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DHS Comm-leader Program Hits Milestone

27 of Alaska's first responders have joined more than 1,600 first responders nationally that have completed the All-hazards Type-III Communications Unit Leader (COML) training course. The program is designed to improve multi-jurisdictional coordination among first responders at an incident, said Chris Essid, Director of the U.S. Department of Homeland Security's Office of Emergency Communications (OEC).

As part of the National Emergency Communications Plan, the OEC offered 66 COML training courses nationwide to help public-safety professionals more effectively lead and coordinate communications during emergencies and large-scale events. Multi-jurisdictional events around the nation have demonstrated the benefits of consistent planning, training, and operating procedures, according to Essid. In fact, it was the emergency response community that identified the need for COML training and helped DHS create the formal training program by building on the successful wildfire-scenario model.

Participants were trained to set up communications at an incident in a standardized way. This is important in a major event because emergency workers who respond from outside the area need to follow similar procedures.

"If they all do it differently … it is chaos," Essid said. "So the course promotes a standardized approach at an incident and works within the existing structure of National Incident Management System (NIMS) and with the Incident Command System (ICS) principles, as well."

"The problem with interoperability, as we've heard from the first responders, is not the technology - it's the coordination, the training, the exercise and the standard operations," he said. "You could have the greatest technology in the world, but if you don't know how to leverage that technology, it doesn't do you any good."

COML training will continue through state-sponsored courses. Interested parties must first complete prerequisites for the class, such as the 100, 200, 700 and 800 NIMS training. Then, attendees go back to their department, participate in actual events, or set up mock multi-agency communication incidents, and can be certified by their police or fire chief.

According to FEMA's National Integration Center (NIC), states should determine who should be trained and seek qualifications for emergency management and incident response positions. DHS adopted a policy where states, having differing needs and requirements based upon their own plans, qualifications, and credentialing policy, may develop a training and accreditation plan.

The Alaska Interoperability Coordinating Committee (AKICC), made up of representatives from local, state and federal agencies and co-chaired by Bryan Fisher, DHS & EM, and Major Matt Leveque, AST, is developing procedures for accrediting COML-trained personnel in Alaska as Communications Generalist's (COMG). While COML trained personnel are encouraged to pursue national COML certification, it is believed that accreditation as a generalist within Alaska is a much more obtainable goal and more accurately reflects the needs of Alaska's first responder agencies.

Additional information should be available shortly. Meanwhile, Alaska first responders interested in attending COML training should contact the Division of Homeland Security & Emergency Management (DHS&EM) to determine if, and when, future classes are scheduled. DHS&EM can advise which specific NIMS classes must be completed prior to an individual attending COML training in Alaska. (Extracts from "Urgent Communications," March 2010)

Why Can't Public Safety Responders Use Cell Phones Instead of LMR Radios

The combination of the cost of individual subscriber units utilized by public safety first responders, and the proliferation of cell phones, often results in members of funding entities (i.e. councils, legislatures, Congress) asking, "Why can't you just use cell phones?"

It is important not to equate cell phone use with classic two-way radio use. Although both provide voice capability, their dynamic of service is quite different. Two-way radio provides a one-to-many capability with a virtually unlimited 'many,' as well as a direct mode (simplex) that can be used without external support (repeater), such as some form of base station and associated fixed infrastructure. These elements are key to the future of public safety mobile communications.

Cell phones require a fixed base station, cannot talk directly to each other (simplex), and have a very limited one-to-many capability. Typically, two-way radio calls are measured in seconds and intended for multiple listeners; cell phone calls are typically measured in minutes and are intended for only one listener.

Two-way radios use a single small resource (frequency or channel) for a call. This applies whether it's connecting with one listener or a thousand listeners. On the other hand, cell phone technology is based on old fashioned land telephone concepts called switched circuits. Each connected party on a cell phone requires a circuit (frequency/channel) resource. Two cell phones talking to each other connect through a base station (or typically multiple base stations) each requiring its own circuit (frequency/channel), therefore using two resources to communicate. Even an iDen®[1] push-to-talk phone operates this way. Every additional party to the original initiated call uses a separate circuit (frequency/channel) resource. Cell phone usage is an outgrowth of regular land-based telephones; private one-to-one calls are the goal. The total concurrent number of calls in any given cell coverage area is highly restricted by limited channel/frequency resources.

Aside from the practical aspects in which cell phones are not capable of providing the robust capabilities required by public safety first responders, the dispatch -centric nature of public safety requires agencies to utilize land mobile radios.

(Extracts from Public Safety Communications magazine - the official magazine of APCO International Inc.)

1 Trademark for system technology developed by Motorola® and currently used by Sprint® for push to talk capability.

DIACAP and ALMR … a security "Stamp of Approval"

Security is a concern for anyone that exchanges information using an information system. The complex and dispersed system of servers, consoles, databases, and computers that comprise the ALMR infrastructure constitute an "information system." Handsets operating on ALMR cannot be used to access System data or infrastructure operating systems. Therefore, they are outside the "boundary" of the ALMR System and not a security issue. Because users of ALMR are concerned about availability of the System, integrity of the information stored or exchanged, and confidentiality of information and underlying data, a well-managed security program is essential.

There are many ways to enforce and monitor the effectiveness of whatever security management system is put in place. Among them, the most comprehensive and stringent is the Department of Defense Information Assurance Certification and Accreditation Process (DIACAP).

This process was chosen because it was required by DOD directive if elements of the Air Force and Army were to be users of the System. It was also chosen because it was at least as stringent and comprehensive (sometimes much more so) than the information assurance processes required by the State and the Federal non-DOD agencies. User organizations at all levels agreed that DIACAP would more than adequately cover their security and protection needs.

The initial DIACAP was completed in July 2007 and has an extensive set of security "controls" based on DOD directives and the Special Publications of the National Institute of Standards and Technology (NIST). The Approval to Operate (ATO) under DIACAP requires constant monitoring of the status and effectiveness of the relevant security controls, an annual assessment, and additional process steps if there are changes to the system design, boundary, or functionality. The ATO expires every three years.

Renewal and continued operation requires the entire process of certification and accreditation be re-accomplished prior to the expiration of the current one. That renewal process begins in June of this year and is expected to be completed a few months before expiration of the current ATO. Without a current ATO, no DOD users would be permitted to use the System, and other Federal non-DOD agencies could choose to cease using the System until recertification was completed.

DIACAP is the "stamp of approval" certifying that the System is adequately protected, security risks have been mitigated to an acceptable level, and ALMR users can be reasonably assured that the System will be available when needed, that operations will not be compromised, and that only the right people have visibility into System operations. Submitted by: Mr. Roger Hull, ALMR Security Manager

Anchorage Wide Area Radio Network (AWARN) Conducts Subscriber Training

The Municipality of Anchorage contracted with Tech-Ops consulting, based in San Diego, to conduct initial training for our users. Three classes were conducted daily April 5 - 9. Classes were held at the Anchorage Fire Training Center. Anchorage Fire Department (AFD), who has been on a simulcast trunked radio system using the legacy APCO Project 16 technology for 15 years, will be the first large agency to transition to the Anchorage Wide Area Radio Network (AWARN). Each three-hour class included about 20 personnel from all AFD disciplines, as well as a sprinkling of Anchorage Police Department dispatchers and supervisors.

Two trainers, one currently employed as a line-fire department engineer and the other a 20-year police officer in the San Diego area, conducted the classes. Both became interested in communications through frustration with their inability to communicate with most of the dozens of public safety and public service agencies they routinely interacted with in Southern California. Trunked system training and interoperable strategies are still their primary job duties with Tech-Ops as an off-duty job.

They discovered in these classes that, in spite of using a trunked system every day, continued training is required. Due to the repeater-to-user ratio on the Anchorage P16 system, busies are very rare. Most users still thought they experienced busies fairly frequently, particularly when on a major incident. Users didn't understand that when they heard a single bonk it usually meant that they were not granted a channel because their selected talkgroup was currently being used. Most typically this occurs when two users key at almost the same instant. The first requestor in the talkgroup is granted the channel and the second requestor receives the talkgroup busy/out of range bonk.

When we demonstrated the three tones that indicate a busy, most users admitted they had never heard them. Because these circumstances are so uncommon our responders would have been at a disadvantage in a truly major event where the System was truly busy. They had also forgotten about the queue that assigns the channel, and if they repeatedly re-keyed, they would be returned to the bottom of the queue each time they re-keyed.

Anchorage will prepare a plan of continuing classes and exercises as we transition other agencies to AWARN.
Submitted by: Trygve Erickson, MOA Wireless Communications Director

Alaska Shield/Arctic Edge/Vigilant Guard 2010

For the better part of the past year, the Alaska Division of Homeland Security and Emergency Management has been working with Federal, State and local agencies in Alaska planning & preparing for the upcoming Alaska Shield 2010 exercise scheduled for April 26 thru May 1, 2010.

The exercise will be conducted in conjunction with the linked military exercises Arctic Edge (involving NORTHCOM, Joint Task Force-AK, Alaska NORAD Region, Canadian NORAD Region) and Vigilant Guard (involving the Alaska National Guard).

The focus of Alaska Shield 2010 is a particularly timely one given the recent natural disasters around the globe.

The objective of the exercise is to validate Alaska's ability to anticipate, prepare for, respond to, and recover from a major event that disrupts primary services, with additional widespread consequences affecting response and recovery efforts.

Ultimately, the over-arching goal of the exercise is to improve Alaska's ability to respond to disruptions from a disaster at the local and state level.

ALMR with 80 sites, over 100 member agencies and 14,500 plus subscriber units will once again provide the primary communications capability and enable interoperability among the Federal, State and local emergency first responder agencies participating in the combined exercises.

Additionally, both ALMR transportable units, North (TAN) and South (TAS) will be deployed to augment communications capacity and coverage in the exercise venues. TAN will be deployed to Valdez and TAS will be deployed to Forward Operating Base Sparta, on Fort Richardson.

This planned exercises, and others like it, ensure that Alaska's first responders, from all levels of government, are prepared to deal with disasters, whether natural or man-made.

Digital-radio Fire Ground Tests Delayed

Although we have not received any recent reports of the problem from Alaska's firefighters utilizing ALMR radios, the Operations Management Office (OMO) wants to keep everyone apprised of current events regarding the issue nationally.

New tests to assess digital-radio performance in fire ground noise environments have been delayed until the spring, 2010 according to an official participating in the process.

D.J. Atkinson, lead electronics engineer for Public Safety Communications Research (PSCR), said his unit, a joint effort of the National Institute of Standards and Technology (NIST) and the Institute of Telecommunications Services (ITS), likely will conduct the tests in April. Late last year, Atkinson said he hoped the testing would occur this month, but an extended comment period has delayed the start of testing by at least two months.

Two years ago, the same lab conducted tests that showed that some digital radios did not perform as well as analog radios in certain fire ground environments. The test results became a source of controversy within the fire community, with some fire departments demanding that they be allowed to use analog equipment instead of newer digital equipment.

New aspects of the testing *will* include an assessment of Digital Voice Systems, Inc. latest vocoder release, which has been designed to help mitigate noise issues caused by personal alerting safety system (PASS) alarms, Atkinson said. In addition, multiple pass alarms and self-contained breathing apparatus (SCBA) masks will be tested.

During the past year, some vendors have demonstrated the impact that noise-cancellation technologies embedded in high-end LMR radios can have on resolving the fire ground noise issue. Atkinson said the noise-cancelling features would not be tested during the upcoming assessment. (Extracts from 'Urgent Communications,' March 2010)

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Agencies on ALMR: 103

Subscriber Units on ALMR: 14,891

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