TECCS

Track Emergency Command Communications System

Disaster Response Applications

Hurricanes, Wildfires, Tornados, Floods, Earthquakes, and Terrorist events all result in widespread loss of critical infrastructure. The first 4 to 72 hours following these disasters are critical in minimizing loss of life and property. However, this is exactly when first responders are most handicapped and largely isolated by the severe lack of communications infrastructure. Communications towers and outside plants are down, damaged or destroyed. Incident commanders rapidly lose communications control of deployed teams, equipment, and supplies, while team leaders in the field are forced to react to local conditions with minimal benefit from overall tactical coordination.

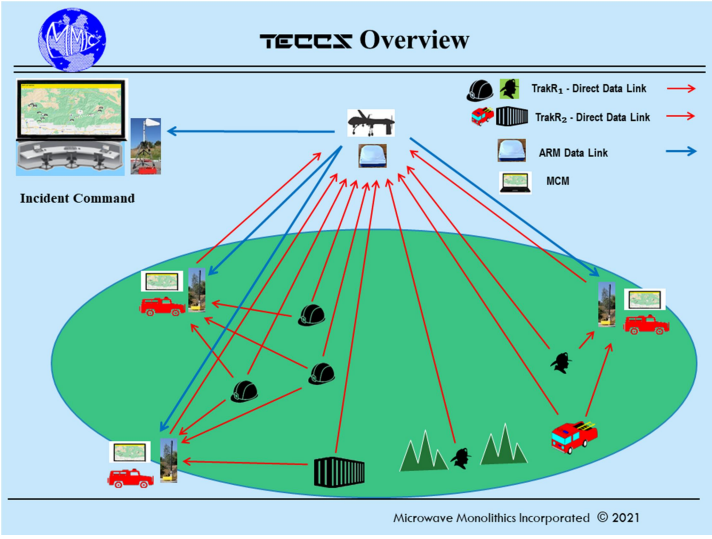
Microwave Monolithics Incorporated (MMInc.) developed TECCS (Track, Emergency, Command and Communications System) to fill this critical gap. While preparing for disasters with advanced warning such as hurricanes, or at inception of a sudden disaster, TECCS immediately establishes real time communications about who, what, and where. This flow of vital information continues as the disaster unfolds, through the immediate S&R period, and on through the recovery phase to enable the best coordinated overall operation possible. During quieter times, while standing-by for the inevitable next disaster, TECCS provides support for on-going preparations and training. It fully supports any critical events such as wildfires in hinterlands, open water and swift water rescues.

TECCS provides both incident command and team leaders in the field with an interactive REAL TIME large area map displaying data to the level of individual personnel, equipment, and supply trailer. All one needs is gas and/or diesel in vehicles and you're "good to go". All without the need for cell towers, radios, a satellite connection, or recurring connection charges that can quickly spiral beyond affordability. This detailed "live" logistics information could be forwarded to regional or national coordination centers via satellite terminals such as Star Link. TECCS thus provides the "ultimate backup" when all else fails during and after a wide range of disasters.

TECCS consists of personnel and resource tracking units (TrakR) which transmit their encrypted "real time" location & ID for display at Mobile Command Modules (MCM) and Incident Command Modules (ICM). Every responder carries a TrakR1 unit, while vehicles, supply trailers, and equipment are fitted with TrakR2 units. Each TrakR can enter a clear channel emergency mode activated by a button on the unit. To minimize non-line of sight shadowing due to obstructions (mountains, large structures, over the horizon, and etc.), small, lightweight Autonomous Relay Module(s) (ARM) can be deployed on airborne platform(s) (Drones, UAV, aircraft, helicopter). The ARM receives all TrakR transmissions within its line of sight and forwards the information to MCM and ICM's. All data is consolidated at the ICM, and can be forwarded to central authorities over any data links (such as Star link) as they become available.

All TECCS data are automatically archived. After an event archived TECCS incident logs enable debriefing, review, critique, replay, and training opportunities, and could also prove useful during investigations or litigation.

In summary, TECCS is engineered to be an easily budgetable and maintainable system that provides all disaster commanders reliable and real time information about who, what, when, and where before, during, and after disaster events. It provides the "ultimate backup" communications and information solution when all else fails.



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