Survivable Real-Time Network Services (J175)

**Impact**

- Minimize dependence on engineered network configuration data
- Avoid intricate case-by-case analysis of failure/fallback/recovery scenarios
- Provide automatic reconfiguration in case of network reconfiguration or failure

**New ideas**

- Dynamic peer discovery using intelligent multicast algorithms
- Self-organizing, multiple server topology for redundancy and diversity
- Automatic repair and restoral using adaptive, constrained-metric heuristics
- Self-organizing security infrastructure

**Schedule (fourth year)**

- Refine and test Autokey security protocol for ad hoc sensor networks
- Refine and test expanding-ring, hop-limited, Autoconfigure manycast algorithms
- Document and prosecute on standards track

University of Delaware: David L. Mills