



## ***TETRAD Technologies Group, Inc.***

Innovative Solutions for Energy, Health and Security

### **DRAFT Outline for Proposed Tutorial (Workshop)**

#### **Transitioning Tools for Getting Ahead of the Next Counter-Countermeasure**

##### **Workshop-Tutorial**

Martin Dudziak, TETRAD

##### **Purpose**

Participants will learn in the context of some realistic and close-to-history cases about the issues and opportunities for bringing specific new tools into the hands of law enforcement, security, public safety and homeland security personnel to help get ahead of the criminal and terrorist before they execute their plans. We will consider the pro and cons of some tools including both currently (COTS) and near-future available sensors, detectors, cellular add-ons, real-time GIS + GPS + 3D modeling and walk(drive)-thru visualization, situation awareness, notification, alert and response, and more. The format is to introduce quickly and succinctly the "what is" about specific available or imminently-available technology and tools, and then to spend most of the [half-day? 1 hr? 2 hrs? 3 hrs?] engaged in short, compact, structured Problem-Solving Sessions (i.e., "break-out" groups or 3-5 individuals). By the end of the period, everyone will have learned experiences, concerns, issues, problems, and needs of those present and their respective agencies, companies and organizations. All participants will gain an understanding about how their groups can work effectively, using available budgets, programs, and resources, to begin introducing and deploying new products, field testable prototypes and evaluation systems. All will gain tools to help in making plans for those solutions that will be ready in 1, 6 or 12 months from now.

##### **Format**

Introduction (MJD)

- Issues and Gaps

- Emerging Defensive Resources and Tools

- Human Barriers and Techno Barriers

- Emerging Criminal and Terrorist Resources and Tools

- Description of The Cases (one per breakout group)

The Break-Out Sessions

Back Together, Sharing Results

Discussion: Self-Critique and Next Steps

##### **The Cases** [these will be detailed and prepared for the group]

Case #1

A terrorist group aims to use PREDs (Passive Radiation Exposure Devices) to create on a large scale a situation similar to that faced in London and other localities as a result of the Litvinenko Episode.

Challenge: Detecting the operators before they unleash the radioactive materials into public places, or dealing with public containment and control in the event of its execution.

Case #2

An episode very much like the Virginia Tech Massacre in style and character. A pathologically disturbed individual aims to use liquid explosives and guns to kill people at Cambridge University.

challenge: Circumvention before the act is executed, or minimization of the atrocity if it has started.

Case #3

Similar to Case #1 but employing industrial supplies of chlorine gas.

Challenge: similar to Case #1

Case #4

A suicide bomber plans to drive a Rover loaded with explosives into the front of a building when Prince William will be inside speaking, hoping to bring down the façade and as much of the building interior as possible. His cohorts plan to open the pathway by using a precursor suicide car bomb that will clear away the gateway and distract security forces long enough for the Rover to speed on through toward the building entrance unimpeded.

Challenge: Prevent the attacker from reaching the building or having any major damaging effect upon the structure and its occupants.

During the Break-Out Group period, each group will work together and with attention from the Facilitator (MJD) who will provide "real time" updated information on each Case for the group to consider and contend-with for developing a solution.

This method has been employed in several workshops of different types before and with positive results.

**Time and Location**

xxx AM – xxx AM (or PM)

31.October.2007

**About TETRAD**

Dr. Martin Dudziak, PhD is the founder and chief science officer of TETRAD Technologies Group, Inc., a USA-Canadian company that is a provider of solutions, including innovative R&D and late-stage program management and commercialization, for applications affecting energy, health, and security.