**Integrated Response Training Focused On Soft Targets Housing Radiological Sources-A Flexible Approach**

Daniel M. Romano

Y12 National Security Complex, Oak Ridge, Tennessee 37831, United States

ID #349

INTRODUCTION

The US Department of Energy’s Office of Radiological Security provides tools to build and reinforce ties between sites and their local law enforcement agencies so that responders are prepared to thwart the most determined of adversaries from obtaining radioactive materials. Alarm Response Training’s proven training methods along with its flexibility to adapt local response protocols will be presented.

Traditional response techniques fit nicely when responding to traditional crimes.  Unfortunately the world no longer fits that paradigm.  Terrorists desiring to create harm to innocents and their peaceful societies see radiological sources as a powerful weapon to be used in accomplishing their reprehensible desires.

If a terrorist organization sets its sights on “soft” civilian targets (e.g., hospitals and universities) in order to gain radiological sources that could be used in radiological dispersal device (RDD) – its attack will almost certainly be both violent and fast. In all likelihood, traditional response techniques will prove to be inadequate in stopping this type of terrorist action.

DISCUSSION

It is a widely accepted premise that terrorists seek to acquire radioactive materials with the objective of causing both harm and disruption on a major scale. The U.S. Department of Energy’s Office of Radiological Security (ORS) has taken a multi-tiered approach to securing soft targets that house radioactive materials for research, industrial and medical use. This includes the removal and disposal of orphan sources, promoting the replacement of radioactive sources with non-isotopic technologies, physical security upgrades to designated sites worldwide and the training of response stakeholders responsible for the security of radiological sources.

Detection and delay measures at a site are meaningless if there is not a timely, effective response from the local law enforcement agency that could prevent the criminal/terrorist from removing the source from that site.

Understanding this basic principle, ORS created Alarm Response Training (ART) as the primary training program provided that is specifically tailored to the responsible on-site and their local responders who support the protection of sites that have radiological and nuclear (R/N) materials. This training program directly supports the ORS protection strategy through the promotion of a timely, well prepared, and coordinated response that has the capability to prevent the theft of nuclear and radiological materials. The ART course combines classroom instruction, tabletop exercises, and hands-on training for on-site security, law enforcement, radiation safety officers, safety personnel, and other responders.

The genesis of ART came when ORS teams noted opportunities for improving training and coordination among response personnel while providing physical security upgrades to vulnerable facilities.

ART is conducted over a three-day period and blends classroom instruction (12 hours), hands-on training (4 hours), and active exercises (8 hours) in an environment that allows the professional adult learner to thrive. Participants graduate with a comprehensive understanding of the threat, potential implications on both the local and the national stage, and ways to protect themselves and the public.

Local response teams leave ART with a comprehensive understanding of what radiological sources are generally and with specific knowledge about high-priority sources within their jurisdictions. The highly qualified training staff will “demystify” the health/safety effects of these radiological sources and teach responders that they can do their jobs within established parameters. During an actual radiological response scenario, law enforcement responders cannot hesitate as the result of an unfounded fear or misunderstanding of what radiation is/is not.

ART has proven to be an extremely effective program when presented in the domestic environment. Within the United States, each soft site is supported by a local jurisdictional police department. Though there are over ten thousand police departments in the United States, each one is organized in a similar fashion with comparable tactics, techniques and procedures. As expected, however, models of policing differ between the United States and other countries. Something other than a “one-size-fits-all” approach to radiological source security needs to be examined.

This became apparent when ORS extended an invitation to partner countries, via EUROPOL to observe the ART course. This program was conducted as an outreach and sharing of best practices among ORS and European Union police agencies. Participants included personnel from: Germany, Belgium, Italy, Bulgaria, Poland, Lithuania, France, Slovenia, Sweden, Czech Republic, Spain, Portugal, Estonia, Malta, Ireland, Latvia and the United Kingdom.

EUROPOL participation was divided over seven ART courses with each partner country participant fully integrated into all aspects of the three day training course. The EUROPOL participants were afforded the same privileges and training opportunities as U.S. participants. Upon completion of training the EUROPOL participants were collectively asked about their ART experience and the courses applicability in their response communities.

Overall, every participant had very complimentary statements about the course and its organization, the professionalism and knowledge of the ART cadre and the smooth logistics process. ART’s focus on soft civilian radiological targets was new conceptually to them and many stated that they needed to re-think their country’s current response protocols to this previously unthought-of threat. Their stated difficulty lies with their current response force structure in that specified that they lack the flexibility needed to adapt to this fast moving threat in a manner similar to that used by the American policing model.

The articulated structural differences regarding the various policing models of the different nations represented include: Some nation’s front-line patrol officers are not armed. These officers would be limited to an observe/report role without the ability to directly interdict an armed adversary. The countries that do permit armed front-line officers have various training standards and protocols that may/may not lend themselves to the U.S. policing model.

Another common theme regarding response was that the interviewees stated that their police organizations currently lack the ability to integrate their response protocols with an on-site security force. All stated that ART’s defined soft targets (universities, hospitals, clinics, etc) are guarded by private security firms, whose service quality and personnel were universally held in low regard. These potential targets were said to be the domain of the private security companies and as a result, the police officers are not encouraged to visit these locations during the course of their patrol. Also, almost universally stated was that each represented EUROPOL country’s police do not hold any joint training efforts.

Also stated, the partner country respondents feel that front-line patrol officers in their respective countries are aware of neither the radiological sources in their respective jurisdictions, nor these sources’ potential for use in a criminal or terrorist act.

Regarding radiological training of front-line patrol officers, it was almost universally agreed that these officers do not receive any training of note. The respondents all agreed that this type of training was reserved for members of specialized units (CBRNE, Border Patrol and Customs were the common answers). Only one respondent (Sweden) noted any meaningful training for front-line officers, stating that each police officer receives a 3 day CBRNE course with additional in-service training every third year.

In conjunction with the above, Personal Radiation Detectors (PRD) are not a common tool in use by front-line patrol officers in the represented partner countries. Virtually all interviewees commented that as a result of their ART training, they see the value of PRD’s for use by their front-line officers.

The major takeaway is the training conducted at ART has value for partner countries regarding source security awareness and best practices. The attendees were generally unaware (as are most US responders) as to: what the sources are, their potentiality regarding criminal/terrorist use, where the sources are located on the particular site(s), timelines, the ability for responders to operate in a radiological environment, etc.

Most stated that their particular country’s jurisdictional setups (e.g. they do not use security forces at hospitals and universities) do not follow the U.S. policing model, so application of U.S. principles would be difficult. They also stated that their current methodology is reactive in nature as opposed to the US’s more proactive stance. This would require a major paradigm shift for the partner nation represented police organizations.

This experience with numerous partner countries attending ART has shown that each has its own unique approach to response as their policing methodologies are varied as is the equipment carried by their local police (e.g. armed, unarmed). A common theme heard from these partner countries was that the ART training concepts (particularly the academic portion) were absolutely valid with respect to their individual countries, though their response protocols varies from the US model (as articulated during the after action review/comments). As response procedures are varied between partner countries, the ART training approach must also be flexible to our individual partner country’s needs.

If a partner country so desires, ART could potentially tailor its content with a needs assessment developed during discussions with the host partner country. Through these discussions, the partner country's response force procedures and protocols, along with laws specific to sites containing radiological sources located in the host country would be detailed and understood.

In this manner, the development of a proven radiological response program that integrates all aspects of radiological response can be customized to each individual partner country’s needs. The country’s ability to conduct a timely and effectively response by local law enforcement (and others) will be greatly enhanced in stopping a criminal or terrorist event involving radioactive materials.

In order to accomplish the partnership and maximize its potential, a “Phased Approach” is proposed as being the most beneficial to all involved parties.

METHODOLOGY

Phase 1

This phase consists of a partner country’s designated representative(s) attending ART as observer(s). This is fundamental to that partner country’s understanding of the course content and objectives and will also enhance the development of professional relationships between the partner representatives and the ART cadre.

* These persons need to be pre-identified as those who have the ability to create/implement organizational policy within their respective country’s response organizations (e.g. senior-level officials)
* It is preferable that each partner nation represented should send a “team” of 2 persons, who represent both their response and science/regulator roles in their respective nations
* An early programmatic lessons learned is of the importance of both response and radiation safety officer (RSO) understanding/complementing each other’s capabilities and critical role in combatting radiological crime and/or terrorism
* At the end of each training day, designated ART staff would convene with the partner attendees for an informal break-out session. The shared information established is central for the development and subsequent execution of Phase 2

Phase 2

This phase consists of the actual conduct of the partner country specific ART. Each partner country’s attendees should be a mix of responders, security, RSO and dispatchers (using the ART model) and specific Table Top Exercises and Drills to that partner countries response protocols.

* The majority of the academic portion will be current ART modules, modified where applicable and agreed upon.
* The academic portion will also include partner country’s specific periods of instruction
* The instructors will include those from the partner country, with the best case being that they were ART observers in Phase 1
* Instructors from the partner country and their active participation demonstrates both the partner country’s and ORS’s commitment to radiological security

Phase 3

This final phase consists of program sustainment for the partner country.  ORS/ART will assist our partners in the development of their own country specific ART (as requested).  In this Phase, the partner country is in effect, “transitioned” in order to assume the primary training role, with ORS/ART assistance provided only when requested from the partner country training team.

CONCLUSION

A well thought-out integrated training program developed through professional international partnerships can be implemented regarding the protection of radioactive materials located at soft civilian targets worldwide. By examining a fully matured radiological response program and tailoring it to specific requirements of a partner country is easily achievable with the results being the development of a well-trained, educated and motivated response team. Thus, the probability of a terrorist success gaining and using a radiological device in a partner country is greatly diminished. Prepared responders ensure sites with radiological sources are secure, thus safeguard their respective countries.