Critical Incident Management and Geographically – Based Systems

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ABSTRACT

In the United States there is a strong dependence on decentralized policing services, delivered by thousands of police departments. As a primary police professional development management institute in the United States, the Law Enforcement Management Institute of Texas (LEMIT) identified that there existed a paucity of management development opportunities for police command staff engaged in critical incident management. This paper describes how LEMIT met this challenge and became a leading U.S. institute in this exciting field of operation.

Keywords: Critical Incident Management, Decision-Making, Geographic Information Systems, Immersive Training, Incident Command, Simulation Training

INTRODUCTION

In the United States, unlike many other western countries, heavy reliance is placed on decentralized policing services, delivered by thousands of police departments. Many of these departments are small in size. For example, in Texas where there are over 1,000 municipal police departments, nearly 50% have less than 25 sworn officers (Webb, 2008, p. 27). In the larger police departments there are greater opportunities for command staff to work as members of an incident management team, and due to the volume of incidents, a greater chance of receiving opportunities to develop their command skills. Recognizing this fact, in 2002 the Law Enforcement Management Institute of Texas (LEMIT) embarked on a new program to address the issue. Incident Command Management Development was introduced for police chiefs and command staff, but utilizing traditional table-top exercises as one of the educational tools.

However, the problem with conventional classroom development was that the participants did not have their decision-making tested under stressful exercise conditions. There is a growing body of literature concerning decision-making under stressful conditions. The question we posed was, “how do you create those conditions in a controlled environment and therefore expose the participants to real-life type expe-
riences?” Flin (2002, p. 4) argued that “the distinguishing feature of the incident command environment is that of the rapidly developing incident where information is incomplete, stress levels are high, and there is an acceptance that not making a decision is not an option.”

The LEMIT solution was to design an immersive training and development environment that simulated real life command situations. The program eventually took the name of InCoSiT, an acronym for Incident Command Simulation Training Program. During its development, a number of options were considered, including the use of gaming technology, but the chosen solution was to design and build an Incident Command Suite, populate the command positions with computers, throat-mikes and telephony, and support the decision-making capability of the command team with multi-layer geographic information embedded with real data, maps, plans, diagrams, aerial photography and multimedia film clips. In the planning phase it was envisaged that the geographic data would be displayed in the suite on a digital imaging table.

The decision to follow this course challenged conventional organizational and personal development approaches, and was not the cheapest option by any means, but the whole design and its subsequent construction and operationalization was to prove a winning concept that others would follow. We knew that there were calculated risks in being in the vanguard, not least of which were the chances that the hardware and software solutions would not deliver the desired outcomes, but our planning was to prove beneficial.

Our solution embodied the use of considerable technical aids, but the key to the solution was the fact that these technical aids were put in place to support the program and not as an end in itself. The Command Suite was equipped with cameras and microphones to record the dynamics of the exercises. All contact between the Command Team and the ‘outside world’ was by computer link to the Control Room. All decisions and requests for deployments, resources and information requests are handled by ‘Control’ with a record of all transactions being maintained on a rolling log, timed by the second. ‘Breaking News’ stories were first used as injects to enhance the reality of the scenarios, and were filmed at a local CBS News station using real newscasters and interjected on one of twelve large plasma screens in the Command Suite at appropriate times during the scenario. Today, participants who play the role of ‘Information Officer’ are filmed real-time in our own studio, and their broadcasts are interjected on screen for the benefit of command team members.

**GEOGRAPHIC CONSIDERATIONS**

Geography is an element of every emergency situation and geographic decisions are among the very first required actions under the National Incident Management System, or NIMS. Although geographic information systems (GIS) technology may not be applicable, or available, for smaller incidents, its relevance increases as the incident expands in seriousness. Our intent, therefore, is to expose emergency managers to the technology should they be confronted with it at a large scale event or an event with a multitude of geographic variables.

Among the geographic decisions that must be made, first and foremost, is the formal establishing of an Incident Command Post. The location is arbitrary, but can significantly impact the emergency response if located in harms way. Additionally, and depending on the nature of the event, other areas such as a hot zone, resource staging areas, media staging areas, triage, helicopter landing-spot, rehabilitation area, decontamination area, and reunification area may be required.

The technical approach of our training incorporates real-world data and locations that reflect potential emergency situations and management technology which could be brought to bear. Primary among these technologies is the use of GIS as a tool for situational awareness, commonly referred to as a COP, or Common Operating Picture.
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