



President- Keith Mumaw KI5VNL Vice-President- Sharon McEachern- KK5SM Secretary-Sarah Richardson- KI5PZF

Treasurer- James Hunt- KI5DQ Trustee- Dr.Mike Durbin - K5MJD

Fannin County Amateur Radio Club K5FRC

Volume 1 Issue 4- April 2024

FUN STUFF

APRIL 2024 K5FRC TREASURER'S

Currently, the club has a balance of \$4333.23 in its checking account and a balance of \$225.25 in its savings account. Since our last club meeting, the club has had the following deposits and expenditures: A deposit of \$1.00 from Anonymous into the Savings Account. The club has had 0 expenditures since last month's meeting.

I will also send out an updated roster prior to our next meeting to include our new members. Reminder: If you need to renew your ARRL membership, you can do so through the club and the club will receive a commission from ARRL. I will have the forms at our next meeting.

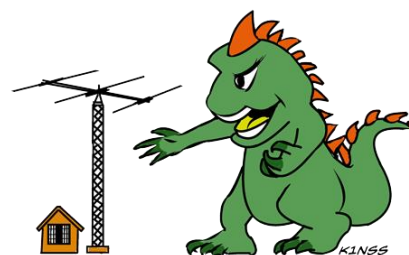
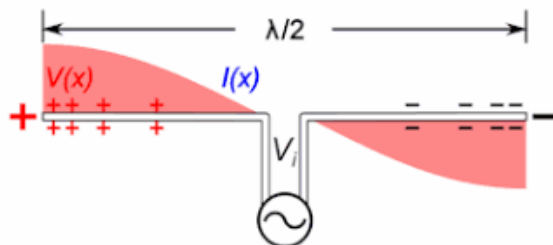
73's, James
KI5DQ

ANTENNA STUFF

What is the difference between a dipole and a regular antenna?



As it's name suggests, in its basic form, a **dipole antenna consists of two conductive elements, unlike a monopole antenna, which has a single conductive element.** The dipole's identical conductive elements (usually rods or metal wires) sit on either end of the antenna.



K5FRC REPEATERS

**145.470 (100Hz tone; -600Khz offset)
C4FM or Analog; IRLP 3602;
ECHOLINK 143903**

Tuesday Night Net 8:00 PM
442.525 (100HZ TONE; +5.0 Mhz offset)
C4FM or Analog;
443.750 (100Hz tone; +5.0Mhz offset)
C4FM or Analog;
FCARC meets every third Saturday at
9:00 AM at the Bois D'Arc Creek
Cowboy Church
ZOOM sessions are held every Tuesday
at 7:00 PM CST before the net on the
145.470 Mhz repeater. Website:
www.k5frc.org

Facebook: www.facebook.com/K5FRC/
Mark, KF5KUW is the administrator.
Website: www.k5frc.org

President's Report

April President's Report

Well, March has left, and April is upon with an event that few people get to see, a "Total Eclipse." It came to us with a lot of fanfare and many unknowns as witnessed by the activation of many Emergency Management Centers around the state, including our own. Once the clouds parted and the Sun could be seen, it truly was a spectacular event worth witnessing. I want to thank everyone who participated with the EOC in relaying information around the county during the event, especially Bob and DeeDee Yakel who acted as "Net Control."

The same day of the eclipse, our spring storm season kicked off and true to form, the club stepped up with Mark Heatherington (KF5KUW) firing up the "Sky Warn Net" acting as "Net Control." It was an active night, and as our spring weather goes forward, I'm sure we will have several of these. James Hunt will be the Tuesday night "Net Control" for April, and I will run the net during May, but we are looking for volunteers to continue through-out the rest of the year. Please, don't be shy! Please continue to promote the club as much as you can and let's see if we can increase our membership as well as getting current members more involved. Well, back to studying for the "General Exam" and I will see all of you at the meeting.

Thanks,
Keith Mumaw Jr (KI5VNL)
2024 FCARC President

VICE PRESIDENTS REPORT

APRIL 2024 VICE-PRESIDENT'S REPORT
SHARON MCEACHERN-KK5SM

Dear club, I thought this would be an appropriate time to list the minimum reporting criteria for Skywarn Nets as I reported erroneous data on the last Net. If you are like me, I have had to print a copy and have it nearby during Skywarn Nets. Please see the minimum reporting criteria below.

MINIMUM REPORTING CRITERIA

1. FUNNEL/WALL CLOUD SPOTTED

FUNNEL

*IS SURFACE DAMAGE OCCURRING?

*IS THE FUNNEL VISIBLE HALFWAY TO THE GROUND?

*WHAT ARE YOUR LOCATION'S MAP GRID COORDINATES?

*DIRECTION AND DISTANCE FROM YOU TO FUNNEL? WALL CLOUD

*IS THERE VISIBLE ROTATION IN THE CLOUD?

*IS THE SURFACE DAMAGE OCCURRING?

- *WHERE IS THE UPDRAFT LOCATED ON THE WALL CLOUD?
- *WHAT ARE YOUR LOCATION'S MAP GRID COORDINATES?
- *DIRECTION AND RATE OF TRAVEL OF WALL CLOUD?

ALL OTHER REPORTS CEASE WHEN A FUNNEL OR WALL CLOUD IS REPORTED!!

2. HAIL LARGER THAN 1/4 INCH

- *WHAT ARE YOUR LOCATION'S MAP GRID COORDINATES?
- *WHAT IS THE ESTIMATED SIZE OF THE HAIL? (INCHES/COIN SIZE?)
- *HOW MUCH IS FALLING? (OCCASIONAL/HEAVY)

3. DAMAGING WINDS (OVER 50 MPH)

- *WHAT ARE YOUR LOCATION'S MAP GRID COORDINATES?
- *IS THE WIND SPEED GREATER THAN 50 MPH? (CAN'T WALK AGAINST THE WIND)
- *WHAT IS THE DIRECTION OF MOVEMENT?
- *BRIEFLY DESCRIBE THE DAMAGE THAT IS OCCURRING.

4. FLASH FLOODING

- *IS WATER FLOWING ACROSS THE ROAD? (IS THERE A CURRENT?)

CURB DEEP WATER DOES NOT MEET MINIMUM REPORTING CRITERIA

- *IS RISING WATER THREATENING LIFE OR PROPERTY?
- *ARE CHILDREN PLAYING IN CULVERTS OR FLOOD WATERS?

5. RAIN OVER 1 INCH PER HOUR

(VISIBILITY LESS THAN FIVE CAR LENGTHS)

- *WHAT ARE YOUR LOCATION'S MAP GRID COORDINATES?
- *WHAT IS THE ESTIMATED RAINFALL IN INCHES/HOUR?

SECRETARY REPORT

Fannin County Amateur Radio Club
Regular Meeting 16 March 2024

President Keith Mumaw (KI5VNL) called the meeting to order.
Bob Yakel (KG5KKE) led the prayer and Keith Mumaw the pledge.
Guests Steven Lott Smith (KG5VK), ARRL NTX Section Manager and Zogail Smith KG5YK YL who gave the program after meeting, along with Marti Mumaw, Rodolfo Delgado were introduced. President Keith Mumaw gave his report with regards to the eclipse meeting and called on Dee Dee Yakel (KI5VFV) for the EOC report. Dee Dee reports that the EOC would need an amateur operator with their own equipment. The hospital, MACS and EOC are the main sites of planning for emergencies.

Vice President Sharon McEachern (KK5SM) gave a report and shared the reporting criteria for storms.

Treasurer James Hunt (KI5DQ) gave the report of deposits - \$144.25 in dues, \$47.25 in "loose change" all checks have cleared. Motion to accept, seconded and motion passed.

Secretary Sarah Richardson (KI5PZF) reviewed the minutes from the February 17, 2024 meeting. Motion to accept from Mark Hetherington (KF5KUW), seconded from DeeDee Yakel (KI5VFFV), motion passed.

Trustee Dr. Mike Durbin (K5MJD) Trailer is ongoing with box build.. The trailer will need a spare, with the need to find a military-style trailer rim. Motion from Dr. Mike to buy tire second by Jody Lindsey, motion passed. The TMC-Bonham crossband repeater is active, 445.20 100 Hz tone and can hit with handie talkies.

Old Business

James reported the lights on the tower have been replaced, and shared the old lamp bulbs with the groups. The 2-mtr antenna cable harness is compromised, crack in the cable. It will have to be addressed at some point. At this time, all lights are good.

New Business:

Upcoming things to be aware of for club activities are the eclipse, the EXPO, the homeschool event with the Sam Rayburn House, and the club meeting all in April.

Motion to adjourn the business part of the meeting.

Mark Hetherington introduced our ARRL Section Manager Steven Lott Smith (KG5VK) and his lovely YL who helps him with the duties, Zogail Smith (K).

Mr. Smith shared benefits of ARRL and a little of his history - he is in the middle of his third 2-yr term. His focus is the helping of and giving back to his fellow hams. He then asked for the things concerning the club. He fielded questions and concerns from club members. Final encouragement was to build an Awards and Education committee, stay informed on what the board of directors is doing in their 2x/yr meeting, and write grants.

Sarah Sue - KI5PZF

Trustees' report

NOW MY USUAL FUN/INFO STUFF

"I AM COMPLETELY OPERATIONAL AND ALL MY CIRCUITS ARE OPERATING NORMALLY"

Antenna questions I get asked over and over

Can a dipole antenna be too high?

Raising the antenna higher than the optimum gain target doesn't generate the drop off that a low antenna does, so **it is better to be too high than too low**, but there isn't a compelling incentive to go another 10 feet over the 42 foot target for a 20M dipole.

Which is better monopole or dipole antenna?

A dipole antenna uses an additional radiator to generate a synthetic ground plane between the symmetric radiator elements, whereas a monopole antenna requires a physical ground plane.

Which type of antenna is best?

Directional, or Yagi antennas, are the most popular choice of antenna, as their high power provides the strongest increase of all antenna types. The trade-off here is that they require aligning in the direction of the station you wish to communicate with - the higher the dB gain, the more precise you'll have to be.

Which antenna has highest efficiency?

Full-wave loops have the highest radiation resistance, and hence the highest efficiency of all antennas: Their radiation resistances are several hundreds of Ohms, whereas dipoles and monopoles are tens of Ohms, and small loops and short whip antennas are a few ohms, or even fractions of an Ohm.

Why is it called rubber duck antenna?



Origin of the name

According to one rumor, **the young Caroline Kennedy, daughter of President John F. Kennedy, named the flexible device when she pointed at one on an agent's transceiver and said, "rubber ducky".**

Will a longer antenna work better?

In theory, as much as you make the antenna bigger, you gain more signal. Is this true? No, antennas need to be the right length to match the wavelength of the signal you are sending. **Any longer or shorter than that will perform worse.**

Will grounding my antenna improve signal?

PROPER grounding reduces fire, equipment, and human hazards. **It normally does not change reception.** It also absolutely does NOT reduce the chances of it getting struck by lightning, not one single bit.

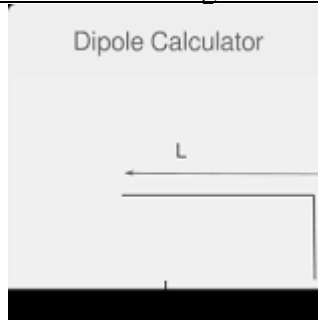
Does a dipole need a balun?

Strictly speaking, **a balun isn't necessary on a dipole** – your antenna can function perfectly fine without one. However, a balun on a dipole is helpful for providing a smoother transition between a balanced antenna and an unbalanced feed line. They can also help to transform impedance for a superior performance overall.

Is dipole antenna vertical or horizontal?

If the dipole is mounted vertical it will radiate to all points on the horizon but not straight up or down. A horizontal dipole is somewhat directional. It is good straight to the sides but not off the ends of the wire.

How do you calculate the length of a dipole antenna?



Dividing 468 by the antenna frequency will give you the length of the antenna in feet. Once you have the entire length, you can divide it by two and obtain the length of each arm of the dipole antenna.

73 -.- -- .--- -..