

Minutes for BGMRC, Inc. – September 12, 2022

Call to Order

A regular monthly meeting of The Bill Gremillion Memorial Radio Club, Inc. was held on September 12, 2022 at the Madras Community Center, Highway 29 north. The meeting was called to order at 7:00 pm. and was presided over by President Gary Beckstedt, WB4GMB, and club Secretary Rick Melville, KK4DDK. The meeting was begun with an opening prayer led by Larry Chappell.

Attendees:

Voting members in attendance can be seen on the check-in sheet.
The Secretary noted that a quorum was present.

Approval of Minutes

A motion and second to approve the minutes of the August 2022. Motion carried by voice vote with no one voting against the motion.

Adoption of Agenda

A motion was made to adopt the proposed agenda. The motion carried by a voice vote with no one voting against the motion.

Treasurer's Report: Walter Jones, Jr. reported the following:

During August 2022 a small number of dues were collected from new members and a small amount from Amazon was paid to the club.

No other expenses.

Ending balance approximately \$5,000.

Presented by Walter Jones, Jr., Treasurer - Walter@WalterJones.com (678) 522-3574

New Business:

Larry Chappell made a motion to appoint Dan Warnock, KI4GWT as **Member Emeritus**. The motion was duly seconded and passed by unanimous vote.

Scott Marlowe, chairman of the nominating committee, reported that all current officers and directors had agreed to serve one additional year. Scott offered the slate of officers by nomination, to be voted on in October. The slate is Gary Beckstedt, President, Beth Walker – Vice President, Rick Melville – Secretary, Walter Jones, Jr. – Treasurer and Frank Kimble – Board member at large. Nominations from the floor will be accepted in the October meeting, if any.

Gary Beckstedt, President explained the club's desire to "link" our repeaters. This can be done if the club purchases and installs linking equipment at each repeater site. The estimated cost will be approximately \$3,200. A motion was made by Scott Marlowe and seconded by Walter Jones, Jr. to purchase the equipment. A vote was taken and was passed unanimously.

Gary Beckstedt, President reported that the City of Turin, Ga. agreed to host a new repeater site for our club. The antenna can be installed on the Turin water tower ladder. Equipment from the old Douglasville site will be used for the installation. The estimated cost to install would be approximately \$1,300-\$1,800. Walter Jones, Jr. made a motion to fund the installation in Turin with current funds held by the club. Scott Marlowe seconded the motion. Gary Beckstedt, President called for a vote which was unanimous in favor of installing a new repeater in Turin, Ga.

Old Business:

Rick Melville updated the club on the legal process of selecting a DBA. The application has been filed and should be complete in 10 to 15 days.

There was no other old business to discuss.

Announcements:

The Chattanooga Ham Fest will be held October 14 -15, 2022.

Coweta County Emergency Management Agency (EMA) is hosting a Missing Person Search & Rescue exercise this Saturday, Sept. 17 from 10 a.m. – 5 p.m. at Chattahoochee State Park. This is just an exercise. While the park is open to the public during this time, we ask that you please avoid the blocked off areas for the exercise. All hams are invited to participate and bring their own radio equipment.

Coweta Hearst Foundation has asked that BGMRC provide communication again this year for the bike ride fundraiser to be held October 2, 2022. We are asked to report at 8 AM.

A motion was made and seconded to close the business portion of the meeting. The motion passed by unanimous vote.

Program – THOMAS J CROWLEY, KT4XN, 1448 Parkview Blvd, Stone Mountain, GA 30087

First licensed as KN2TMT in 1957, and Tom received a First-Class radiotelephone license in 1962. Let them both expire and got back into ham radio in 1993 as KF4BVD, upgraded to Advanced in 1994 with his current call KT4XN. Finally upgraded to Extra. He is working on improving Morse code skills: SKCC 15540, CWOPS 1738, and FISTS 17898.

Tom explained that a **radio telescope** is a specialized antenna and radio receiver used to detect radio waves from astronomical radio sources in the sky. Radio telescopes are the main observing instrument used in radio astronomy, which studies the radio frequency portion of the electromagnetic spectrum emitted by astronomical objects, just as optical telescopes are the main observing instrument used in traditional optical astronomy which studies the light wave portion of the spectrum coming from astronomical objects. Unlike optical telescopes, radio telescopes can be used in the daytime as well as at night.

Since astronomical radio sources such as planets, stars, nebulas and galaxies are very far away, the radio waves coming from them are extremely weak, so radio telescopes require very large antennas to collect enough radio energy to study them, and extremely sensitive receiving equipment. Radio telescopes are typically large parabolic ("dish") antennas similar to those employed in tracking and communicating with satellites and space probes. They may be used singly or linked together electronically in an array. Radio observatories are preferentially located far from major centers of population to avoid electromagnetic interference (EMI) from radio, television, radar, motor vehicles, and other man-made electronic devices.

Radio waves from space were first detected by engineer Karl Guthe Jansky in 1932 at Bell Telephone Laboratories in Holmdel, New Jersey using an antenna built to study radio receiver noise. The first purpose-built radio telescope was a 9-meter parabolic dish constructed by radio amateur Grote Reber in his back yard in Wheaton, Illinois in 1937. The sky survey he performed is often considered the beginning of the field of radio astronomy.

The range of frequencies in the electromagnetic spectrum that makes up the radio spectrum is very large. As a consequence, the types of antennas that are used as radio telescopes vary widely in design, size, and configuration. At wavelengths of 30 meters to 3 meters (10–100 MHz), they are generally either directional antenna arrays similar to

"TV antennas" or large stationary reflectors with moveable focal points. Since the wavelengths being observed with these types of antennas are so long, the "reflector" surfaces can be constructed from coarse wire mesh such as chicken wire. At shorter wavelengths parabolic "dish" antennas predominate. The angular resolution of a dish antenna is determined by the ratio of the diameter of the dish to the wavelength of the radio waves being observed. This dictates the dish size a radio telescope needs for a useful resolution. Radio telescopes that operate at wavelengths of 3 meters to 30 cm (100 MHz to 1 GHz) are usually well over 100 meters in diameter. Telescopes working at wavelengths shorter than 30 cm (above 1 GHz) range in size from 3 to 90 meters in diameter.

The meeting ended at approximately 9 PM.

Respectfully Submitted

Rick Melville

Date of Approval - TBD
