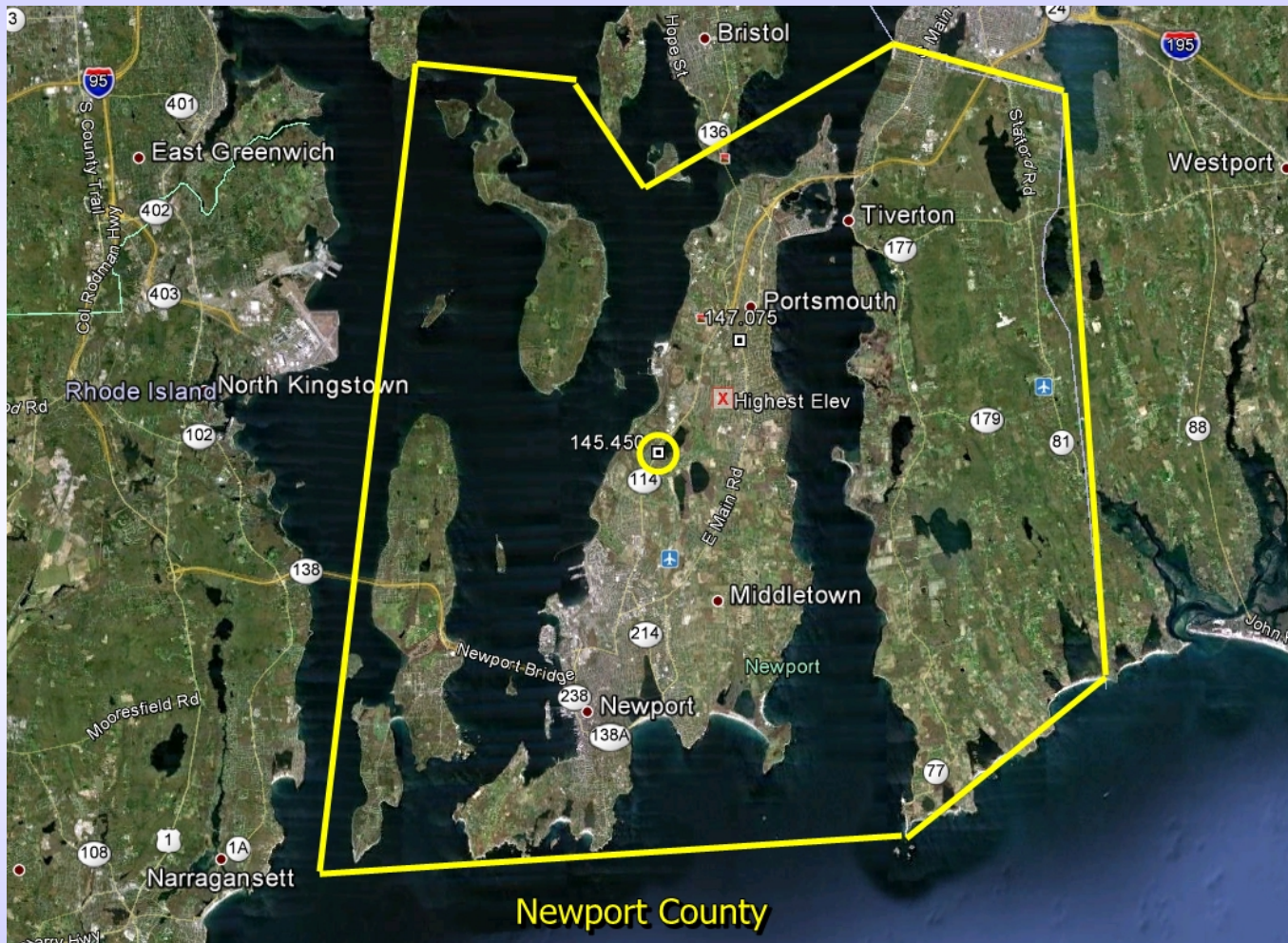


W1SYE Repeater

Ideally located to serve Newport County



W1SYE Repeater

New antenna and transmission line installed by Willy MacLean, W1LY



W1SYE Repeater

Current Repeater Status

- Coverage is reasonably good
 - Goal – Provide HT coverage for all of Newport County
- Repeat audio has low deviation
- Voice synthesizer has full deviation
- Audio delay clipping last word of user transmission
- Repeater receiver is being desensed by repeater transmitter
- Intermittent crackly noise in repeater receiver
- No way to determine if repeater site has AC power

W1SYE Repeater

Proposed improvements – Phase 1 – Audio levels and ID's

- Set audio levels
 - Full deviation for repeat audio
 - Reduced deviation for voice synthesizer
 - Reduced deviation for CW ID (see below)
- Controller programming changes
 - Decrease audio delay time to 100 milliseconds
 - Program 'Active' and 'Idle' voice ID's
 - Allow user to talk over 'Active' ID
 - Switch to CW ID if user talks over voice ID
 - Eliminate promiscuous voice ID's

W1SYE Repeater

Proposed improvements – Phase 2 – RF System

- Transmitter
 - Transmitter performance measurements
 - Retune or repair if needed
- Receiver
 - Receiver performance measurements
 - Align or repair if needed
- Duplexer
 - Clean all connectors
 - Inspect all interconnect cables
 - Retune duplexer in place

W1SYE Repeater

New Capabilities – Site Telemetry and Control

- Site AC Power Status – Indicated by unique Courtesy beeps
 - Normal beep for AC OK, Two-tone beep for AC fail
 - Need logic high signal for AC OK
 - Need logic high signal for AC fail
 - Program 2 controller inputs for above
- Other telemetry capabilities can be added
 - Sky is the limit
- Control capabilities can be added
 - Eight control channels available in controller
 - Could be expanded to n channels