

Self-Healing Drone Swarms



Problem

Due to bandwidth and security limitations, needed network capabilities cannot be delivered to operators behind enemy lines. These limitations increase risk to life. An example is FMV battlefield telemedicine.

Solution

Control algorithms to establish an autonomous drone swarm over a geographic region to provide 4G or 5G network connectivity to operators on the ground.

Partner



Benefits

- Provides automated shorter term high bandwidth networks at the edge over contested or disaster areas
- Can be extended to provide area denial capabilities

Status

- Initial algorithmic prototyping underway to provide scheduling of drone swarm
- Initial prototyping with AT&T cellular coverage models to plan coverage and recovery of swarm underway

