

Systems integration
Remote visualization
Perimeter security
Real-time solutions
Communications
Robotics
Wireless hazmat detection
Radiological and chemical detection



Automechs LLC

Providing Situational Intelligence to Dynamic Situations

INTERVIEW WITH TIM MURPHY By Candace Carman

Our communication structure for responding to terrorism and natural disasters was not intended to defend against an enemy that utilizes coordinated attacks. "In a large enough incident, situational commanders can fall into the trap of information overload, while critical information becomes bottlenecked, or overlooked."

Tim Murphy, a visionary pragmatist created Automechs -to develop faster communication systems, with setups that can survive infrastructure attacks, and provide situational intelligence to decision makers while minimizing the risk to human life. It is dedicated to providing aid to groups ranging from community-based first responders to government agencies."

I had the pleasure of an extended email conversation with Mr. Murphy. I'd like to share some of that conversation with you now:

Q. What does the Distributed Information Network (DIN) do?

A. The DIN moves information around in an approach more like a spider web versus a stovepipe. In a stovepipe, the different pipes of information don't talk to each other. In a web there is a redundancy that allows for points of failure. The way we structure our network

is to detect the network faults and automatically bypass them, without the user having known anything was wrong.

Q. What is your long-range vision for this network?

A. To be able to allow FEMA-like groups to enter any area in the US and know everything about every response vehicle and responder in the area.

There is too much information, and not enough routes to pass the information to the appropriate people. We are looking to consolidate how the information travels.

Q. How does it interface with the net?

A. If the net is available, great; if it isn't, it doesn't have to be.

The more resources that come into the DIN the stronger it is, but it can act completely as a stand alone system. Local responders can setup our devices in the field and look for chemicals in the air, or search for survivors in a rubble pile until communications arrive. When the reach back to the net occurs, there is a seamless transition to the web.

Q. Is this based on a multiple node system?

A. Yes. Nodes can be used to pass messages to each other, as well as

communicate with one another. Nodes can be anything, from a field station, to a laptop, to an ambulance.

Q. Can it be used from multiple sites simultaneously using military, commercial radio, wired, wireless or satellite?

A. It can become one giant cell or it can be a combination of distributed cells operating in the same area, and using satellite to link the groups together. This allows, for example, Center for Disease Control to look at a blood culture under a microscope while *IN* the hotzone, without leaving their facility.

Q. Who or what groups do you see making best use of this?

A. Primarily, first responders, but it's flexible enough to be used by anyone doing perimeter security, multi-agency operations, or deployed field monitoring. If, for example, one group has purchased your hardware and they have Memorandums of Understanding [MOU's] with several organizations does this mean that each of those groups would have to purchase your hardware?

Think of it like a potluck. The more you bring, the better, but there will be people who won't bring anything and still get to share. Our current goal is to make the systems cheap enough for volunteer groups. Our system does not have a per minute charge. Buy the hardware, leave it on 24/7; there is no added cost.