

MARC Repeater Update

21OCT24

KR4YK- Fred

Updates since 16SEP23

Bald Knob Site

Bald Knob Site- 146.840

- **Added courtesy tone on 4NOV23 to try to cut down on “doubling”.**
- **MARC membership voted to remove this tone on 15JAN24.**

Bald Knob Site

- **Major power problems at all Bald Knob sites on 12JAN24.**
- **Standby generator at Bald Knob failed.**
- **Generator replaced on 15FEB24.**

Bald Knob Site

- **Re-tuned bandpass filter to reject 154.920 on the 146.840 input side.**
- **Be aware that band openings, solar activity, sporadic E and ducting does influences VHF propagation.**

146.840 Antenna

Problems with the current antenna location:

- **Interaction with existing antennas**

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- **Interaction with existing antennas**
- **Lack of real estate on top of the tower**
- **Every antenna is a compromise**

146.840 Antenna Location Change

- **Lowering the antenna (~ 40') WILL affect the coverage pattern to the North.**
- **Re-location should improve dead spots in Montgomery.**

146.840 Antenna Damage

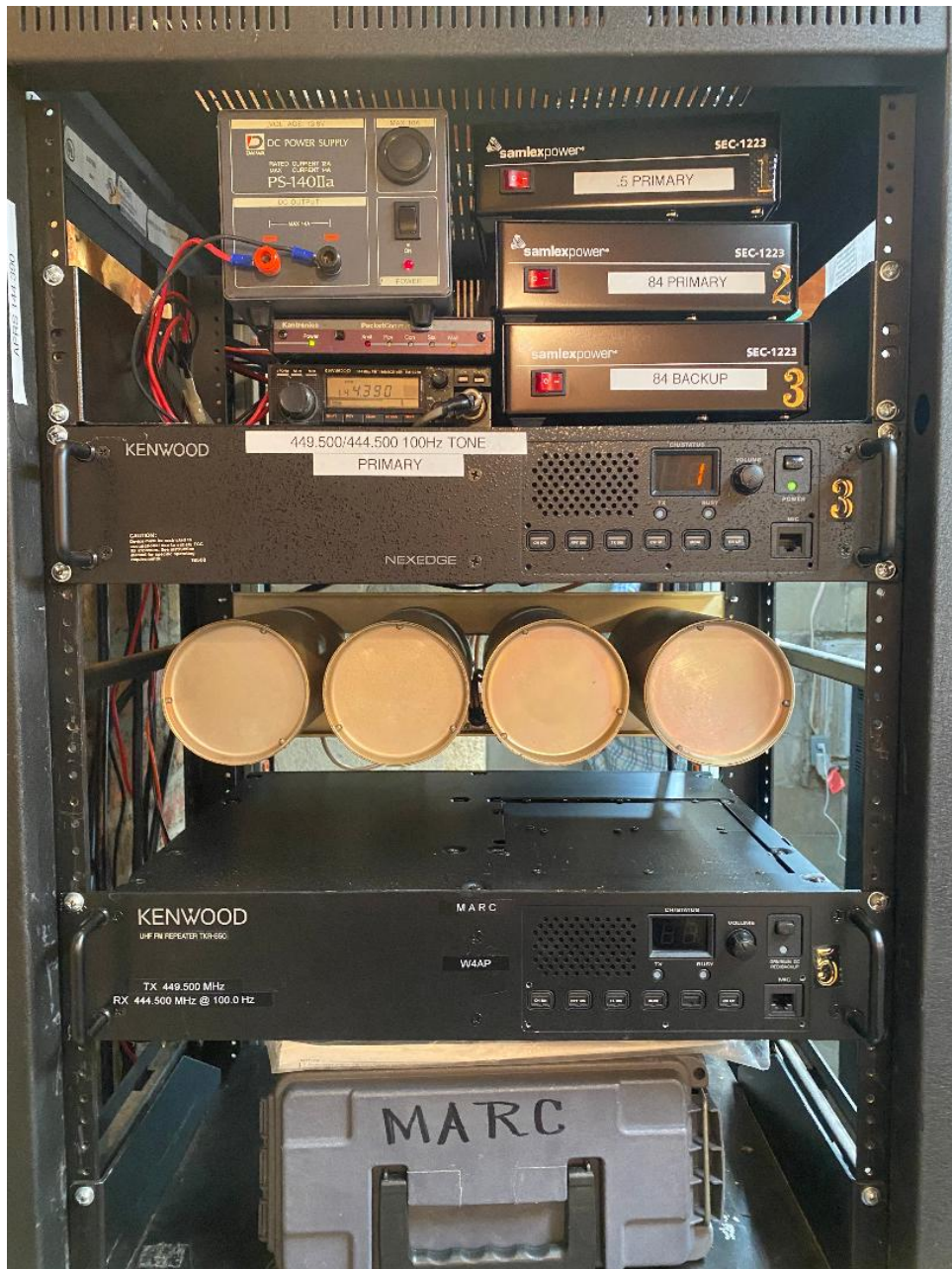
- **Lightning strike damaged on 8/9AUG24.**
- **Service restored on 9AUG24 (AM).**
- **Related problems developed later as a result of this strike (PM).**

Current Bald Knob Configuration

- **146.840 & 444.500 are on the lower dual band antenna using a diplexer.**
- **144.390 (APRS) is running on the upper dual band antenna.**
- **147.180 cross band is running on bottom antenna.**

146.840 Antenna Plan

- **TDR confirms likely antenna, matching harness, and/or connector damage. Feedline is OK.**
- **Antenna will be taken down for inspection and evaluation. Feed line connector will be inspected.**
- **Antenna will be relocated to the proposed location as planned.**



APRS System

APRS System Upgrade

- **Existing I-Gate location changed from W5NZ (Mark) to W4IJG (Jerome) in November 2023. It is still located in Pike Road (Montgomery Co.).**
- **Secondary I-Gate KD4AXP (Charles) added to provide diversified operations from Prattville (Autauga Co.).**



Ramer Repeater

Ramer Repeater

- **Reprogrammed the repeater to add a decode tone (123 Hz) to block the Villa Rica, GA repeater on 26JAN24.**
- **This Georgia repeater was being picked up directly in South Montgomery County.**

Ramer Repeater

- **Replace back-up battery and UPS with a 550A CCA battery on 8OCT24.**
- **Charger built into the repeater.**
- **This will extend the operational time to at least 24 hours in case of a power failure.**

Ramer Security- WS4PDR



Thanks for the Donation

K4PO (Phil) for the battery.

Cross Band for 147.180
Project Completed

Cross Band Repeater for 147.180

- **Kenwood repeater assembly completed and in test mode until 24OCT23 at temporary site.**
- **Moved to Bald Knob on 4NOV23.**
- **Upgraded UPS w/new batt on 21DEC23.**

Cross Band Repeater for 147.180

- **Simplex operation on 444.0750 MHz with 203.5 Hz encode tone.**
- **Listed on W4AP webpage.**

Cross Band Repeater for 147.180

- **UHF radio unit developed intermittent problems (starting late FEB24) and eventually failed.**
- **Radio repaired and re-installed on 2JUL24.**
- **Thanks to WB4UQT (Chris) for the repairs.**



Thanks for the Donation

- **KO4UWY (Mac) for the power supply.**
- **K4PO (Phil) for UPS batteries.**
- **KR4YK (Fred) for the UPS.**

444.500 Repeater

444.500 Repeater

Low power and problematic ICOM UHF backup repeater replaced with a Kenwood TKR unit on 15FEB24.

Other Area Repeater Updates

Wares Ferry Site (DSTAR, DMR and Fusion)

- **Major power problems on 12JAN24 resulting in D-Star, Fusion and DMR outage. Local repeater service operational but lost internet service connection due to server issues.**
- **Full operation restored on 3FEB24.**
- **Thanks K4DJL (EI).**

KE4LTT 147.200 (Waugh) Repeater

- **Off the air due to suspected lightning/power surge damage (8/9Aug24).**
- **Repairs completed and operational on 23AUG however failed again 1SEP24.**
- **MARC loaner repeater currently at this location.**

W4KEN 220 MHz Repeaters

- **The 224.880 repeater is off the air and will not return.**
- **The 224.840 (+ offset and 103.5 Hz tone) repeater remains on the air.**

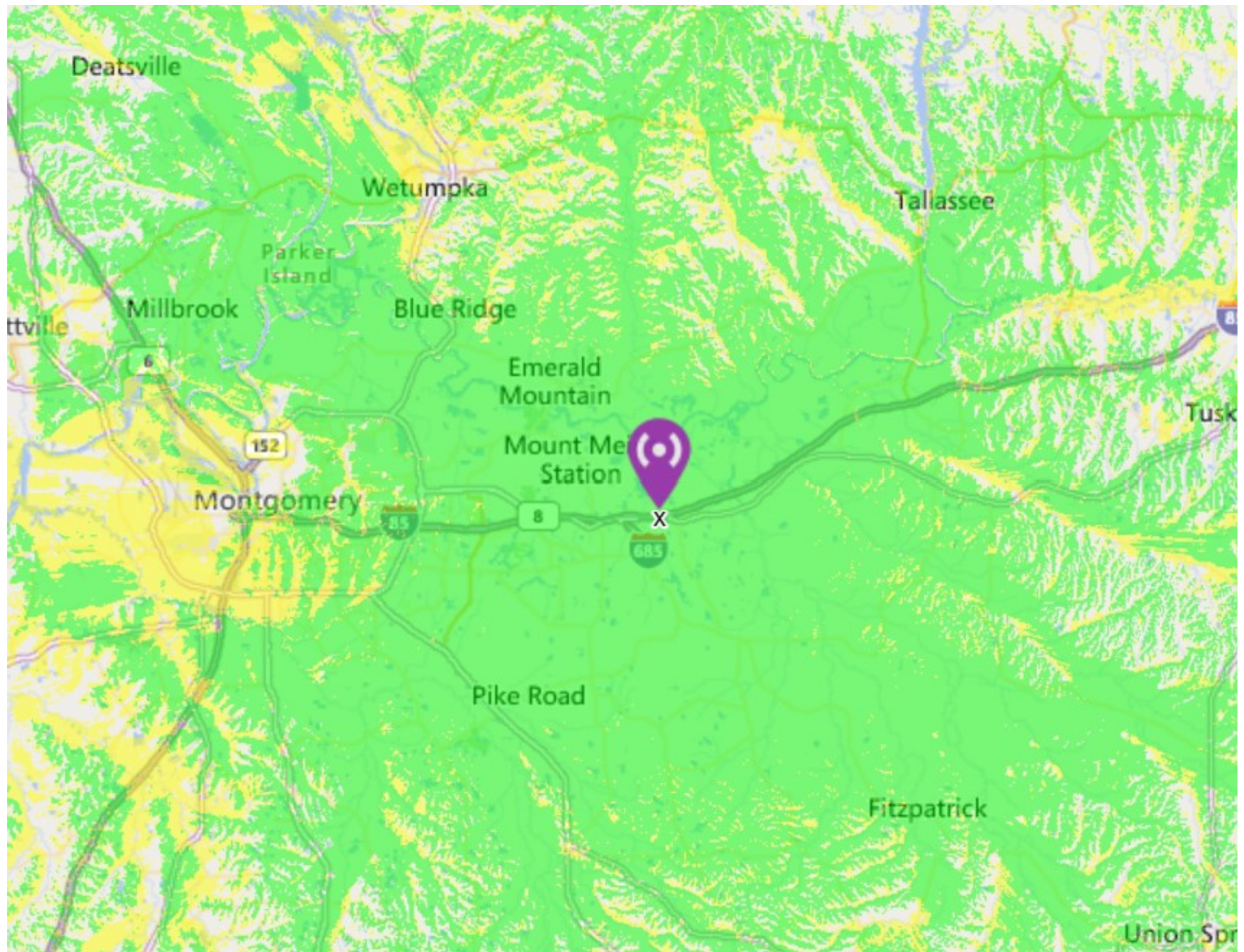
KF4RHA Repeater

- **Currently on 442.500 (+) with no tone.**
- **Will change to 442.550 (date and tones TBD).**
- **Likely re-location to W4KEN tower.**

**Waugh GMRS Repeater is
Operational**

Waugh GMRS Repeater

- **Installation completed and operational on 26SEP23 and field testing on 1NOV23.**
- **Listed as MTG600- 462/467.600 with a 141.3 Hz encode tone.**
- **Total cost to the club was less than \$400.**





Thanks for the Donations!

- **WB4UQT (Chris) for the antenna and feedline.**
- **Carl Howell (Communications International) for the repeater.**

Thanks for the Donations!

- **KN4AAZ (Kevin) for donation of a UPS.**
- **K4PO (Phil) for the UPS Batteries.**

GMRS Capability Now at the Club Station

- **Good coverage into the Waugh GMRS repeater.**
- **Will be used as a supplemental/coordination/
alternate communications method.**

Thanks for the Donation!

Thanks to K4PO (Phil) for the donation and programming of the UHF radio for the club station.

Elmore Co. GMRS

South Elmore Co. GMRS Repeater

- **KQ1USA (Jamie) and KS4TOM (Tom) installed an additional GMRS repeater for S. Elmore County on 20MAY24.**
- **Listed as WET550- 462/467.550 with 88.5 Hz tones.**

North Elmore Co. GMRS Repeater

- **KQ4VGE (Ernest) installed an additional GMRS repeater for N. Elmore County in July 2024.**
- **Listed as WTMP650- 462/467.650 with 141.3 Hz tones.**

“The Big Plan”

- **The original plan was to install multiple linked GMRS repeaters to cover the interstates in/out of Montgomery.**

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- **The original plan was to install multiple linked GMRS repeaters to cover the interstates in/out of Montgomery.**
- **However, on 14JUN2424, the FCC e-mailed a linked system in New York “suggesting” that they discontinue linked operations (which they did that day).**

What Happened Next?

- **On 14AUG24 the FCC stated that “Linking repeaters is not in the public interest under Part 95”.**

“Operation of a GMRS station with a telephone connection is prohibited, as in § 95.349. GMRS repeater, base and fixed stations, however, may be connected to the public switched network or other networks for the sole purpose of operation by remote control pursuant to § 95.1745”.

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- **Our linking project is now dead but the repeaters will remain as “stand alone”.**

Remember!

- **GMRS is a separate communications service that requires a GMRS license to use.**
- **The license covers all family members.**
- **Most repeaters are “open” and free to use.**

Alternate Input for 146.840 for Prattville Project

“The Prattville Problem”

- There is a known no/poor coverage area that is located on “the wrong side of the hill” that has always had a major problems hitting the Bald Knob repeater.**
- This project would provide an alternate input to the 146.840 repeater.**

Cross Band Repeater for 146.840

- **Low power and intended to specifically serve the West Prattville area.**
- **Frequencies have been coordinated.**

The Autaugaville Site is Now Out.

**July 2024- Site was
sold and the new owner
has decided to move
the tower to North
Alabama.**



Plan “B”

- **Autauga County EMA office has approved installation (26SEP24).**
- **826 Gillespie St. Prattville**



Autauga EMA Plan “B” Updates

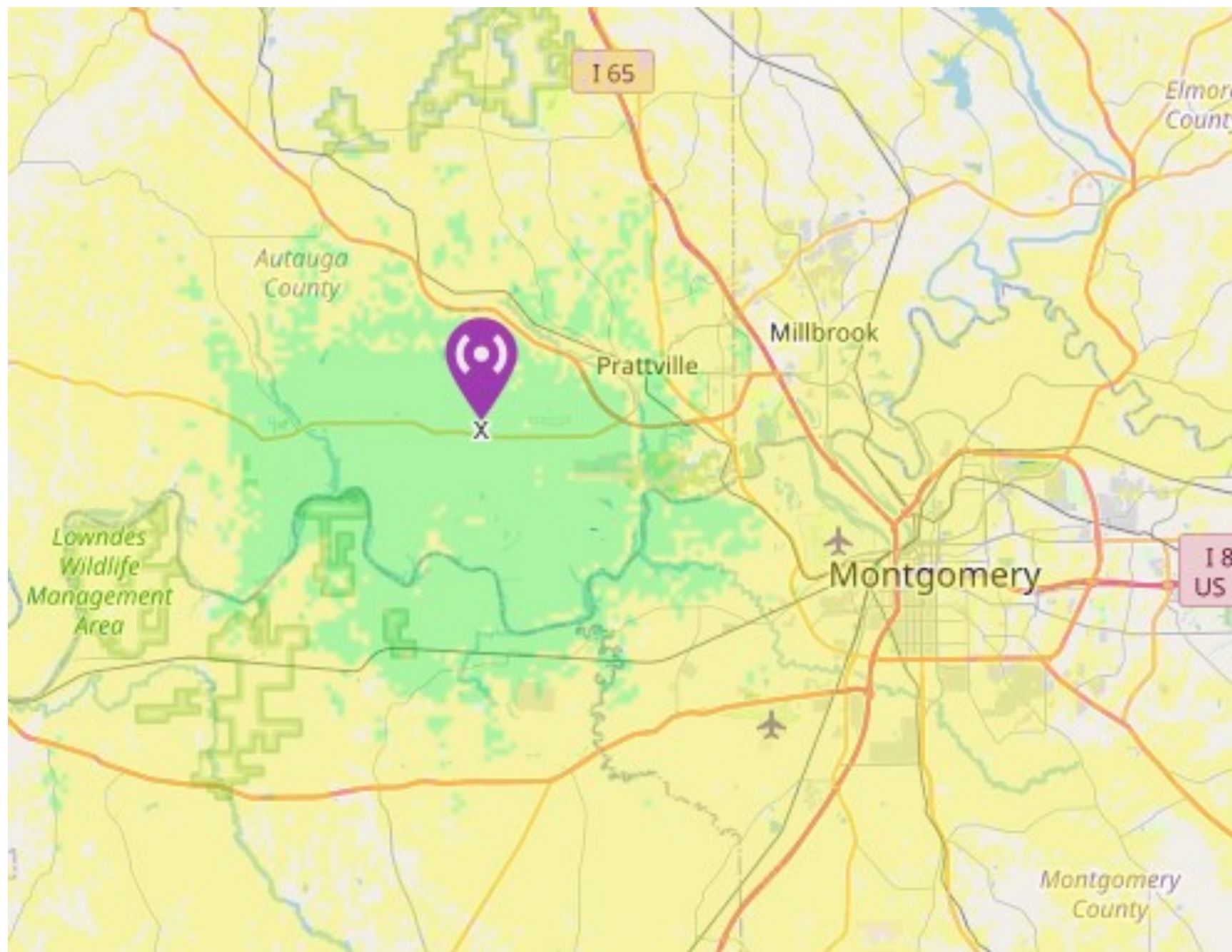
- **Thanks to KV4UZ (Trent) for the coordination.**
- **Survey trip made (20OCT24) by AK4KN (Ken) and KR4YK (Fred).**
- **Project Power Point sent on 14OCT24.**

Autauga EMA Plan “B” Updates

- **Equipment needs have changed due to site change.**
- **In process to identify equipment and hardware for the new site.**

Autauga EMA Plan “B” Updates

- **Frequency coordination completed for new location on 8OCT24.**
- **UPS from Ramer can be used at this site.**



Donations Needed

- **About 85' of coax and connectors.**
- **Small dual band vertical antenna.**
- **Offset antenna mount.**



Camp Tukabatchee Project

Camp Tuckabatchee Project

- **Project is to install an ~35' tower to generate interest in amateur radio.**
- **A permanent VHF antenna on top.**
- **A hoisting assembly for an HF wire antenna to be used as needed.**

Camp Tuckabatchee Project

- **Site visit on 22Oct23.**
- **Written project proposal submitted to BSA Council on 7NOV23.**

Camp Tuckabatchee Project

- **Presentation made to BSA Council on 14DEC23.**
- **BSA Council approval is pending.**

Thanks for the Donation

KV4AC (Randy) for the ROHN tower

Donations Needed

- **About 40' of coax and connectors.**
- **Dual band antenna.**
- **Sheet metal and access to a bending brake
(3 pieces approx. 5' X 15" each).**

Anti- Climb Panels

**Each of the three panels
are approx. 60" X 15"**



Camp Tuckabatchee Project

The tower and attachments will be donated to Camp Tukabatchee when the project is completed.

**and oh
yeah,
one last
thing...**

UHF Net

- **Monday at 8PM (except the third week due to the monthly MARC meeting).**
- **444.500 MHz (+5) with 100 Hz tone.**
- **Directed toward recently licensed hams, however all amateurs are welcomed.**

UHF Net

- **We are also looking for additional Net Control Stations.**
- **A good opportunity to give it a try and also prepare for emergency operations.**

A lot happens in a year!



**We just bought a book from
Ikea!**



shared by silversurfers.com