



# DTARC ENCOUNTERS



June 2023, 3rd Edition, Betty Breen, WY7MOM, Editor

## From the President

Hello DTARC,

We have completed our first full two-year term. This means that it is now election time. Terry, WOVB and the nomination committee have found a slate for this term's election.

Elections will take place at our annual meeting Friday evening, June 23rd at 6:00 PM. There will be a semi-potluck meal. Folks will bring the meat they would like cooked on the grill and a side dish to share with the group. Kelly Dennis has volunteered to cook again this year. He always does a yummy job. Hopefully someone will bring some drinks as well. Water will be there and coolers of ice too.

Field Day setup will commence Friday morning and operation will start at noon on Saturday. We will run for 24 hours and break it all down Sunday after 12 noon.

In the past, we have had problems fulfilling our quorum during meetings. A few of us did a bit of research and discovered



that we had a lofty expectation with the quorum set at greater than 50%. Last month we as a club made a change to our constitution and bylaws that reduced our quorum from greater than 50% down to greater than 33%. Hopefully it will be a bit easier to reach the quorum in future meetings.

See you at Field Day,  
Dwayne, WY7FD



## Minutes of the May 18, 2023 DTARC Meeting

Prior to the start of the May meeting, the Board of Directors met in executive session to discuss a proposed change in the club membership. Following a brief discussion, the board made a decision to designate student (youth) memberships as non-voting associate members. As a result, the numbers needed for a quorum are reduced.

The May meeting was then opened by President Dwayne Allen at 12:20 PM. There were 10 members present: Dwayne, Betty, Jerry Boone, Pat, Al, Kelly, Rhonda, Wade, Clay and Bill Vance.

The Treasurer's report was given by Treasurer, Jerry Boone. He gave the club's bank balance. He also explained that the annual liability insurance premium needs to be paid in June. A motion to accept the treasurer's report was then made by Jerry, seconded by Betty and all present voted in favor.

Dwayne then pointed out that there was an error in the minutes from the previous meeting. The following changes to the previous minutes are provided here in order to correct the record: "The name of the club newsletter was changed to Devils Tower Encounters. The motion to adopt this name was made by Terry and seconded by Katie." A motion to accept the corrected minutes was then made by Al and seconded by Bill. All present voted in favor.

### **Old Business:**

Liability insurance: The club liability insurance policy is due for renewal and the only acceptable payment is by credit card. In the past, Dwayne has paid the bill with his credit card and the club has reimbursed him. Bill moved that we continue to do the same and Wade seconded the motion. All voted in favor.

Field Day: Club Officer elections will be held on Friday June 23, 2023, which is the night before Field Day. Kelly has agreed to cook for us that evening. Everyone will bring their own meat and a side dish to share. Dwayne will arrive Friday morning to begin setting up for Field Day and invites all members to help.

ARISS: Jerry spoke about the ARISS proposal made to the Crook County school district where we would provide the technical expertise to arrange a radio contact between the schools and the International Space Station. Due to an apparent lack of interest from the schools, Jerry made a motion to table the project and Betty seconded the motion. We may try this again at a later date. All voted in favor.

### **New Business:**

Reduction of the Quorum: A discussion was held regarding the club quorum requirements. It was proposed to change the quorum from the present "greater than 50% of the voting membership" to "greater than 33% of the voting membership." A motion to do so was made by Wade and seconded by Jerry. All voted in favor.

Electricity to the Sunny Divide building: The power to the building is not on and the cause is unknown. Last year, the club contributed the funds to pay the Sunny Divide electrical bill for four months. A club member's personal contribution added funds for another two month's

(Minutes continued from page 2)

electrical costs. A suggestion was made that we do so again, and the club has the funds available. Wade made the motion to contribute \$170 towards the Sunny Divide power bill. It was seconded by Jerry, and all voted in favor.

QSL cards: Dwayne spoke about creating a Club Log account and using their OQRS feature for foreign QSL requests.

June VHF contest: This will be on June 10<sup>th</sup> and 11<sup>th</sup> and held either at the farm again or here at Sunny Divide. Everyone is encouraged to join in.

New web page: There are a few bugs in the new web page and Dwayne will be working on finding and fixing them.

Our next meeting will be at Sunny Divide, Friday June 23, 2023.

The motion to adjourn was made by Jerry and seconded by Wade at 1:35 pm. All present voting in favor.

Patricia Boone  
Secretary

## HEADS UP!!

FIELD DAY WEEKEND SATURDAY AND SUNDAY, JUNE 24 & 25

FRIDAY, JUNE 23, BEGIN SET-UP

ALSO, AT 6 PM  
ANNUAL MEETING, ELECT OFFICERS, PAY YOUR DUES

SUPPER:  
Bring your own meat (Kelly will cook it for you)  
Bring a dish to share

During the weekend, you will be responsible  
for your own food and drink.  
Feel free to share!





## Dwayne's Tech Note for June: Azimuth headings and Greater Circle Distances vs A Flat Earth

As a young lad in high school, I learned that the shortest distance between two points is a straight line. I believe this to be true even today. I was also told that if I dug a hole straight through the earth, I would end up in China. This was a bit of a stretch. I later learned that from Georgia, a hole dug straight through the earth, would end up in the Indian Ocean about halfway between Africa and Australia. From Sundance, a hole dug the same way would also wind up in the Indian Ocean near St. Paul and Amsterdam Islands, both French territories. But I digress.

Sitting in the shack a few days back, I saw a DX server listing for a station in Equatorial New Guinea. As the name suggest, it lies on the equator on the west side of the African Continent. High school geography taught me that the equator is an imaginary line drawn around the earth equally distant from both poles, dividing the earth into northern and southern hemispheres and constituting the parallel of latitude  $0^\circ$

Sundance is at latitude  $44.4^\circ$ . This is roughly halfway between the equator and the north pole. Using this logic, I immediately thought to point the antenna southward and to the east. (Africa is east of Wyoming.) The computer had a different idea. It insisted that the antenna should be pointed east by northeast. That's right, the antenna was pointing more north than south. Wait a minute! The equator is south of us.

The greater circle distance is the shortest distance from one point on the globe to another, no matter what direction you must go. The formula for greater circle is  $\text{hav}(\theta) = \sin^2(\theta/2)$ . All the mathematicians in the room jump up and explain this one. Needless to say, one must have a Haversine table to go forth with this formula. I just let the software chew on it and spit out the answer when it is done. I went to Google Earth and drew a line from our house to Equatorial New Guinea and ask it to calculate distance. It drew a greater circle line heading east by northeast.

If you look at a flat map of the world, Europe is straight east of here. If you pull a string on the globe, it will go through Canada, Greenland, and Iceland. About 46 degrees east of north.

Why did I ramble on about this? To demonstrate to you how Ham Radio signals from directional antennas travel about while we play on the airwaves. As a man of science, I just found this interesting, and I hope you did too.

### **DTARC Board Members:**

Dwayne Allen, WY7FD, President  
Wade Dennis, KD7KNZ, Vice President  
Jerry Boone, WY7JB, Treasurer  
Pat Boone, KF7RJT, Secretary  
Ken Bollinger, KF7PTK, Member at large  
Al Wessel, NOVMD, Member at large

### **Newsletter Material!**

Feel free to communicate.  
Feedback is important and welcomed.  
We will be looking for contributions,  
pictures, etc.

Email me at [newsletter@wy7dt.com](mailto:newsletter@wy7dt.com)