



## CHI Systems

### Locating Downed 1st Responders



One of the more critical needs of the Department of Homeland Security is personnel location systems that can operate in Global Positioning System (GPS) denied environments such as large buildings and underground tunnels. Personnel location systems facilitate more rapid location and recovery of downed firefighters and other emergency response and security personnel in the event of a major incident such as the 9/11 tragedy.

Understanding this need, CCAT sought out personnel location technologies in its 1401 national solicitation in 2008. CHI Systems – a company based in Poway, CA – responded with a proposal for their Distributed Crisis

Coordination, Command and Control System (DC4S) which had been developed for the military special operations community.

The DC4S tracker uses the embedded GPS on a cell phone to track personnel during operations in the field. The system offers real-time situational awareness, tracking, visualization, and sharing of a common operational picture. The system enables dispatchers to rapidly locate all 1st responder personnel and visualize which ones are down and which ones are presently mobile.

CCAT funded product modifications to the system making it more adaptable to civilian 1st responder use. The system was inserted into real-life operational demonstrations to test its efficacy with fire fighters and law enforcement personnel. Demonstrations were conducted at a subterranean storm drain in an officer-down scenario and at the San Diego Convention Center in a hostage/shooter scenario. Under both scenarios, the affected personnel were found within two meters of their plotted locations.



As a result of this success, CHI Systems spun off a special division (Layered Security Solutions) to market the system to 1st responder agencies. The Department of Homeland Security Immigration and Customs Enforcement recently purchased four systems to be deployed with officers operating in underground tunnels along the U.S./Mexican border.

#### **For more information, please contact:**

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