

Installation of Alarm Monitoring System for the City of Buffalo, NY and the Erie County Dispatch Center

Challenge:

The City of Buffalo, NY and the County of Erie, NY required a UL, FM and NFPA-72 compliant Networked Alarm Monitoring System that would receive and share alarm information from the City of Buffalo's existing city-wide 100-milliamp Telegraph system and existing and future Digital Alarm Communicator Transmitters (DACTs) and the County of Erie's existing and future DACTs. Both the City Fire Dept. Alarm Dispatch Center and the County Alarm Dispatch Center require that their alarms be sent to their individual Computer Aided Dispatch Systems (CAD).

Digitize and Simplex Grinnell Solution:

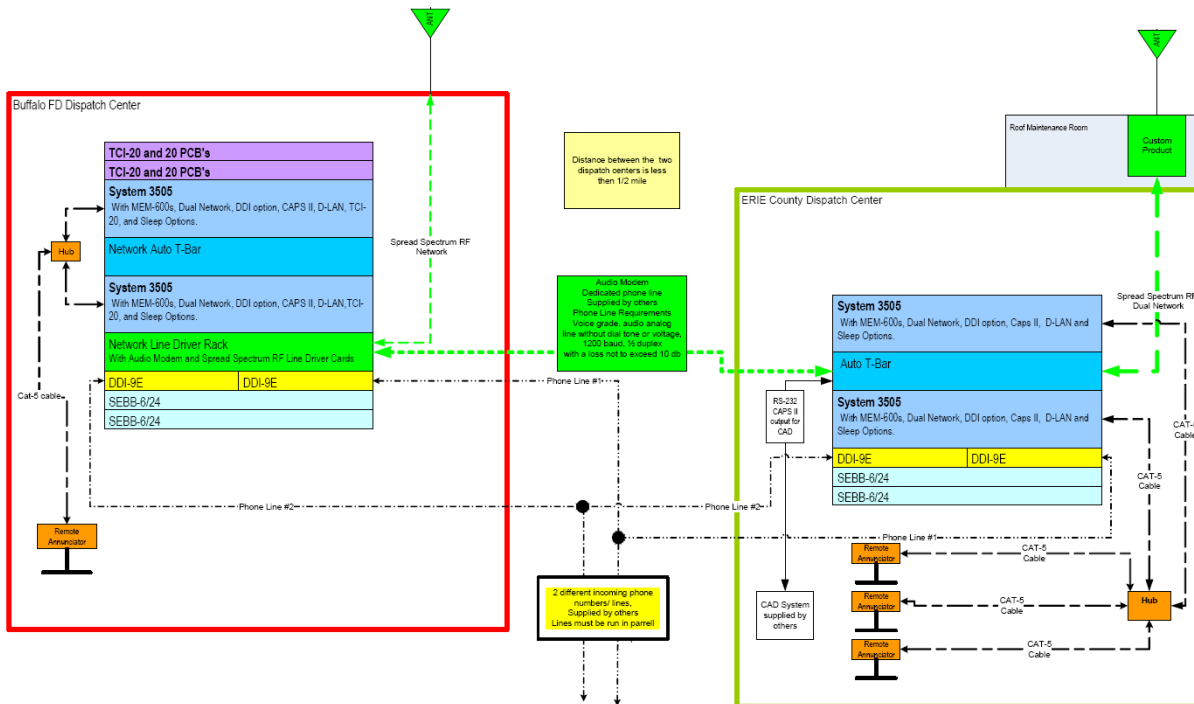
The Buffalo F.D. Dispatch Center is comprised of Redundant System 3505's with Autotransfer switching, accepting alarm input information from both the existing 15 circuits of 100-milliamp Telegraph System and City's Digital Alarm Communicator Transmitters (DACTs). New Form Four 100-milliamp regulating power supplies and two DDI-9E Digital Alarm Monitoring Receivers (DACRs) replace the city's 18 year old Digitize System 3000 units and Form Four. A Digitize Remote Annunciator is included for supervisory use. Ethernet outputs from the System 3505 units to the Fire Dept.'s Computer Aided Dispatch system are provided.

The New Erie County Dispatch Center is accepting the County's existing and future DACTs via Redundant System 3505's with Auto-transfer switching and two DDI-9Es, along with the networked alarms from the City of Buffalo Fire Dept. Systems. These alarms will be sent to the County's CAD System and three Digitize Remote Annunciators. As an additional fail-safe, both the County's and the City's DACTs are programmed to call each other's DDI-9E's (DACR) secondary phone number.

The Buffalo FD Redundant System 3505s are communicating to the Redundant System 3505's located at the New Erie County Dispatch Center, via a Dual Network communications link. The Dual-Network allows the on-line System 3505s to communicate via both Supervised Polling Multiplex Audio Modem and Spread Spectrum Radio Frequency technology. A Dual Network is extremely robust, providing two methods of communication, thereby ensuring network communication.

Please refer to the representative block diagram on the next page.

Representative block diagram of the City of Buffalo and the County of Erie, NY Alarm Monitoring System:



System Benefits:

The system's ability to provide the City of Buffalo and the County of Erie important lifesaving information is provided in several ways:

- Under normal operation the city and county can work together to provide their citizens with a accurate and speedy response to emergency and life threatening situations.
- System integrity and survivability is provided by each entity having redundant systems.
- Each system can stand on its own and receive the other systems alarm information.
- Each system can operate as a fallback position for the other system
- The dual wire and radio network ensures communication between the city and the county's systems. This ensures that the systems will provide vital information to both the county and the city's systems during a crisis.
- Record keeping and report generation capabilities are enhanced by the systems ability to automatically provide all the alarm information to the individual city and county CAD systems.