tests for Phase 1 capability only, as the ALMR System does not support Phase 2 operations at this time. Therefore it is incumbent upon the purchasing agency to determine Phase 2 capabilities prior to purchasing.

Narrowband Technology Detail

The diagram illustrates each of the narrowband phases. Existing 25 kHz channels were split to 12.5 kHz in Phase 1, and will be split to 6.25 kHz in Phase 2, further down the road, thereby allowing additional channels within the same spectrum.

State of Alaska Enterprise Technology Services has advised the Operations Manager that state agency radios have been programmed with the narrowbanded National Interoperability Channels.

The ALMR System is currently here and up to date

All other agencies utilizing ALMR should complete their reprogramming not later than December 31, 2012.

Please contact the ALMR Operations Management Office if you have any questions about Phase 2 capable radios. A complete list of approved radios Phase 1 can be found on the ALMR web site on the "Radios" page at: www.alaskalandmobileradio.org/radios.htm.

Nationwide Governance: FirstNet

A key provision of the law that creates the National Public Safety Broadband Network (NPSBN) also creates the First Responders Network Authority (FirstNet), an independent authority within the Department of Commerce's National Telecommunications and Information Administration (NTIA).

FirstNet is responsible for deploying the NPSBN. This responsibility includes, at a minimum, ensuring nationwide standards for use and access to the network; and issuing open, transparent, and competitive requests for proposals (RFPs) to build, operate, and maintain the network. It is also responsible for leveraging, to the maximum extent economically desirable, existing commercial wireless infrastructure to speed deployment of the network; and overseeing contracts with non-federal entities to build, operate, and maintain the network.

FirstNet is run by a 15-member Board of Directors, with the Secretary of Homeland Security, the US Attorney General, and the Director of the Office of Management and Budget serving as permanent Federal representatives.

On August 20, 2012, Acting US Commerce Secretary Rebecca Blank announced the 12 remaining members of the Board, representing the interests of State, local, and tribal stakeholders. This diverse group brings together expertise in the fields of public safety, technology, network operations, and finance. (Excerpt taken from DHS OEC Emergency Communications Forum, Volume 10, September 2012)

Thales Liberty® Multi-band Radio Approved for Use

On September 5, the Thales Liberty® multi-band portable radio passed the Acceptance Test Procedure (ATP) and is now authorized to operate on the Alaska Land Mobile Radio (ALMR) Communications System.

With the addition of the Thales radio, there are a total of six manufacturers who have completed testing. This means ALMR member agencies now have a total of eight mobile models (including one multi-band) and nine portable models (including two multi-bands) to select from when looking for radios to purchase.

The features tested during the ATP, and the results, are listed on the ALMR web site, along with brochures containing the specifications for each unit. Individual models may have features that are not available and therefore, not tested. Likewise, models may also have additional features that are available, but were not tested. (www.alaskalandmobileradio.org/radios.htm)

The ATP data provided is not a certification, implied or otherwise, of any product listed. It is listed as a means of providing information regarding how the unit performed on the ALMR System against the specified test protocols.

Individuals considering purchasing any radio, regardless of the make/model, are encouraged to request a loaner from the vendor for their own testing and verification purposes.

700MHz (LTE) Public Safety Broadband Status

The passage of the Middle Class Tax Relief and Job Creation Act of 2012 establishes the means to create a nationwide public safety LTE broadband network. Unfortunately, it appears that many state and local legislative officials may feel there is no longer a need for funding land mobile radio (LMR) systems.

Although it is extremely important the network be built out for public safety, a nationwide 700MHz wireless broadband system for first responders is not a replacement for traditional public safety LMR systems like the ALMR System today, nor in the foreseeable future.

Efforts to create the system are moving ahead at this time. FirstNet, an independent authority, was established by the Act within the Department of Commerce to oversee the creation of the nationwide network.. The 15 members of the FirsNet Board of Directors were recently appointed and have begun working. The Act also allocates $7 billion for build out of the LTE system and $135 million for an implementation grant program for state, regional, tribal and local agencies to ensure the proposed nationwide system meets their needs.

The proposed secure and interoperable system is intended, among many potential uses, to allow firefighters to download blueprints of burning buildings, emergency medical technicians to remotely access medical records from ambulances, or to aid law enforcement to identify criminal suspects through facial recognition and other emerging technologies.

Obviously, there are many more potential applications that could be utilized with such a system. However, it is critically important for all involved, including funding bodies, to recognize that mission critical voice transmission currently provided by LMR systems will continue to be necessary for many years to come. Mission critical voice over LTE is not a possibility at this time and likely will not be for some time to come.

Agency ALMR Training Update

The 5 Star Team is currently conducting training for agencies operating on ALMR, which specifically addresses the needs of the requesting agency. Scheduling of this training will take into account agency shifts, days off and availability of volunteer personnel to attend training sessions.

The training is free to the member agency and focus areas can include, but are not limited to, radio familiarization, codeplug review, Incident Command (IC) Zones, and channel lineups.

To schedule training for your agency, call Mr. Joe Quickel, 907-227-5048, email: joequickel@5starteam.net or Ms. Sherry Shafer, 907-269-8408, email: sherry-shafer@5starteam.net.

Agencies Trained To Date		
Copper River Basin July/	**DOC Academy August/ 18 attendees**	**KPB School District August/**

Multiple-Agency Operation Deemed A Success

During the week of July 9, the United States Postal Inspection Service, Federal Bureau of Investigations, Juneau Police Department, Drug Enforcement Agency, Ketchikan Police Department, Petersburg Police Department, Sitka Police Department, National Guard Counter Drug Support Group, Homeland Security Investigations, Southeast Alaska Cities Against Drugs Task Force (SEACAD), Customs and Border Protection, King County (Washington State) Sheriff's Office, Seattle Police Department, Kent Police Department, Washington State Patrol and the Port of Seattle all combined to execute a drugs-through-the-mail interdiction operation, code named "Operation Last Frontier."

Spread widely across Southeast Alaska, the use of the Alaska Land Mobile Radio (ALMR) System network was integral to the success of the operation.

In Juneau alone, more than a half dozen separate enforcement operations were conducted simultaneously, integrating personnel from as many as seven different agencies at one time.

Hundreds of thousands of dollars worth of dangerous, illegal drugs were prevented from hitting our streets in Southeast Alaska.

The clear and timely communications provided by ALMR were absolutely essential to the safe and successful execution of this mission.

Correction to the July newsletter: The total subscriber count at the end of June was incorrectly shown as 16,056, which was really the end of May count. The actual count at the end of June was 15,737.

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Garner Site

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