

Standard Operating Procedure

Searching a Car for an Individual

Every scenario is going to be situational and rely on what information is provided prior to the operators being on site. The following is the general approach on how to handle an AMBER Alert situation utilizing our package of sensors and what will be accomplished. This approach would be similar as to how the operators should search for a fugitive or a similar situation. There will be an assumption that the operators are provided with the details about the child, a brief description of what the suspect might look like, and a description of what the car looks like. After isolating a car that is suspected to be involved with an AMBER Alert, an officer on the scene will be able to attempt to determine if there is a person being hidden within the car using the following procedure.

First, the officer will command if there is someone within the car to make audible noise or create movement if possible. In the case of a fugitive, the officer would not want to alert the person hiding that they are being searched for. If the officer is not able to identify if there is a child present within the car, they will deploy the motion detector by holding the sensor up to the back and sides of the car trunk. This will provide information on whether there is an object of interest that will lead to probable cause and the opening of the car. For our purposes, this indicates a person is present. The motion detector will pick up movement through a car trunk and has the capability to identify motion from an individual who is fully restrained and unable to move themselves. This sensor will be able to detect heavy breathing from an individual.

If there is no movement detected the officer will utilize the radio frequency detector to identify if a cell phone is present within the car. This sensor will provide the officer with an directional signal that can scan through a car trunk to determine if the child has their phone in their pocket. For this project, a positive identification that a phone is in the trunk of the car will give probable cause that a child would be in the trunk and the car needs to be opened. If no cell phones are detected by the Mobile Phone Detector, we proceed with using the SnakeScope and the AVMU as the operator sees fit.

Rubble & Collapsed Building

Retired CMSgt. Barry Reinartz was the 148th Emergency Operations Center (EOC) Representative for Logistics Readiness Squadron (LRS) for all Major Accident Response Exercise (MARE's) which included Active Shooter, Chemical Biological Radiological and Nuclear (CBRN) Events, Civil Disturbances, and other events. According to CMSgt. Reinartz, the primary concern in any form of emergency situation should focus on maintaining order and rescuing survivors. The following steps are listed in the order to best use the system of sensors included in this report for a collapsed building situation.

The first order of business is to construct a chain of command and map out the area the operators will be sweeping. If those maps are available, the GUI will have access to them. Communication will be maintained between the operators and the command post through radio contact.

Once the operators have an understanding of the previous layout of the collapsed building, they will proceed to sweep through the area, paying attention for any exposed body parts or noises. They will use the WolfHound-Pro to detect for any mobile phone activity in a given area, and if there is any, notifying

the command post. The WolfHound-Pro is being used to target and direct the operators to specific areas that the operators believe for people to be in.

The next step would be to determine if the SnakeScope can be used to gain a visual or hear a survivor. An additional benefit of the SnakeScope is the ability to see how the collapsed pieces of the building are arranged or pinning the person down.

The Motion Detector sensor offers the ability to detect movement as slight as aspiration, and should be used given the opportunity. The AVMU radar requires a higher degree of movement for detection, but it should be used at the operator's discretion.

The information the operator's gain from the system of sensors will be utilized to make informed decisions such as where to immediately start and proceed with the removal of the rubble and the rescue of the survivors.

Active Threat

Active Threat situations pose the most diverse arrangement of conditions our operators may face. All of the SME's from Law Enforcement have said that the moment that they hear gunfire; they are sprinting toward the scene. This procedure will inform the operators of how to use the system of sensors prior to hearing gunfire. The operators will be moving in a team of two as described above with the Radar and the Field Operator. The operators will have access to the floor plans of the building and view them on their GUI.

The AVMU radar is to be used immediately upon entering the scene, and determine if there is anyone within 200ft of the front of the antenna. The Radar operator should rescan the area with the AVMU at least every 100ft or at their discretion.

As the operators are proceeding through the building. The operators have the ability to run either the AVMU or the WolfHound-Pro. The Field Operator will run the WolfHound-Pro unless the AVMU is in use.

The SnakeScope will be used to clear avenues of threat and look underneath doors before entry.

The Motion Detector is to be used before entering an area as it requires a lesser degree of movement than the AVMU to detect motion and has a faster deployment and run time than the AVMU.

This system is designed to integrate with the deliberate search procedures that were displayed at Lt. Shene's SWAT training exercises.