



# Upshur County ARES® and Upshur Area Amateur Radio Club History

Oct. 2017 through Dec. 2022

by

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# Chapter 1 - Upshur County ARES® Early Years



N5TQI - Jim Liberacki EC, Upshur County ARES® 2017 - 2020



146.90 MHz Upshur County Repeater Antenna August 17, 2019

Upshur County ARES® was founded in October 2017 by Jim Liberacki, N5TQI who only raised his hand to ask a question. Jo Ann, KA5AZK was presenting Traffic Handling Training at LETARC and Jim ask a question that made her think he would make a good Emergency Coordinator (EC) for Upshur County. See, she was also District Eight EC, responsible for appointing ECs in the 8 counties in her district.

Not quite sure what he signed up for, Jim started recruiting and putting together the first Upshur County ARES® group, at least in recent memory. Jim introduced ARES® to the Gilmer Fire Chief as well as other officials in the county. Paul, KG5SAV and Gary K5GDM took on rolls as Skywarn® Coordinators and Nancy, KT8TOR the role of Net Control Coordinator and Assistant EC.

Jim secured permission from LETARC for Upshur County ARES® to use their repeater for Thursday evening nets and for emergency operations. As time went by and Upshur County became more active, it became apparent Upshur County needed its own repeater.

Jo Ann, KA5AZK had wished for an Upshur County Repeater for years, even before ARES® and finally talked John, W5BWC into seeing what it would take. Of coarse finding an affordable duplexer was the first and most difficult task. Jo Ann told John to check Main Trading in Paris, to which he said – they won't have anything like that – but immediately went to the office and called them. Of coarse they had a six cavity commercial set that had never been re-tuned.

So, with duplexer in hand the next task was obtaining frequency coordination, another difficult task. John worked with the VHF FM Society Coordinator (appointed by ARRL and FCC) to manage repeater coordination. Once again, to his surprise a limited range coordination was received for 146.90 MHz.

Jim, N5TQI called a meeting to determine who might be willing to participate in the repeater project. Almost, if not all, of the members agreed to donate time, money, skills or support. Indeed they did. John, W5BWC built the repeater, Jerry, WA5OKO refurbished and tuned the duplexer and donated a DB224E antenna.

The project involved raising a tower to 65 feet, installing antenna and feed-line, installing guy anchor posts, halo ground system, building the controller, power supply,



146.90 MHz Repeater Activated Sep. 10, 2019

© W S B W C LINE WE B B W C

W5BWC - EC, Upshur County ARES® 2020 - present

mounting transmitter and receiver, picture taking and documentation. Those who participated were; K5GDM, KA5AZK, KG5SAV, KG5UGY, KG5WEA, KT8TOR, N5IMM(SK), N5TQI, W5BWC, WA5OKO, W5QZB and non-Hams Doug Turner, Jacob Vise, Garrett Manning.

A hamburger supper was held September 10, 2019 where the switch was flipped and Upshur County suddenly had its own repeater. Granted, not the greatest, but its own. As time went by, the original antenna was switched out to the DB224E, the feed-line replaced and finally a new Bridgecom BR-50V was donated by WA50KO. After these modifications, the repeater was decent, but still range limited.

Early in 2020 Jim, N5TQI retired due to several issues including some heath related. He had grown Upshur County ARES® from absolutely nothing, got Skywarn® operational, operated a booth at Yamboree and most importantly during his leadership; Upshur County got its own 2M repeater.

Again Jo Ann was without an Upshur County EC. It is always difficult appointing ECs, but she was even more intent on filling Jim's spot for a couple reasons. First, it is her own county and second, Jim had grown an ARES® team from nothing. After several attempts, she finally got John W5BWC to accept.

John started on-air training in April 2020, using the existing Thursday evening net. While Skywarn® continued to be the major operation, training was on going to prepare for other communications support and activities.

About that same time, talk among the group about forming an Upshur Ham club came to fruition. The Upshur County ARES® team became the core group, to form a club that became known as UAARC - Upshur Area Amateur Radio Club.





Repeater Planning Meeting
L. to R. - Don KG5WEA, Jerry WA5OKO, Gary K5GDM, Nancy KT8TOR, George KG5UGY, Paul KG5SAV, Bill W5QZB,
Wayne N5IMM, Jim N5TQI, John W5BWC - picture by Jo Ann KA5AZK.

# Chapter 2 – Upshur Area Amateur Radio Club Formation

At one of the Upshur County ARES® meetings, a show of hands was asked for from those who would like to see a club formed in Upshur County. All hands were shown - let's do it was the remark. So Jo Ann KA5AZK and John W5BWC were selected to begin the process.

Jo Ann started looking for a suitable meeting place that was affordable, centrally located, with good parking and large enough for the club to grow. She also hoped for a venue with class, not to be snobbish, but so the members and guest would be comfortable.

In general, affordable venues are hard to find, so it took some time and effort. Finally she discovered Upshur Rural Electric Coop has a 200 seat auditorium that they allow non-profit civic minded groups the use of. Once she and John visited with URECC they approved the use of their facility. This venue met all of her requirements, including outstanding class. It truly was one of the finest venues, for an Amateur Radio Club meeting, that she had ever seen.

Next came the task of filtering QRZ data base for Hams in and around Upshur County, a job Jo Ann again took on. After compiling a list of over 100 names, she and John began putting together a mailing to send perspective members. A meeting was arranged for January 14, 2020 with the stated purpose of exploring the possibility of a new Ham Club in Upshur County.

Around 25 people attended and the interest among them was very high, with agreement to proceed. What a time to start a club – just as a pandemic engulfs the country! None the less, those who attended the first meeting showed determination that the club was to be. A club formation committee was selected and was comprised of John W5BWC, JoAnn KA5AZK, Jana NJ5S, Matt W5MSM and Kelly KD5S.

The committee met for the first time February 18, 2020 and John was voted Chairman. Next the committee started work on a constitution and by-laws, planning club meetings, establishing a temporary Internet presence, obtaining club name suggestions & voting on them and creating a roster of members.

This formation process moved rapidly considering the spreading effects of the pandemic and precautionary closing of the URECC auditorium. Some meetings were held on the Upshur County 2M repeater, that the ARES® group had



**Upshur Rural Electric Coop Auditorium** 

installed. One meeting was held on Zoom, but almost no one was in favor of another.

The club name was selected from member suggestions. Of the several suggested, the name "Upshur Area Amateur Radio Club" was selected by a membership vote. The thought process involved was to select a name that defines the club's location (Upshur County) but also shows it includes the surrounding counties. Next the constitution and by-laws were written and approved by a vote of the members present at the May 12, 2020 club meeting.

Nominations for Officers came next. At the July 2020 club meeting paper ballots were used to vote for officers to serve for the remainder of 2020. The election results were; President - John W5BWC, Vice-president - Kelly KD5S, Secretary/Treasurer - Debbie KI5BHT. The rest of the year was consumed by new club business, setting up a website, obtaining a post office box, collecting first year dues, and such.

By December 2020 the club had 27 voting members. At the December meeting a certificate of appreciation was presented to Jerry, WA50KO for his donation of the Bridgecom repeater and DB224E as well as to UREEC along with a \$100 donation to their Scholar Ship Fund, in appreciation for the use of their facility. Charter Membership Certificates were presented to all the founding members as well.

The club by-laws specify nominations for office are taken in January. The membership votes for candidates at the February meeting. January 2021 nominations for office were; President – John W5BWC, Vice-president – Matt W5MSM and Secretary/Treasurer Debbie KI5BHT. All ran unopposed and were voted in.

During 2021 club meetings started out being held on the 2M repeater until March 8, 2021 when club meetings returned to the URECC auditorium, it was really good to be back in person! In January the club continued new club tasks with voting to become an ARRL Affiliated club. The club had 17/27 members that were ARRL members, thus easily satisfying the requirement to have 51% ARRL members.

Debbie, KI5BHT found a source for tee-shirts with the club logo imprinted on them. Jo Ann, KA5AZK found a source for club patches and also accepted the Refreshment Chairwoman appointment. The ARRL approved the club's application for



Debbie KI5BHT, Kelly KD5S, John W5BWC First UAARC Officers

UAARC 1st Field Day 2021

affiliation in April 2021. The greatest advantage that brought was club liability insurance, which the members approved purchasing.

UAARC voted to participate in Field Day 2021, in conjunction with Upshur County ARES®, to be held held in KA5AZK and W5BWC hay patch. Operating as Class 1A, contacts were made on 2M, 20M and 40M. Three formal messages were sent via ARRL radiogram with 203 contacts confirmed. Score was 406 placing the club well up the list of 1A stations participating.

The Field Day had 27 people attend and 20 stay to eat BBQ dinner. Families were invited to the evening meal and were able to meet one another and visit. After dinner, the operation resumed with contacts made across the entire country, as the gray line passed. As it moved on around the globe, contacts were made with Disney World, Homer, AK, Japan and Australia. The station was on the air until an hour before the end time on Sunday afternoon. K5GDM was watching the radar and warned a cell was approaching, so operation stopped and things were packed up. No sooner than done and the thunderstorm hit.

The club developed its own website during the early part of 2021 with the club officers owning the URL and providing the content as well as maintenance. In August, William, KG5SVM was appointed news and events coordinator. As time goes by, he also takes on more responsibility for the website. The website is listed in the ARRL club data base where interested individuals can locate the club and its website. Emily Collier was appointed club photographer and worked with William to upload images to the website.

In October 2021 a seminar was held in KA5AZK and W5BWC shop, consisting of Traffic Handling Training, hamburger lunch and then Grounding and Lightning Protection. The event was well attended and there was time for everyone's questions and discussions. Show and tell followed making pretty much a day of it.

The December meeting was limited to a short business meeting, followed by Christmas refreshments and family time. The club presented a \$100 donation to the URECC Scholarship Fund as a sign of the club's appreciation for the use of their facility. A certificate of appreciation was presented to W5MSM for his digital projector donation, to WA5OKO for his repeater duplexer donation and to KA5AZK and W5BWC for hosting Field Day.

The club finished out 2021 with 28 members, having survived the pandemic, becoming an ARRL Affiliated club, participating in its first Field Day and becoming well established as truly the Upshur AREA club.



UAARC Charter Members - L. to R.

Tommy KG5ZSU,Mike N5UWF, Cara KG5ZST, Ray KE5VJH, Nancy KT8TOR, Gary K5GDM, Jana NJ5S, John KI5GRV, Mack KI5OZA, Cliff AE5ZA, Debbie KI5BHT, Phillip KJ5ZW, William KG5SVM, John W5BWC, Jerry WA5OKO, Kelly KD5S - picture by Jo Ann KA5AZK

Not pictured:

Bob AB5X, Rachael K8EFI, Gwen KA5ADO, KE5HKI Elizabeth, Mary Jane KG5PZR, George KG5UGY, Kayla KI5ADN, Jim N5TQI, Matt W5MSM, Guy W5UAA

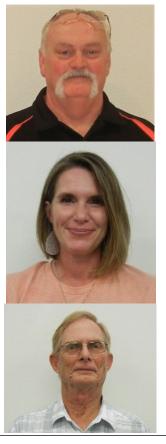
# Upshur County ARES® during Pandemic

As mentioned in the UAARC 2021 history, it and Uphur County ARES® were closely intertwined, as most of the UAARC members were also ARES® members. The repeater upgrades were provided by Hams that were members of both groups. Parts of the original repeater were donated to UAARC and piece by piece until the repeater became the club's. Remember the repeater was built and operated by Upshur County ARES® before the club came to be; however, the same Hams were involved in both.

During 2021 Upshur County ARES® grew to 15 active members. The significance of this is due to the term "active members". Previously anyone who expressed any interest was included as a member, but that changed during 2021 to require "active members" to participate in at least 2/3 of the on-air training sessions.

During 2021 Upshur County ARES® participated in several Skywarn® activations, held several eyeball training sessions, and completed the first year of on-air training sessions. Training continued with the goal of presenting the group to agencies other than the NWS that might me able to use back up communications. Training for deployment was begun with the understanding no one would be ask to deploy if they were uncomfortable doing so.

## Chapter 3 - UAARC in 2022



UAARC Officers 2021-2022
T. to B. Matt W5MSM - Vice President
Debbie, KI5BHT - Secretary/Treasurer
John, W5BWC - President

UAARC starts 2022 in its second full year of operation. Debbie, KI5BHT presents the first yearly budget to the membership. It shows the club's fixed expenses in comparison with the collected dues. It was decided to have a kitty on the sign up table for those who would like to donate. While sufficient funds were available, it was considered a good idea to collect a reserve without raising dues.

2022 Officer nominees were; President – W5BWC, Vice-president – W5MSM and KG5UGY, Secretary/Treasurer – KI5BHT. Once again William, KG5SVM was the Nomination/Election Chairman. By one vote W5MSM continued as Vice-president with John and Debbie unchallenged. Also, early in 2022 the club ask for proposed QSL card design. Of several submitted, William KG5SVM entry was accepted.

Field Day planning started early this year with Tony, KI5OFD appointed FD Coordinator. Tony did a great job getting the operation planned, supplies and personnel lined up. It was again to be held at the Keith's. Unfortunately, both John and Jo Ann came down with Covid a few weeks before FD. Without sufficient time to rearrange the decision was made to cancel UAARC FD 2022.

In place of FD it was decided the club activate a station in the Parks On the Air latter in the year. The summer of 2022 was very hot and humid and not conducive to operating outdoors. Finally by October an activation was planned for Daingerfield State Park.

In conjunction with ARES® several members attended a Basic and Advanced Storm Spotter Training in Tyler that was put on by the Shreveport NWS. The club continued to support ARES® with new members and use of the club's new repeater and site. The new repeater site is a story unto itself.

## Chapter 4 - UAARC and Simpson Mt.

On March 21, 2022 Upshur County ARES® had activated in Skywarn® mode due to a strong cell moving toward the county from the southwest. Two way communication between the net and the NWS-Shreveport was handled by Gary K5GDM the Skywarn® Coordinator. As well, Paul KG5SAV, a reserve member and also a Skywarn® Coordinator participated, supplying critical information. The Upshur County Emergency Management was on the net, handled by Chris KI5OMH, also providing two communications between the county and ARES®.

Gary encouraged us to take this storm serious from what he was seeing and the county opened the court house as shelter. Shortly thereafter the NWS released a Tornado Warning for Upshur County. Gilmer sirens sounded quickly and Chris was busy getting folks into shelter. A few minutes latter a tornado was observed moving NE almost due east of downtown Gilmer.

About 15 minutes after the confirmed tornado was reported, damage reports started coming in. As they were reported they were passed on the the NWS and the county EM. The net control, W5BWC plotted the damage reports on a county map. When the third point was received, the damage path was established and provided to the NWS and county. The county used this track to begin search and rescue, as well as to determine where roads were blocked.

The NWS surveyed the damage and rated the tornado as a strong EF2 with areas approaching a low end EF3. The county asked Upshur County ARES® to assist in the state damage assessment operation a few days latter. K5GDM, K5WAM, KA5AZK, KI5OFD, KI5OMH, KI5TCK and W5BWC participated for two days. One evening late, after finishing the damage assessment, the County Emergency Management asked W5BWC and K5GDM what would be required to improve the repeater county coverage.

The answer was twofold; first, a mountain to locate the repeater and second, obtain coordination for a wide-area coverage repeater frequency. They asked which they could most help with and were told - find a mountain. A week or so latter, Chris KI5OMH talked to ETEX about use of one of their towers. ETEX provided a map of their Upshur County towers, which Chris gave to W5BWC.

John, W5BWC and Jo Ann, KA5AZK traveled the county surveying ETEX towers. Hopes were fading when it was discovered the ETEX towers are now leased to a cell phone



Simpson Mt. Site as it was found.



Brush Clearing Detail - L. to R. George KG5UGY, Tony KI5OFD, Rod KNOWER, Kuni KT4LKS, Gary W5GWS, John W5BWC - photo by Jo Ann KA5AZK

company. But then on Simpson Mt. John met Phil Smith, who just happened to be on his way up the mountain. He told John of an abandoned building and tower back off in the woods. Sure enough there it was, buried back off the trail.

An unbelievable find, a building and 68 foot Rohn 45 tower that would not require an escort to enter or permission from any business. But, who owns it? Gary, K5GDM put his skills to work and found the land owner, who John then contacted. He lived in the Dallas area and had inherited the property through his family and was not familiar with what was on the mountain.

He met John one day and they surveyed the property together. Once the property owner understood what the site would be used for and some other details worked out, he gave permission for UAARC to locate the club repeater on his property.

The odds for finding a site, particularly already with a building and tower on it, are very low if not impossible to believe. But, this was only one of two major issues. The second was obtaining a frequency coordination for a wide-area coverage repeater. The club repeater at the time was the 146.90 MHz limited range repeater that the ARES® group had put up a few years prior. With Gun Barrel City repeater on the same frequency, it was not possible for the club to move that repeater to the mountain.

The Frequency Coordinator informed John the waiting list was two years long for a wide-area coverage repeater. He had requested 146.94 MHz, not realizing Mt. Pleasant had a repeater on that frequency, when he printed the on-line Repeater Book, that part was cut off. George KG5UGY spoke up and said he thought it was no longer in use. George contacted the Mt. Pleasant trustee, Harry, K5FPI who confirmed their repeater was no longer in use and he did not intend to put it back in service.

John then contacted the Frequency Coordinator, who said, that since he did the leg work and if Harry relinquished 146.94 MHz, he would assign it to UAARC and not the next applicant in line. Harry agreed and suddenly the next impossible task was complete. Now the work began.

The site on Simpson Mt. was overgrown with brush, saplings, vines and even a tree growing into the building's roof. The building, having been abandoned for years was infested with



Site after repairs - Antenna Crew Front to back L. to R. Tony KI50FD, Garrett, Jerry WA50KO, John W5BWC, Gary K5GDM, Nancy KT8TOR photo by Jo Ann KA5AZK

rodents and their excretions. The tree in the roof had caused water intrusion and therefore mold grow, the rodents had gnawed holes in the gable ends and the metal door had bullet holes in it. But... the use of it was for free.

The club and ARES® members responded without hesitation. Site clean up began the next weekend, with written permission in hand for the club's use of the site. Interestingly, all the club members who participated in the site clean up, building repair, tower repair and antenna installation were also ARES® members. Those who donated money, labor, material, equipment and expertise were; KA5AZK, KI5BHT, W5BWC, K5GDM, W5GWC, KI5OFD, KI5OMH, WA5OKO, KG5SVM, KT8TOR, N5TQI, KG5UGY, KT4LKS, KN0WER, KG5ZSU and Garrett Manning.

The generosity of the club and ARES® members was outstanding! No club funds were used during the entire process. Unbelievable donations including cash, material purchased at member's cost, equipment and installation were made. Jerry, WA50KO donated another DB224E and sufficient money to complete the antenna system.

Many other significant donations were made by those listed above, all of which were required before the project could be completed. Work on the project started May 14, 2022 with a brush clearing detail. This was a hard work day, no way around it. But chain saws, hand saws, machetes and grunt cleared the site of debris.

Work proceeded to install a new metal roof, clear out the rodent nest and mess, inspect the tower base for repair and paint. Over the next several weeks, work parties were on the mountain all but one weekend and often during the week.

The building was then disinfected, painted with primer, door repaired, new air conditioner installed, gable ends replaced, soffit installed, and conduit and wiring installed. URECC connected power from their radio site just a few hundred feet away.

Work on the tower consisted of pouring a 42 x 42 inch base 12 inches deep. Re-bar was embedded in the original base and formed into the new base. When completed the tower was secure for climbing and extended use. An antenna crew, consisting of the above named Hams, removed the old commercial antenna and installed the new DB224E and 7/8 inch Andrews Heliax.



Looking West from tower - 10 ft. below antenna base.



Repeater mounted in building.



K5UAR - 146.94 MHz Repeater Site.

W5BWC used parts from the original 2M repeater and a rack donated by N5KGN to build a new repeater, resulting in a 75W transmitter and a receiver + preamp sensitivity of -127 dBm (0.1  $\mu V$ ). WA5OKO tuned a duplexer, that he donated, to 146.94 MHz. The original controller was also used along with a continuous duty 25 Amp power supply built by W5BWC. Using donated deep cycle AGM 12 Volt batteries, the repeater included uninterruptible power.

The work was almost complete August 6, 2022 with the repeater and antenna installed and operational. In fact the repeater was put on the air that Saturday after the antenna work was finished. The last few details were completed by August 28, 2022 when no-climb panels, fabricated by Tony KI5OFD, were installed on the tower.

The Bridgecom repeater, second duplexer and DB224E remained at W5BWC QTH as the back up repeater. The difference in elevation, transmit power and receiver sensitivity was like turning on a light in a dark room. The poor county coverage was now gone, or relegated to only deep holes in the county. Coverage, which had been lacking for the "Area" members was now possible. The interference problems with Gun Barrel City gone as well. The county's request to improve county coverage was accomplished by the members of UAARC and ARES®.

At the December Christmas party, certificates of appreciation were presented to those who participated in the repeater project. URECC and WA5OKO received plaques of appreciation due to outstanding contributions made by them. As well a few people outside the club that played an important role were recognized. Tony Mc Cullough, URECC for obtaining power for the site, Darren Sosebee, URECC for installing power, Harry McCollum, K5FPI for transferring 146.94 MHz to the club, Phil Smith who pointed John to the abandoned site, Mark Marshall, property owner for permission to use site and Garrett Manning for tower base repair and antenna installation.

# Chapter 5 - Upshur County ARES® in its fifth year

By the fifth anniversary of Upshur County ARES®, in October of 2022, it had grown to 25 active members (meeting 2/3 of the on air training) and one reserve member. Participating in the March 21, 2022 Upshur County tornado and damage assessment it became one of the resources the NWS – Shreveport Office relies on.

It also renewed the county Emergency Management inclusion of Amateur Radio in its Emergency Plan and became apart of their actual operations. And, the contact with the Gilmer Fire Department was renewed with presentation of the training and capabilities of the present Upshur County ARES®.

Training now consists of 116 on air session with 1,689 participating stations accruing 844 hours of training. Also, Traffic Handling Training, Net Control Training, Deployment Training and other in person training has been held.

Training and implementation of deploy-able stations was accomplished with several members equipped with field radios, others with cross-band capability for low spots were 2M repeater coverage may be a problem, back pack stations for foot mobile operations and low profile gain antennas for EOC or command center use.