**Office of Radiological Security**

**Adapting to Response - Customized Alarm Response Training**

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**Abstract**

The Office of Radiological Security Alarm Response Training (ART) program provides a unique, quality training experience for sites participating in the voluntary security program. The training course is designed to cultivate interoperability of various response elements and offer the opportunity to discuss, develop, and refine their organizations' response plans and strategies.

The three day ORS ART course is held at the Y-12 National Security Complex in Oak Ridge, TN provides the participating site approximately ten slots. The ten slots are divided among on-site security, radiation safety, and local law enforcement personnel to ensure each response agency directly involved is represented[[1]](#footnote-1). This “diversity of group” is essential in fostering an atmosphere of collaboration and is an element that consistently receives positive feedback in course critiques. However, because each site participating at the Y-12 site is limited to approximately ten slots, the majority of an area’s response personnel, particularly the law enforcement officers most likely to respond, are not afforded the opportunity of attending the training. Often, key leaders ( e.g., police chiefs, city managers, and facility administrators) are unable to attend due to the schedule challenges presented by a weeklong training event held away from their jurisdiction.

Out of this request, the Customized Alarm Response Training Course (cART) was developed. The cART efforts complement, not supplant, the resident Y-12 program as the course often provides the first opportunity for participating sites to create and exercise tactics, techniques, and procedures (TTP’s). cART is strategically conducted in select cities across the U.S. In addition to providing on-site training, the cost for attending the cART is less than the current resident ART course since logistical support for approximately 40 participants is not be required.

The cART program also provides the Local Law Enforcement Agency (LLEA) with a mock irradiator and supporting equipment. An example of equipment required includes a mobile camera system to provide central alarm station setups, observer rooms, and the ability to conduct after-action participant reviews[[2]](#footnote-2).

The ORS program has implemented cART in through 2020 Cities Initiative. The 2020 Cities Initiative focuses on securing the top 20 cities by the year 2020. This paper will present the best practices and lessons learned from these select events.

1. Introduction

Since 2009, the Office of Radiological Security has been conducting the Alarm Response Training course at the Y-12 National Security Complex in Oak Ridge, Tennessee. The course is mostly successful due to its ability to bring together a diversity of personnel in addressing an issue that would have significant impacts on a community, the state, and national security. A key attribute is conveying the information in a manner that is easily understandable by all participants and provokes engagement by all participants. The weakness of the program has been its inability to involve a larger group of law enforcement officers for those sites that are unarmed. There may be hundreds or thousands of law enforcement personnel in a precinct or jurisdiction where these sites reside, and the span of influence for traditional Alarm Response Training cannot accommodate these officers. The number of participants is limited for several reasons such as cost, the ability of personnel to attend due to inadequate staffing, availability of space, to name a few. The majority of an area’s response personnel, particularly the law enforcement officers most likely to respond, are not afforded the opportunity of attending the training. Additionally, key leaders such as police chiefs, city managers, and facility administrators are unable to attend due to the schedule challenges presented by the required absence away from their jurisdiction. A solution was needed to assist our first responders across the nation.

2. Office of Radiological Security Response

Thus, the Customized Alarm Response Training Course (cART) was developed by the ORS Response Integration Team to address this challenge. The cART efforts complement, not supplant, the resident Y-12 program as the course often provides the first opportunity for participating sites to create and exercise tactics, techniques, and procedures. Alarm Response Training encourages the attendees to return home and implement what they have learned from the training. Based on the observations provided by the regional field teams, it is evident that this occurs. Site procedures are changed, working groups formed, security culture is improved, and radioactive material security is applied more seriously. However, the law enforcement community can only do so much without the buy-in from their senior-level leadership. Primarily, policies need to written, and local training developed. Customized Alarm Response Training fills the gap.

In 2012 ORS began developing this training. Working with the ART staff along with a group of consultant law enforcement and health physicist, the team assembled at the Y-12 National Security Complex. They started working through the process of making the program tailorable to the individual sites and law enforcement agencies. The concept focused on those sites that needed an armed response from the local law enforcement agency. Places such as universities that have a police department utilize the same authorities as any other state law enforcement agency, therefore, were not the intended audience. Still, training for those supporting such a site would benefit from training.

In April 2017, the ART Staff conducted ORS’s first pilot with the Honolulu Police Department. The effort proved successful and continued to expand. The lessons learned during the progression have led to additional support efforts for the program and specifically the policy development. Radiological response policy is the driver for ensuring that action is taken so that training is indigenized and implemented. There are cases where a local law enforcement official attended ART, returned to their home station, and took it upon themselves to champion change within their departments, but generally, the overwhelming daily tasks for law officers diverted the intentions for many to achieve this goal. Learning for this, the office now approaches the challenge by starting the LLEA engagement with a policy review regarding radioactive material security and response.

Through the ORS 2020 Cities Initiative, this new training program enables major U. S. police departments to customize an alarm response training course that meets local requirements. This localized program allows for a more significant number of personnel to be trained in radiological response and allows the local police department to own, adapt, and sustain the training for their officers indefinitely. The train-the-trainer model includes the policy review, as mentioned earlier, followed by a 1 or 2-day training class. In this training event, the LLEA engages with the local and state regulators, City emergency management personnel, and radiation safety representatives from the institutions within their area of operations who have these materials of concern. The LLEA’s interest also includes those sites within its boundaries that have not completed the security upgrades. Providing this knowledge can assist the ORS security upgrades program since the LLEA may be appropriate to assure the site that security upgrades are in the community’s best interest.

To further enable these LLEA’s, Sandia National Laboratories designed a highly portable training system that resides in a 7-meter trailer and can be transferred to local law enforcement agencies. These trailers allow local law enforcement instructors to deliver training at police substations, schools, or any other facility available for training. Rather than imposing upon a local institution for training, the LLEA can set its own time and date for training its forces. They can also dictate the amount of time that they wish to dedicate to the effort and have the flexibility to take the training to their units.

These trailers contain a mock blood irradiator shell and a portable remote monitoring system (RMS) that replicates traditional radiological material security alarm systems. The trailers can be used in training scenarios as off-site dispatch centers or command posts, complete with RMS console, climate control systems, generator, day/night interior lighting, and exterior scene lighting. The trailer can be used as a mobile classroom with an expandable awning and projector in the event a traditional classroom is not available. Instructors can simulate a variety of radiological theft scenarios through a series of RMS alarms and real-time video clips that can be rapidly communicated to patrol officers, supervisors, and specialized response during training exercises. Upon completion of the training, the law enforcement officers are encouraged to engage with their local sites and to familiarize themselves with the facility layout and source material location. This training enables a timely response should an armed reaction be necessary.

3. Conclusion

The ORS program has implemented cART in several major cities to date. This program is filling an essential gap between policy, knowledge, and implementation. It is also helping to bridge the gap between an unarmed facility, adversary detection, and response time. The U.S. Code of Federal Regulations Part 37 requires licensees of radioactive materials, Radiation Safety personnel, developing a coordination policy with law enforcement. This program nearly assures this is achieved while, more importantly, providing training to the LLEA and assuring a timely response. The critical lessons learned from the deployment of these trailers as training aids, best practices, and lessons learned from these select events have assisted with indigenizing radiological material security training at select LLEAs.

# Bibliography

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1. (2020) [↑](#footnote-ref-1)
2. (2018) [↑](#footnote-ref-2)