IRVING AMATEUR RADIO CLUB

Serving Amateur Radio Since 1955

WA5CKF REPEATERS: 146.720 - PL 110.9 TSQL 110.9 224.400 - PL110.9 442.675 + PL 110.9 442.375 + PL110.9

June 2023



The June meeting will be Thursday, 22 June 2023, at Senter Park East, 7:00 PM. We will talk about plans for ARRL Field Day on June 24

President's Corner

Ken Hansen N2VIP

Hello, and welcome to June, the month when all hams have the opportunity to become "contesters" by participating in the ARRL's Field Day – even though Field Day is NOT a contest! While you ponder that truth, I'll formally invite everyone in the club to join us at Heritage Park in Irving this Saturday the 24th (more information can be found elsewhere in this newsletter, or by attending our June meeting on the 22nd).



Our Field Day plans run until sundown, meaning we plan to be out of the park with all our antennas down and the equipment packed away. Roger and Kim Bacak are preparing some BBQ. If I remember correctly they are preparing what they are referring to as a "taco bar" type setting, and I expect others will bring some small side dishes and desserts. The club will have bottled water and maybe some assorted sodas leftover from recent meetings. I hope you can make it, it promises to be a lot of fun – our goal is to keep a couple of radios busy for a few hours an have a nice social event.

As a member of three clubs (Irving, Dallas and Richardson) I will be shuttling between three Field Day sites this weekend. I've volunteered to help move the Dallas trailer and help setup antennas Friday night, Saturday I'll be at Irving's Heritage Park location helping set up antennas and staying around for most of the day, possibly making a trip to Richardson's EOC location (they too are planning to be done by sundown). I'll be visiting Dallas's Field Day site after sundown, as they are going all 24 hours. On top of those events, I've volunteered to assist in collecting and forwarding ARRL Section Manager Steve Lott Smith's messages from the traffic nets (you know, so clubs can gather more points in this non-contest!), and over the course of this weekend there will be a Vintage Computer Festival at UT Richardson campus. Whew! I got exhausted just listing my plans for this weekend!

In other news I was able to finally connect the emergency backup batteries to the two Yaesu repeaters at the Fire Training (future EOC) location – it was a comedy of errors, I went to the site three previous times yet didn't get the batteries connected until my fourth visit. It just underscores the need to plan ahead and make sure you have everything you need before you head to the repeater site. Fortunately access to the repeater site is simple, the few authorized people need only call and alert the City of Irving of our intention to visit the site and to call when we leave. There are no restrictions, no supervision requirement, and no advance notice needed. Soon I hope to have a third Yaesu repeater installed at the Fire Training facility as our 2 meter backup, and we need to get our broken Bridgecom 220 repeater looked at, then we can have all our repeater "pairs" either located or backed-up at the Fire Training Facility.



President

Ken Hansen N2VIP Vice-President

Bill Byrom N5BB

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Ron Tabb KC5HPO

Secretary

John Cheyney KF5PFP

Directors

Venzula Mathews KF5PJH Ron Ford KF5OMH Billy Geer KA5OZC Andrew Harmon KD5RKO

Newsletter Editor

John Cheyney KF5PFP

General/Business Meeting: **22 June 2023** @ 7:00pm

Weekly Meeting Nets: 7:00 pm each Thursday on the WA5CKF 2m repeater.

Monthly VE Testing:

2nd Saturday of the month, Business Jet Center at Dallas Love Field. Check the IARC Calendar <u>here</u> for more details.

Contact Us

l<u>rvingarc.org</u> P.O. Box 153333 Irving, Texas 75015-3333

Facebook:

https://www.facebook.com/ irvingarc.org Before I go, I wanted to share a club activity that really endears me to the Richardson Wireless Klub (I really don't like that "Club with a K" thing BTW, but I know lots of clubs thought it was cute "back in the day...) - every Wednesday they meet at BBQ restaurant from 12:00 until as late as 3:30 or 4:00, sharing stories, asking questions/getting answers, and just having a good time. Understand the Richardson club is about 8-10 times larger than Irving, but each Wednesday two or three dozen members turn out for these lunches, it really is a great time. Personally, I added the one-way swap meet – I bring unneeded/unwanted items to the lunch and try to make them go away. I almost never charge for any item I bring, but then again if I did I would most likely bring them back home with me. The goal is to free up space in my garage, not profit from a ten year-old item. It something I may start doing at our club meetings, and I would encourage you to do the same. The idea is simple – a table is set up, unwanted items are put on the table, and hopefully a fellow club member takes it home. The catch is, you can't abandon the items – someone, either a fellow club member or you has to take it home.

The Irving club used to have a Wednesday "brunch bunch" that met at the McDonald's on Story, but that got scuttled when they closed the McDonalds for renovations. Is there interest in organizing a weekly social event, either a weekday morning, afternoon, or something on the weekend? Give it some thought, and let's discuss it at this month's meeting later this week. And with that, I'll just add I hope to see you not only at this month's meeting on Saturday, but also at Field Day this Saturday. And if you want more information about the Vintage Computer Festival, check out this website: https://www.vcfsw.org/

2023 Field Day John Cheyney KF5PFP

ARRL Field Day 2023 is fast approaching. As I write this we are less than one week away!

The club will operate on Saturday only from the Heritage Park building in downtown Irving. Set up starts at 10:00AM. We will operate from 1:00pm to 7:30PM. Breakdown has to be completed by 9:00PM.

We will have three stations, one CW station, one digital station, and one SSB. However, each station can operate in any mode.







Ken Hansen N2VIP Vice-President Bill Byrom N5BB **Treasurer**

AMATEUR RADIO

FRIENDLY BUT

Ron Tabb KC5HPO

Secretary

John Cheyney KF5PFP

Directors

Venzula Mathews KF5PJH Ron Ford KF50MH Billy Geer KA5OZC Andrew Harmon KD5RKO

Newsletter Editor John Cheyney KF5PFP

The Heritage park building is air conditioned and has two bathrooms.

The club will provide drinks. Roger and Kim Bacak will be providing a brisket taco bar for people who want to eat. There are also numerous restaurants and a Starbucks within easy walking distance.

Regardless of your license level, we have control operators who are all Amateur Extra class. You can operate any level you want.

If you can't join us or want to operate outside those hours you can still aggregate your scores with the club. Enter 'IRVING ARC' in the club box in your log entry.

We had a great time in this location at Winter Field Day. What we need more than anything are people to operate radios. Regardless of how long, please come by and enjoy.

We will talk about the final plans at this week's club meeting. Please join us for the meeting and for Field Day.

Working the 2023 June VHF contest from home

Tom Schuessler, N5HYP

Two years ago, I worked my first ever ARRL VHF contest. I used my Buddypole system and configured a 6 Meter 3 element beam from directions found on the BuddyPole web site. https://turbifycdn.com/ty/cdn/buddipole/6myagi3element.pdf. Band conditions then were so-so. I made some FT8 and a couple of meteor scatter contacts on 6 and was happy. I did have to work from the back patio as I had temporarily lost access to my antenna passthrough system. Along with the bugs, it was "Hot fun in the Summertime".

For whatever reason, I was not able to participate last year, but decided with a much higher sunspot number on average as Cycle 25 is ramping up, that I had to give it another try. For this year, I had my passthrough back, so I was looking forward to operating in the AC

Setting up and operating

To prepare, I put the antenna together the Friday of the week before to remember how the design worked, so as to make contest day easier. I knew I would have to adjust and tweak the measurements given in the published descriptions. When I first followed those instructions, the element measurements gave me an SWR that was at it's lowest at about 49 MHz. Not acceptable when I really needed it to be lowest at abut 50.3. With the aid of my NanoVNA, I shortened the sets of whips to appropriate lengths to get the plot shown. Made some FT8 contacts on 50.313 and was happy,

On contest day, Saturday the 10th, I put everything back together using the measurements from the week before but found incredibly bad SWR numbers. I eventually switched out an adapter and a length of coax and got the SWR from the previous week. I will have to now experiment with the components that did not work to find out just what went wrong. Unfortunately, the coax change gave me 25 more feet of higher loss transmission line, so I probably lost a DB or two in the process. Fortunately though, it was now working as it should with a nice 1.12:1 SWR in the lower portions of 50 MHz.



The whole idea of moving inside was that I would be able to use my tower PC and monitor and sit comfortably, working the software. Unfortunately, I had issues with the serial control of the radio from that desktop PC. You probably know that I have a venerable Yaesu FT847 All mode rig that goes from HF to 70 CM. For audio interfacing, I use a West Mountain Radio Rigblaster Advantage soundcard interface. It has a USB connection for audio in/out of the PC and that also can be passed to a standard 9 pin serial cable for control of an older rig like mine. The Rigblaster worked great for control via my old and slow ACER laptop, but just would not control the rig through the desktop. I have bumped into this problem before with newer PCs as their ports sometime don't put out the right data speed for the USB to serial conversion. So ultimately, even though I was operating inside, I still had to use the laptop with the 13 inch screen, to run things as if I was portable.

Doing some test contacts on Saturday, I found I could run a full 100 watts on 6 Meters. Starting at 1800 UTC and working off and on until 0300 UTC on the 11th, I made 69 contacts mostly on FT8 on 6 meters with a few on 2 meters. While the "JT" modes were profitable, I find it kind of "lazy man's" contesting. For the WSJT-X modes, you just click on a decoded call, and the software on both ends runs through the contact sequence. Fun, but where is the operator skill? I kept spinning down to the phone and CW portions of the band but never really heard much activity there on Saturday.



ISunday I was not able to get back on until mid afternoon local time with Church, lunch, and laundry. When I did get on mid -afternoon, I was amazed by how much more active the digital mode frequencies were showing. I worked another 20 or so contacts there but pined for a greater challenge so I again spun down to the CW/Phone portion of 6 and was greeted by a raft of QSOs going on, so I jumped in on phone. Over the next two hours, worked at least 35 calls from the Midwest (Wisconsin, Illinois, and Minnesota), as well as Ohio and the northeast, with a few Southeastern grids in there for good measure. Manual data entry on the laptop keyboard ended up with me having a few busted calls that if I had been using the desktop keyboard, would have been in the log correctly.

These two days of operation were the most time I have spent on a VHF contesting in my 38 years of hamming. The "Magic Band" can be totally dead at times, but when it is active like it was for the VHF contest, with a good bit of Sporadic E propagation, and maybe even some F2, it is quite fun. Even with thunderstorms building out to the west, it was quiet with no static crashes.

Turned out it was a good thing I decided to take the antenna down about 5:30 local time on Sunday, as it was obvious that there were thundershowers building in the local area.

When I was done, my log had about 145 QSOs to begin with, but after I accounted for, and deleted the duplicate QSOs in the digital mode log, and a few broken calls that got entered on phone, I ended up with 124 contacts in 34 unique grids. I felt pleased for a little pistol, with a marginal antenna down in a hole, but having good propagation really helped.

Afterthoughts and action items

I do have a few observations as this was by far the most use of the Joe Taylor, W1JT, digital mode software package WSJT-X, in a contest situation. First, it is very much, an easy way to work a contest and pick up a lot of QSOs. That ease also in my mind, takes some of the challenge out of contest chasing or digital contesting. The software is designed to semi-automate the QSO process. If set up right, a response to your CQ message can be picked up automatically by the software by a receiving station, 'and when they respond, your local software responds in kind. Responses are cycled through a complete contact with acknowledgment. The biggest skill needed may be to quickly "DoubleClick" a responding call or someone else's CQ before the next transmit cycle. No need to train your ear to pull a call sign out of the mud, or to properly copy and send the needed CW message in a sharp, readable manner. Also, since for modes like FT8 or FT4, each transmission is only 13 characters long, there is no way to acknowledge something beyond signal strength or Grid.

Although the WSJT-X software does have a "Contest log" viewing mode, the software does not balk if you run a QSO in the contest with a duplicate call you have already worked. I suppose that JTAlert software, which runs as a companion to WSJT-X, and can interface to external loggers, would do the flagging directly, and avoid wasting time on those dups. Have not worked on that piece yet, but that is for another day.

I also wondered why so few folks were running the faster sequencing of the FT4 protocol over the very densely used, but slower FT8. I know the argument that FT8 is much more sensitive to weak signals than FT4, but I only saw a small percentage of operators on the FT4 watering hole frequency of 53.318 over the crowd on 50.313.

Another strange one for me was how the secondary watering hole for FT8 on 50.323 almost always never was used. It would have made working FT8 easier due to the crowds all stacked up in one place.

I also wondered why it took so long in the weekend, for operators to get to working the traditional voice or CW modes. Propagation was quite good on Saturday, with some very strong out of area signals, but no real activity down on those frequencies. I guess by Sunday, more folks like me, were ready to do some real contesting.



Ultimately, I had a real blast working this contest. It was wonderful that the ionosphere cooperated, and provided some excellent conditions for a wide range of locations. There are September and January versions of the ARRL VHF contest, along with others as well, that I hope to join in as well. See you on the Magic Band.

New FM Satellites

Tom Schuessler, N5HYP

Although launched back in January of 2022. A small fleet of cubesats has just recently been activated for Amateur Radio use. The "Tevel" satellites, built by high school students in Israel, are a group of eight, 1 unit cubesats, (10X10X10 CM and 1 Kg) all with identical FM transponders on the same frequency have recently become active for communications use. All launched on a SpaceX "Transporter" flight, the satellites were originally bunched quite tightly, but over time have drifted further apart, so that the control operators can command several of them on at a time, making for more frequent usable passes.

I have worked through these satellites and they have nice strong signals on the downlinks. Downlink frequency is 436.400 MHz +- 9 Khz of doppler. The uplink is 145.970 MHz FM with no PL tone. Unfortunately, of these satellites, named TEVEL – through TEVEL-8, 1 AND 8 are not functional.

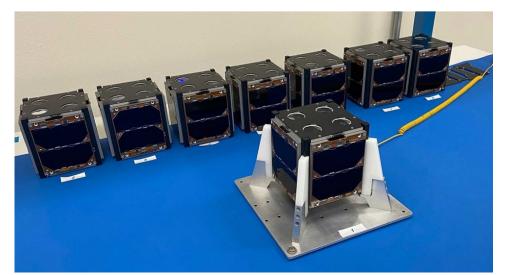
David Greenberg, 4X1DG from Israel, has been regularly announcing through social media, and the AMSAT BB mail list, the current state of this group of satellites, regularly activating two or three of these birds at a time for 72 hour stints. Passes are either later in the mornings 10:30A-1P or so and evenings from 10:30P-1A.

You can find more information on these satellites from the following links;

- Gunter's Space Page, https://space.skyrocket.de/doc_sdat/tevel-1.htm
- Nanosats Database, https://www.nanosats.eu/sat/tevel
- AMSAT satellite status page, https://www.amsat.org/status/
- AMSAT satellite FM satellite frequency chart, https://www.amsat.org/fm-satellite-frequency-summary/
- AMSAT pass prediction page, https://www.amsat.org/track/index.php Grid calculate, and select satellite.
- Live Tracking, next few hours, http://amsat.org.ar/pass? satx=teve3,teve4,teve5,tevel2,tevel6,tevel7 Enter Grid at bottom, Resolve and Set New.

Hope you get a chance to listen.

Learn more of this and other Amateur Radio satellite related news on either of two area repeater nets. "East", Tuesdays, except for the first Tuesday of the month, 8PM on DARC's 146.88 repeater, and "West", every Wednesday at 9PM on the Arlington 147.14 repeater. Both with PL 110.9.





Irving RACES/ARES Report May 2023 Billy Geer KA5OZC

Total number of ARES members: 13

Change since last month: (-) ____ or (+) ___ or same: >__X ___

Local Net Name: Irving RACES/ARES

Total sessions: 6

NTS liaison is maintained with the: DFW Net

Number of ARES drills, tests and training sessions this month: 6

--2 Dallas Training (25 hrs)
--1 Irving Training (12 hrs)
--2 Radio Checks (IPD/IFD) (2 hrs)
Monthly Warning Siren Check (1.5 hrs)

Person hours: 40.5

Number of ARES public service events this month: Number of ARES emergency operations this month:

Total number of ARES operations/activations this month: 6

Total Person hours: 40.5

Thursday Club Net

IARC holds a net every Thursday night, except the fourth Thursday when we have our meeting. The net starts at 7:00pm on the 146.72 repeater or Echolink. Everyone is welcome, whether you are an IARC member or not. Net controls are:

- Bill Byrom N5BB
- Shane Outlaw KI5GBU
- John Cheyney KF5PFP

May Club Meeting Minutes

John Cheyney KF5PFP, Club Secretary IARC April 2023 Meeting Senter Park East, Irving 25 May 2022

Officers Present:

Secretary John Cheyney KF5PFP Treasurer Ron Tabb KC5HPO Director Billy Geer KA5OZC

Director Ron Ford KF50MH

Direcotr Andrew Harmon KD5RKO

Call to Order 19:15 pm by John Cheyney KF5PFP

There were 8 members

Pledge: John Cheyney KF5PFP **Prayer:** John Moss KI5WRQ

Old Business:

Approve minutes from last meeting (March) Motion to Accept: Billy Geer KA5OZC

Second: Ron Ford KF50MH

Unanimous



President

Ken Hansen N2VIP

Vice-President

Bill Byrom N5BB

Treasurer

Ron Tabb KC5HPO

Secretary

John Cheyney KF5PFP

Directors

Venzula Mathews KF5PJH Ron Ford KF5OMH Billv Geer KA5OZC

Andrew Harmon KD5RKO

Newsletter Editor

John Cheyney KF5PFP

Treasurer Report: Taxes and tax prep are completed. Current balance is \$48,074.41

Motion to Accept: Billy Geer KA5OZC

Second: Ron Ford KF50MH

Unanimous

New Business:

Officers present approved \$150 to pay Andrew Koenig for tuning duplexer cans.

Shane Outlaw KI5GBU is going to Cedar Hill State Park, Saturday 3 June at 0900. He is going to activate the park and will help people. John Cheyney KF5PFP to send out notice to club via HCOL.

DFW Ham Expo, at the Vista Mall, formerly Music City Mall, Lewisville, Saturday 3 June. Tailgating starts at 0700, 9-3 inside.

Field Day plans were discussed.

Motion to adjourn: Ron Ford KF5OMH

Second: Billy Geer KA5OZC

Unanimous

Submitted by IARC Secretary John Cheyney KF5PFP

