

MARC Site Equipment Update

20JUL26

KR4YK- Fred

Updates since 17JUN25

Bald Knob Site

Bald Knob Site- Completed

- **Replacement of upper dual band antenna.**
 - **14JUL25- dual band antenna developed a high SWR problem on VHF and UHF.**
 - **Replacement completed 25JUL25.**
 - **The other dual band antenna was replaced approximately 6 years ago.**

APRS at Bald Knob

- **A TNC programming issue was discovered on 27JUL25 and corrected on 1AUG25.**
- **Thanks to KD4AXP (Charles) for the programming fix.**

Baptist South Site

WinLink

- **Completion of the WinLink system at Baptist South.**
- **MARC to take over maintenance responsibilities**
- **Re-boot on 15MAY26 and 10JUL26 due to updates**



APRS Upgrade at Baptist South

- **Replaced VHF radio and updated/replaced TNC**
- **Harden site (more on this later)**
- **Completed 15MAY26.**



Thanks For The Donations

- **The TNC and cable was donated by KN4AAZ (Kevin).**
- **The VHF radio, wire harnesses and mic adapter were donated by KK4IB (Sparks).**
- **The UPS was donated by KR4YK (Fred).**

How many sites we have have?

MARC Sites

Sites include:

Bald Knob

Club Station at Frazer Church

iHeart Radio

MARC Sites

Sites include:

Waugh

Faith Radio

Ramer

MARC Sites

Sites include:

Montgomery County EMA

Baptist South

Autauga County EMA

MARC Sites

Sites include:

Greenville

MARC Sites

TEN SITES IN FOUR COUNTIES!

MARC Sites

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**And another one under construction (Airwood Drive) to be
completed in Fall 26 or Winter 27**

Hardening of MARC Sites

Hardening of MARC Sites

- **UPS, battery or generator backup power.**
- **Improved RF and AC surge protection.**
- **Bonding and grounding upgrades.**

Hardening of MARC Sites

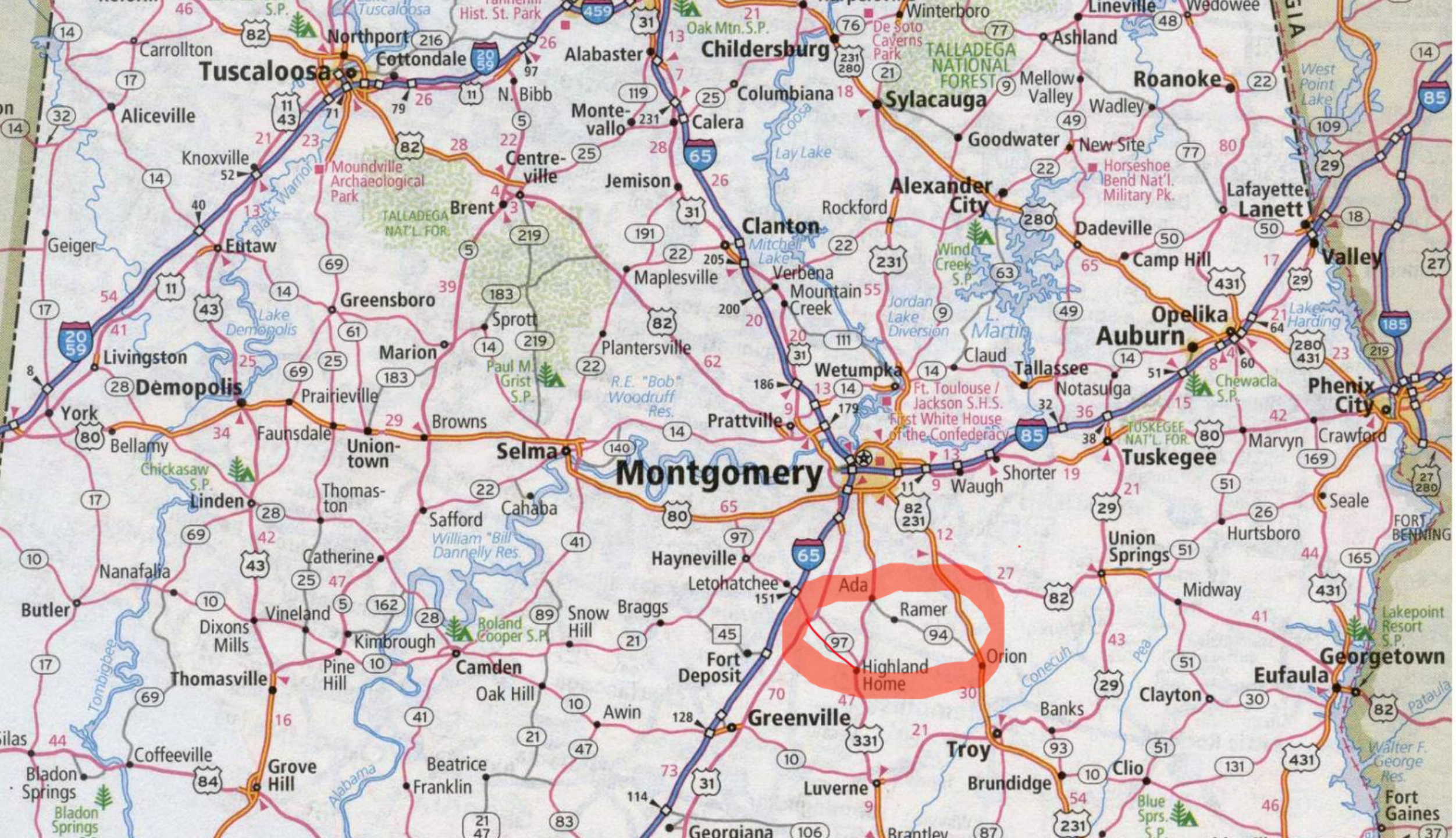
- **Redundant equipment installed when and where possible.**
- **Install lockable equipment cabinets when and where possible at the more remote locations.**

S. Montgomery Co. APRS

Upgrade Project

APRS System Expansion

- **This project is to provide additional APRS coverage for South Montgomery County.**
- **Disaster use**
- **Everyday use**
- **Glassner Autum Challenge**



APRS System Expansion

- **Information and Power Point Presentation submitted for consideration at the annual Ramer Water Company Board Meeting on 24MAR26.**
- **Met with three Board Members on 31MAR26 at the site.**



APRS System Expansion

- Turns out that the Water Authority only controls a small patch in the much larger cleared area.**
- After measurements and discussion, It was determined that there is not enough area to construct the proposed tower.**
- We will continue to look for suitable sites in the area.**

Other APRS Sites Considered

- 1. Luverne- (Crenshaw Co.) at WXKD-AM.**
- 2. Ramer- AK4NG site.**
- 3. Troy- (Pike Co.) at WSMX-FM.**
- 4. China Grove- (Pike Co.).**

FSQ at Bald Knob

Phase I

FSQ

- **Fast Simple QSO (FSQ) is a digital messaging system utilizing FLDIGI software.**
- **Independent of the internet and uses VHF Amateur frequencies.**

FSQ

- **Each site can see the other sites connections to determine optimal routing automatically.**
- **Temporarily on the 147.180 cross band antenna, shared with the .550 GMRS repeater.**

FSQ Project at Bald Knob

- **A dedicated site intended to provide relay service to/from the MCEMA and improve service in the Montgomery area.**
- **Temporarily on the 147.180 cross band antenna, shared with the .550 GMRS repeater.**
- **Completed and operational on 29APR26.**





Thanks for the Donations

- **Thanks to N4UZZ (Otto) for donating the radio and computer.**
- **Thanks to K4PO (Phil) for donating the Signal Link, cabling and programming.**

FSQ Project at Bald Knob Phase II

- **Utilize an existing 7/8” feed line to move the FSQ station and .550 GMRS repeater antenna up the tower.**
- **Upon completion- The 147.1800 cross band repeater will return.**



FSQ Project at Bald Knob Phase II

Work includes purchase and installation of an antenna, install connector on the antenna end, re-route feed line and data lines, install connector inside building, bonding and grounding, install surge protection and route coax to equipment rack.

Waugh Site Upgrades

147.200 Repeater at Waugh

- **Work completed on 31AUG26.**
- **Most equipment installed in a lockable cabinet.**
- **Added UPS for 147.200.**
- **Added back-up repeater.**





.600 GMRS Repeater at Waugh

- **Moved equipment off of an old A/C cover and installed all GMRS equipment in locking cabinet**
- **Former primary repeater (15W) now the backup unit.**

.600 GMRS PHASE 1

- **Completed 31AUG25**
- **Added back-up
repeater**
- **Upgraded UPS**



.600 GMRS PHASE 2

- **Completed 15APR26**
- **Upgraded radios to double power to 30W**
- **Upgraded Duplexer**



Thanks for the Donations

- **Equipment cabinets donated by KI4HEG (Jeb).**
- **Duplexer donated by W4MPQ-SK (Bob).**
- **UPS donated by KR4YK (Fred).**

Other GMRS Repeater Updates

The GMRS Local System

- **MARC sponsors local GMRS operations and the equipment is mostly loaned for all of the sites.**
- **This is intended to be a alternate system/back- up for emergency use and family use during non-emergency times.**

Montgomery .700 GMRS Repeater

- **462.700 repeater moved to new location at the iHeart tower on 30JUN25.**
- **Coverage area is approximately 8 miles to include the Northern and Eastern By-Pass, E. Montgomery, Atlanta Highway and Wares Ferry areas.**



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New (Prattville) .650 GMRS Repeater

- **462.650 with a 151.4Hz tone.**
- **Low power in test/tune mode at a temporary location.**

Move .650 GMRS Repeater

- **Moving to a new site South of the I-65/I-85 interchange (Airwood Dr.). Estimated completion late 2026 or early 2027.**
- **Provide increased coverage for I-65, West Montgomery, Montgomery County and portions of Autauga County.**

.550 GMRS Repeater Move to Bald Knob

- **Completed and operational on 29APR26.**
- **Temporarily on the 147.180 cross band antenna and shared with the FSQ station.**
- **Will move to a permanent antenna.**

Emergency/Training .575 GMRS Repeater

- **A GMRS repeater is now available for temporary use during emergencies, disasters or CERT activations/training with an approximate 5-mile range.**
- **Frequency is 462.5750 with a 141.3 Hz tone.**

Emergency/Training .575 GMRS Repeater

- **This can also be used as a temporary replacement for existing GMRS repeaters as needed.**
- **This is not intended for transient travelers.**
- **Not operational full time!**



Repeater Output Frequency	Transmit Offset	CTCSS Tone	Power Out	Estimate Range	Primary Coverage Area	Status and Notes
462.5500 MHz	+5 MHz	151.4 Hz	50 W	25 Miles	N. Montgomery & S. Elmore Co.	Operational
462.5750 MHz	+5 MHz	141.3 Hz	15 W	5 Miles	Montgomery Area	Operational- Emergency, CERT, and temporary/portable use only. Not on full time.
462.6000 MHz	+5 MHz	141.3 Hz	50 W	20 Miles	Montgomery and I-85 into Shorter	Operational
462.6250 MHz	+5 MHz					Available Frequency Pair
462.6500 MHz	+5 MHz	151.4Hz	10 W	5 Miles	Prattville, I-65 N and West Montgomery Co.	Test and Tune Mode using Low Power (Pending site move)
462.6750 MHz	+5 MHz					Available Frequency Pair
462.7000 MHz	+5 MHz	151.4 Hz	20 W	8 Miles	East Montgomery	Operational
462.7250 MHz	+5 MHz					Available Frequency Pair

GMRS tab on the w4ap.org Site

- **Added a separate tab for GMRS information.**
- **General info about GMRS and FAQ.**
- **List of repeaters in the Montgomery area.**
- **The latest information is posted here.**

Thanks For The Support

- **KD4AXP (Charles) for loaning the equipment for the .650 GMRS repeater.**
- **KQ1USA (Jamie) for loaning the equipment for the .550 GMRS repeater.**
- **KO4UWY (Mac) for the webpage support.**

Remember!

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

Camp Tukabatchee Project

Camp Tuckabatchee Project

- **This project would provide a permanent tower to be used for a temporary HF wireline antenna and a fixed 2M antenna.**

Camp Tuckabatchee Project

- **This project would provide a permanent tower to be used for a temporary HF wireline antenna and a fixed 2M antenna.**
- **Discussed at the 21JUN25 Board meeting and the decision was made to cancel the project due to BSA liability issues.**



*“Ahhh...
Just one more
thing...”*

UHF Net

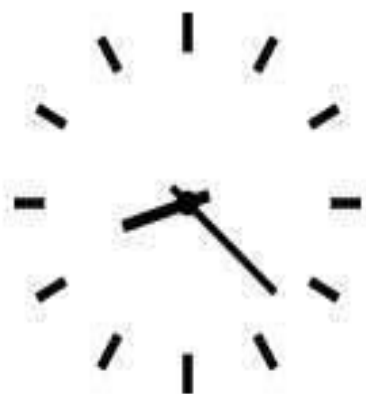
- **Monday at 8PM (except the third week due to the monthly MARC meeting).**
- **444.500 MHz (+5) with 100 Hz tone.**
- **Directed toward recently licensed hams, however all amateurs are welcomed.**

UHF Net

- **We are also looking for additional Net Control Stations.**
- **This is a good opportunity for preparation during emergency operations.**

A lot happens in a year!





Q & A time



**How many of you have worked at a Military or
Commercial Communication Station or
Message Center?**

