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DARIEN EMERGENCY SERVICES RADIO SYSTEM



DARIEN EMERGENCY SERVICES 2-WAY RADIO SYSTEM PROJECT

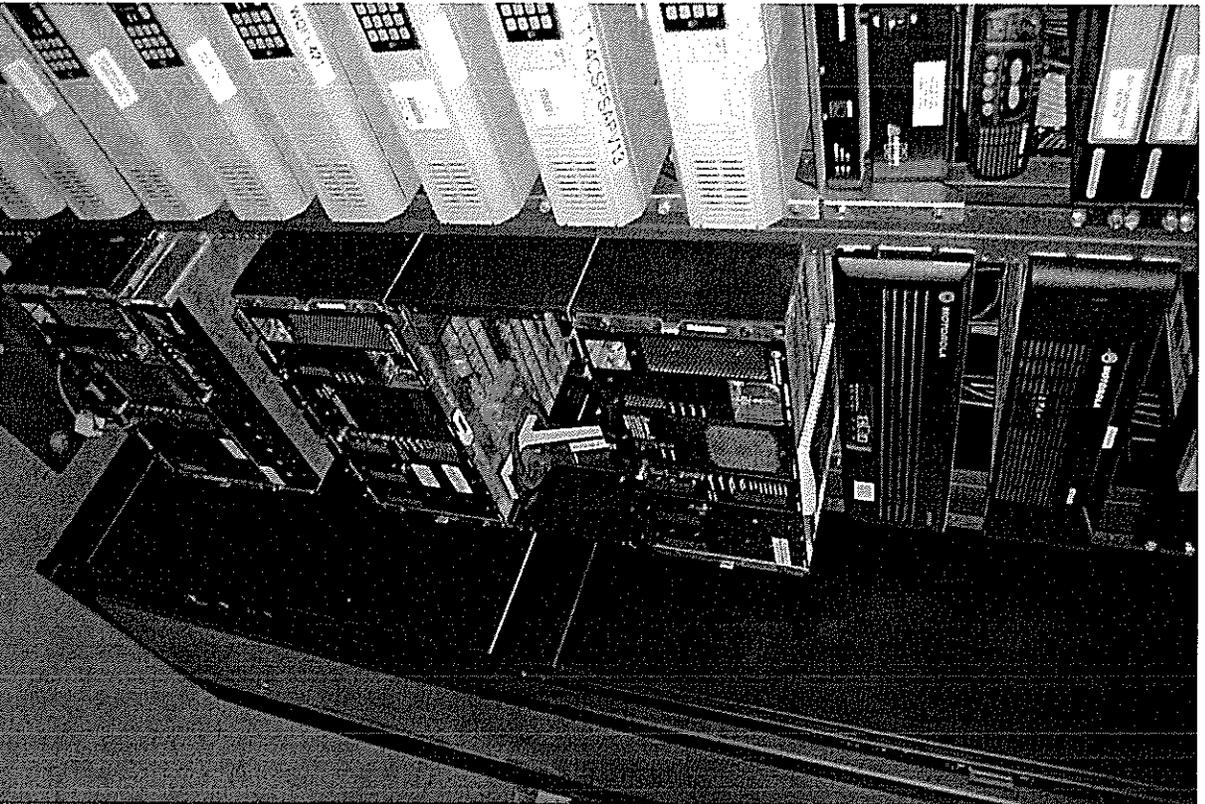
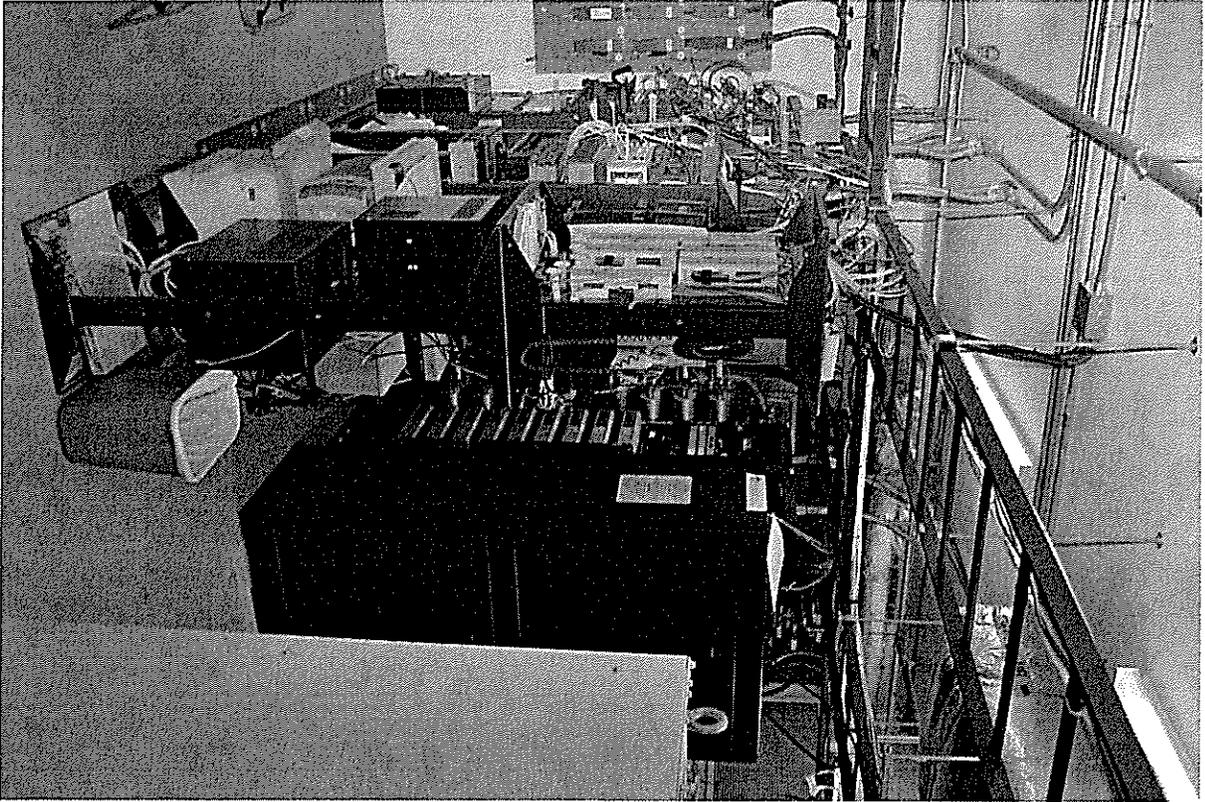
Original infrastructure components installed in
FY1998 & 1999 cost was approximately \$800,000.
The current hardware, ceased production in 2011.
Maintenance support will only be available for a
few more years.

System Overview

- Each agency has a primary channel, with an additional secondary operational channel.
- Exception is EMS only has a single channel.
- One Inter-operable channel for all agencies to operate (town-wide).
- Each channel has main repeater.
- Each channel except the town wide has a redundant backup repeater
- Repeaters share antennas and cables through a combiner filter.
- Connectivity provided by town fiber network, phone circuits, and direct point to point microwave.

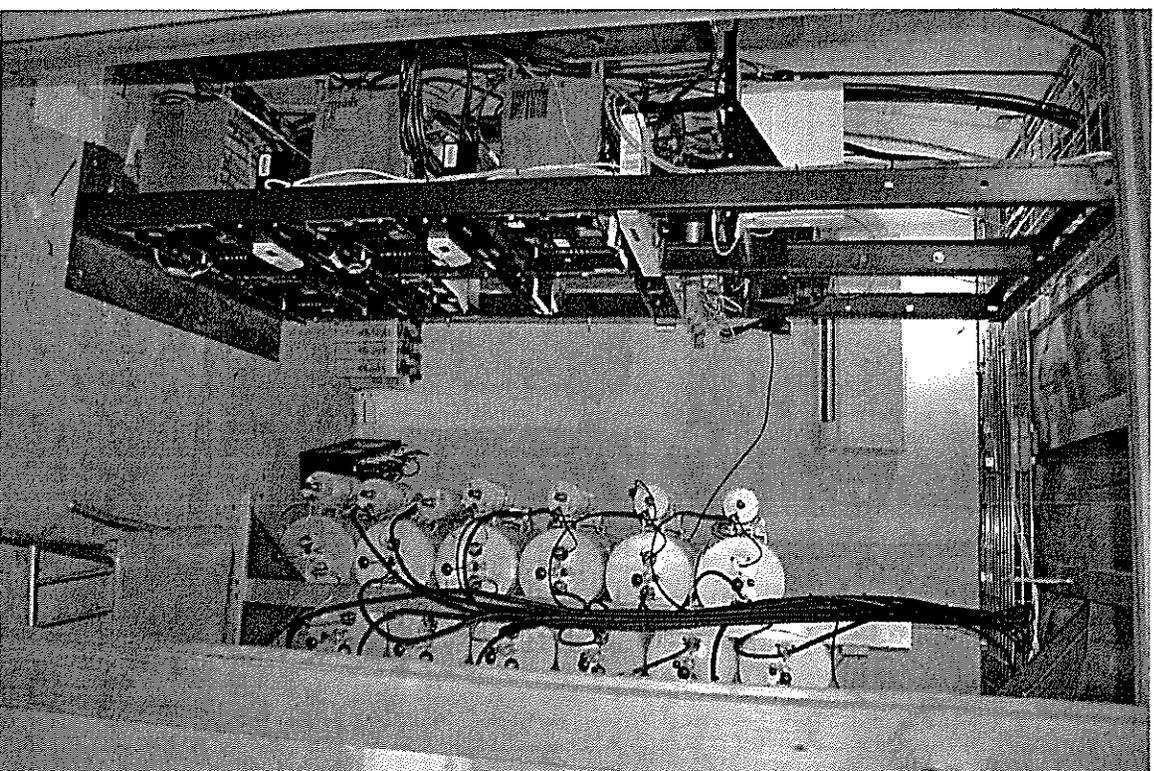
Coverage-provided by multiple sites

- The system is similar to a cellular phone system; which is supported by multiple sites, to insure the coverage necessary in town. Police, Fire, and EMS have replaced almost all of the portables and mobile radios over the past few years. They rely on the infrastructure to operate.
- Receive and/or Transmit sites (infrastructure):
 - Darien PD (main site)
 - Middlesex Middle School (backup site)
 - Water Tank on Tower Drive
 - Tokeneke School
 - Sterling Farm Golf Course-(Future site for Rt. 106 coverage).

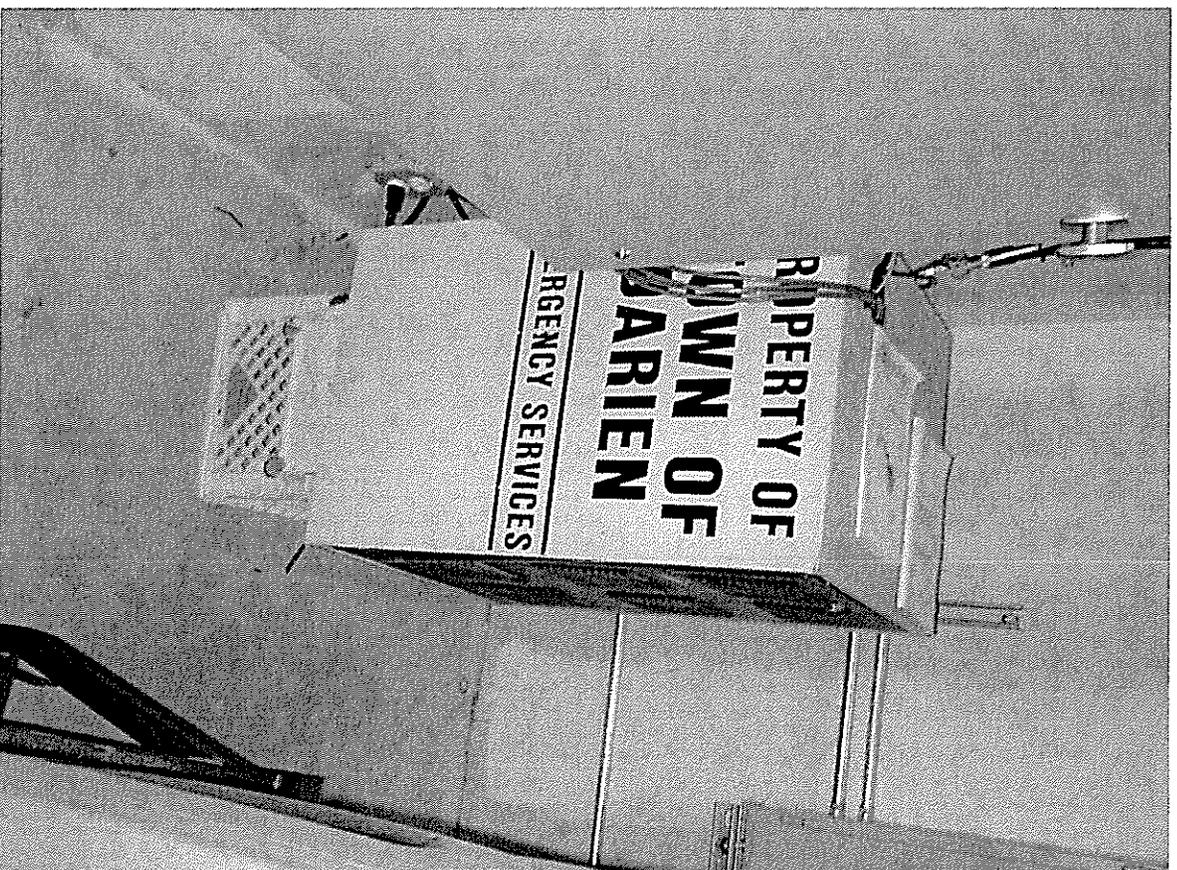


Darien PD

Middlesex Middle School



TOKENEKE SCHOOL

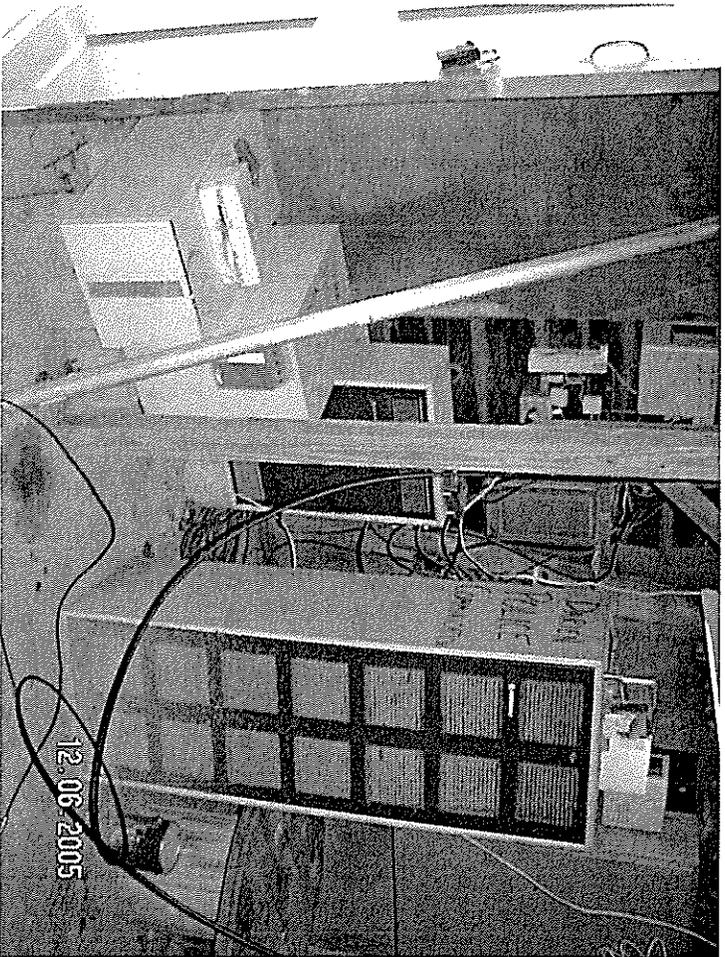


Sterling Farm-Proposed

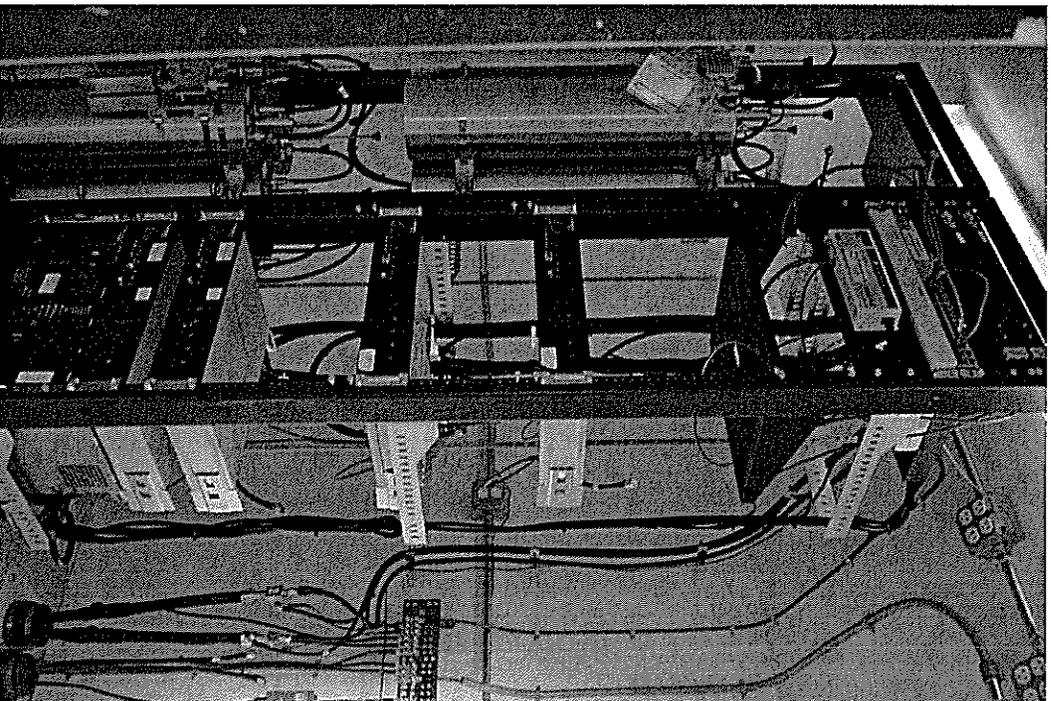


Tower Drive

BEFORE



AFTER



Project Overview Cont'd

- Plan for FY 14/15
 - Change out all channel 1 hardware at all sites
 - Change out connectivity equipment to IP based controllers.
 - Provide common operating platform for connectivity for police, fire, and ems.

Project Overview

- The current year plan:
 - Replace Point to Point Microwave link (tank to PD).(completed)
 - In order to start installation a lease agreement with Aquarion Water was required by Aquarion, since old handshake agreement was with CT-American Water Company from early 80's. (completed)
 - Install site equipment in a secure environmentally controlled facility with back up power. (completed)
 - Replace fire channel 1 at this location.
 - Complete MOU with Stamford for site location at Sterling Farm. This would provide for lack of coverage along Hoyt Street and its side streets that is currently deficient. Install all agencies channel 1 equipment in their existing emergency services at this site.

Future Planning

- Follow FCC directive for licensees in the UHF “T” band to relinquish licenses and relocate to other radio band spectrum. Approximately FY 2021-2023.
- This involves most of the town’s 2-way radio channels.
- May involve a complete overhaul depending on what band spectrum is available in the future.
- Price tag for migrating to other than UHF spectrum will involve 1.5 million to 2.25 million taxpayer dollars, though the FCC may assist in the cost to migrate, depending on the outcome of the auctioning of the T band spectrum.
- Law states up to \$7 billion may be spent to those licensees. There are 13 urban areas of the country affected, and 808 licensed public safety users in the T-band spectrum.

Project Overview Cont'd

- Plan for FY 15/16
 - Replace all channel 2 hardware at all sites.
 - Replace connectivity to IP based controllers for those channel 2 pieces of equipment.
 - Replace common-operating channel repeater (aka town-wide channel)