IRVING AMATEUR RADIO CLUB

Serving Amateur Radio Since 1955

WA5CKF REPEATERS:
146.72 PL 110.9/TSQL 110.9
224.40 PL 110.9
442.675 PL 110.9/TSQL110.9

July 2021

July Club Meeting Is In Person

The July club meeting will be held in person. This is our first in person meeting in over a year and we are looking forward to seeing everyone. The meeting will be Thursday 22 July, 7 pm, at Senter Park East. The address is 228 Chamberlain, Irving, 75060.

At the meeting the club will vote on the proposed updates to the by-laws. If you cannot be there for the meeting you can contact Bill Byrom N5BB at N5BB@Byrom.net to get an absentee ballot.

President's Corner

Ken Hansen N2VIP

Well, I must say, it's great to be back in Texas, after spending nearly six weeks in New Jersey. We drove to New Jersey on Memorial day for lots of reasons, but mainly to visit with family. As expected, I packed a number of "toys" to allow me to "play radio" while away from home.

Best Laid Plans

I loaded up my truck with a 100 watt HF radio and a 10 watt QRP HF/VHF/UHF radio, along with an assortment of antennas and required accessories (laptop, coax, power sources, antennas). I also gave my Granbury shack a good "going-over" before leaving town to allow for recovery if something got "wedged" in the station (remote power control, for example) I knew I'd be "on the road" during Field Day, and I planned on participating – and I did, but not as much as I would have liked.

APRS

I've always been casually interested in running APRS in my vehicle, since the radio in my car supports it (Kenwood TM-D710GA) without any additional hardware. On a rest stop while travelling to NJ I took about 30 minutes and set it up on my radio. It was hard to configure since no one seemed interested in simply telling you what do to set it up. I eventually found a YouTube video where a very helpful ham simply stepped thru the settings, menu by menu, to turn on APRS beaconing. I'm not sure how I feel about constantly beaconing my position to the world, but it's now just a simple flick of a switch to turn beaconing on and off.

Surprise Contest

Shortly after arriving in New Jersey I learned about the ARRL VHF/UHF contest in early June. Checking my calendar of family events I determined I could participate with a very modest station. So on the appointed day I set up my Elk Log Periodic antenna on the tripod mount I described previously in the club newsletter and set about working the contest with my 10 Watt Icom IC-705 radio operating FT8 from the 2nd floor balcony of my Father in Law's house. The balcony faced north and was on one of the highest points in the county. I was able to work stations over 300 miles away, running up and down the east coast from Maine to southern Virginia and across Pennsylvania. Given the reality that I started contesting at around 11:00 PM, and that I was running a QRP-level station, I was quite pleased with the 40 or so stations I worked. The reasons behind my success were, in order of importance: a) the decision to run FT8, b) my excellent elevated location, and c) that my antenna offered modest gain and was properly (horizontally) polarized.

General/Business Meeting:
July 22 @ 7:00 pm

Weekly Meeting Nets:
7:00 pm each Thursday on the WA5CKF repeaters.

Contact Us
Irvingarc.org
P.O. Box 153333
Irving, Texas 75015-3333

This is my operating position for the VHF/UHF Contest – the IC-705 is running off an external battery, giving me the "full" 10 watt output the radio is capable of.

Ken Goes Shopping

We take for granted that we are but a half-hour drive from a Ham Radio store – from where I was in New Jersey it was a near 90 minute drive to the nearest HRO, and I do enjoy walking around Ham Radio stores (and hamfests). So I drove down to HRO in New Castle, Delaware, and picked up a few items for Field Day (coax jumpers, power pole cables). While in the store the Manager was re-boxing a radio he just took in from a customer – a beautiful, "good as new" TS-520 in a pristine original box w/manual. Now, the last thing I need is another HF radio – especially a tube radio – but this was a beautiful radio. This was a radio I'd always wanted since the late 70s, but I honestly had no need for it (I've got Max's old TS-830 if I ever feel the need to warm the room with tubes, not to mention a small number of Collins radios.). So I left the store with just my accessories.

Field Day

I thought I was ready for Field Day, I had packed a vertical antenna (the Alpha Mil Whip, like the club owns), as well as an end-fed half-wave antenna that covers 40-10 meters, and a 50' run of coax, along with some smaller coax lines and barrel connectors – I thought I was set… Then I had an idea. Realizing I had over 120' between my Father-in-law's house and a small shed/barn, I realized I could run a much bigger EFHW antenna and hopefully operate on the lower bands (80, 40, and maybe 160 meters) with a different antenna. Checking the HRO website they had the Chameleon EmComm III antenna in stock in Virginia and New Hampshire, but not in Delaware, so I ordered it from the Virginia store and it arrived next-day (!) in plenty of time for Field Day. So, Field Day comes, and I set out to install my new antenna, and guess what – I didn't have enough coax to configure the antenna the way I wanted to (feed point near ground, the far end elevated), so I either had to reverse the installation or get more coax. Of course, I'll take any excuse to go shopping, so I drove to HRO in Delaware getting there just in time (they were about to close). I picked up two 50' coax runs and a couple more barrel connectors, as well as an Arrow dual-band J Pole (in case I wanted to work local repeaters in NJ). Upon returning to my station I was summoned to a family dinner. After dinner I stopped by and visited a great radio club in my old neighborhood – The Delaware Valley Amateur Radio Club in West Trenton, NJ. This club has is original ARRL affiliation paperwork signed by Hiram Percy, and they own a physical shack with several towers and two HF operating positions in their building. It was a very nice setup, and the club members were wonderful, and we had a great conversation. The standout item for me was the 40 meter beam they had on one of their towers, you don't get to see one of those every day!

After I added the new coax, I fired up the radio, and set about "Logging Q's". Since I wasn't starting until 10:00 PM, the higher bands (20 meters and up) weren't really an option, so I focused on 80 and 40 meters, having pretty good success working stations all around the Northeast (my EFHW was only about 8-15' above the ground, so it was really working as an NVIS antenna). I did manage a 160 Meter FT8 QSO, and when I returned to my operating position in the morning I had better luck on 20 meters as the sun came up.
Given that I was operating 100 watts, with a compromise antenna, and the hours of operation (primarily 12:00 AM to about 4:00 AM) I was quite pleased with my results. I logged about 60 QSOs, and for the first time operated on 80 meters logging QSOs.

I Went Back to Ohio…
One of the reasons for this extended trip is because our youngest is attending college in Ohio, and was enrolled in a couple summer courses in Ohio – we drove her to and from her courses, necessitating multiple cross-Pennsylvania drives. On one of the trips, rather than take the PA Turnpike I choose to travel along RT. 80, and shortly after crossing into Pennsylvania from Ohio I spied a HUGE HF Beam antenna on the side of the highway, poking up thru the trees. As we got closer, I was able to actually see the house with the beam and it was none other than Tim Duffy's station, K3LR, and boy, did he jam a lot of antennas into a fairly modest lot (maybe a couple acres, no more than 4 or 5 I'd guess)! That was a surprise.

Yet Another HRO Visit
After my last trip to Ohio, I was returning home by myself, so I took s little detour and visited HRO in Milwaukee, WI. You may recall this used to be an AES store, and legend had it that this store was HUGE. So I went to Milwaukee, visited the store, and it WAS huge. I'd estimate it to be about 3-4 times the size of HRO in Plano, the aisles were very wide, and they had tons of stuff on the floor. In addition, they have a dedicated class room for clubs to use for license classes and VE testing, and a massive warehouse in back of the store. I understand HRO plans to use this space as a national warehouse/distribution point, once the manufacturers can start supplying more products. While in Milwaukee I felt the need to get something (a fairly common sensation among Hams in Ham radio stores, I understand), and decided to pick up a new HT. I picked up an AnyTone DMR HT that is the latest and greatest on the market, capable of beaconing my position on VHF-FM (144.390 MHz) as well as FM and DMR operation on VHF and UHF. Look forward to a Report on this new radio in a future newsletter.

Club News
So, at our July meeting we will finally be voting on the amended by-laws, and before we do so I'd like to thank everyone involved in the process of reviewing and amending them. Contrary to almost every other club I'm aware of, the review and amendment process went very smooth, and while we had some hiccups along the way, the process went without a hitch. Thank you to everyone involved.

As I write this, I'm not sure where our July meeting will be held, but it will be our first in-person meeting for quite a while. If you feel safe, I encourage you to try and attend the meeting in-person. The topic will be "Show and Tell", so if you have something to share or demonstrate, please come prepared.

Last night I took one of our Yaesu DR-2X repeaters and put it on our "other" UHF pair (442.375, +5 MHz, 110.9 pl) at the Bingo Hall. It's operational, but will need some adjustments. For now, it identifies itself via CW (at least I assume it does, I don't know Morse Code), but I will be adding a voice board for a spoken ID and possibly for storing announcements. The Yaesu repeaters have a ton of features, and it is our hope to explore and learn about the Yaesu repeaters we have already as we prepare to deploy new repeaters in the new Irving EOC in the next 6-12 months. Please, if you get a chance, try and access the new repeater, it may be off the air at random times for tinkering, but it should be generally available,

Finally, I'd also like to thank everyone involved in the recovering from the great repeater kerfuffle – as I write this article I'm still not clear on all that happened, but we'll go over the issues at the July meeting.

That's it for now,
Ken, N2VIP

Slow Scan TV Via the International Space Station

John Cheyney KF5PFP

On one of our weekly nets, Tom Schuessler N5HYP mentioned the International Space Station (ISS) would do a slow-scan TV (SSTV) broadcast session the week of 21-26 June. I had seen pictures on the Reddit amateur radio forum. The process didn't seem complicated, so I decided I would try to grab some pictures.

Slow-scan TV is an amateur radio mode that is used to send non-moving pictures. Its initial major use was in space exploration. Both the Russian and US space programs used it to transmit pictures from manned and unmanned missions. The FCC legalized SSTV for amateurs in 1968. In the 1990s, personal computers made the system usable for amateurs. Slow-scan TV has fallen off in use but it's still out there. In fact, it still has questions on the current Amateur Extra exam.

The Russian ARISS team broadcasts the SSTV pictures coming from the ISS from the Russian module (Zarya). They use a Kenwood D-710 and 25 watts of output on 145.80 FM. The pictures use the PD-120 format, which transmits one picture in two minutes, followed by a two minute off cycle, then repeat. This allows someone with a handheld radio and a rubber duck antenna to pick up the signal. Most people who posted SSTV pictures from the ISS used a handheld radio and a phone app. You launch the app and hold the phone up to the radio. The app picks up the sound using the phone's microphone and creates the picture. Each round of broadcasting has a theme. The theme for this session was 'Amateur Radio on Shuttle, Mir, and ISS.' Each of the pictures showed missions with ham-licensed astronauts from different countries.

My rig is an ICOM-7100 connected to a Diamond 2M/440cm/220M antenna in front of my house. Because I work mostly digitally, I already have a laptop connected to the built-in soundcard. I had everything in place from a hardware standpoint. The only thing I need was software. The first application I found was MultiPSK. I got it hooked up on Monday about an hour before the first pass.

Not knowing what to expect, I opened the squelch and started listening. Through the hiss I made out some warbling digital tones. As the satellite icon in GoSatWatch showed up, the tones got stronger and MultiPSK showed, line by line, the picture being broadcast. It was grainy and slanted, but it was there. That picture ended, and it went back to static. Then, two minutes later, I could hear the squelch close and got much, much stronger signal. The picture had a marked slant to it. That picture was still not great, but I had proved the connection.

The next pass was about two hours later, at a much higher angle. This picture was very clear and very slanted, but I used the controls in MultiPSK to take the slant out. I was hyped, because I had gotten just what I was looking for.

That lasted five minutes. Turns out that MultiPSK doesn't have autosave as a default. I turned away from the computer. By the time I turned back, the picture disappeared.

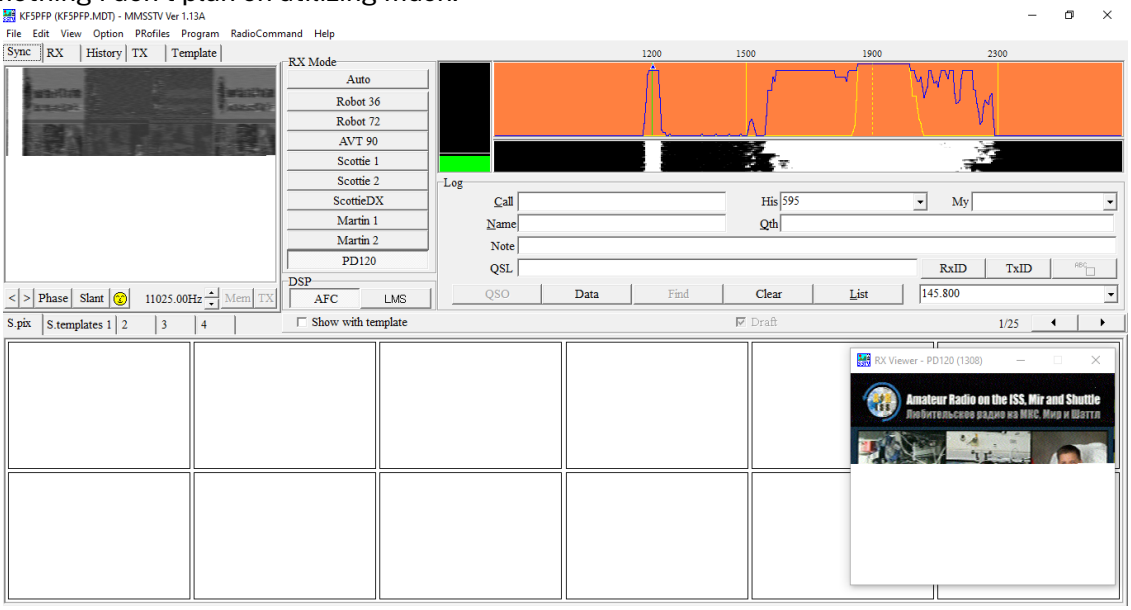
I picked up more pictures with MultiPSK (after I set up auto synch) and they were fine. But I already use FLDIGI for digital modes and really didn't need everything else MultiPSK does. One of the other applications that was suggested was MMSSTV by Majoto Mori JE3HHT. I was initially sceptical because the 'latest' version was 2010 and listed compatibility with Windows 7. However, several sources mentioned it so I downloaded it and installed it. Installation and configuration were very simple. The only configuration step was to pick the soundcard input and output from a drop-down menu. MMSSTV automatically picks up the signal and determines the format.

Note: If I had kept looking I would have seen that there is a newer version called MMSSTV_YONIQ. This one supports Omni-Rig for cat control, Spanish and English translations, and a host of other additional features.

MMSSTV has done well. It automatically picked up the signal and started processing, and then automatically saved the picture. Its default is a BMP file but it will also do JPEG files.

For this event there are 12 pictures that commemorate the history of amateur radio on Mir, the Space Shuttle, and the ISS. The layout of my house and antenna made the passes to the northeast the best. As long as the height was 5 degrees or more above the horizon, I got a solid decode.

This has been a fun and easy project. I got some cool pictures and learned a new mode, even if it's something I don't plan on utilizing much.



Screenshot of MMSTV receiving a picture from the ISS

ARRL Field Day 2021

Tom Schuessler N5HYP

Although there were some clubs and groups who had organized Field Day events at public places, I chose to again operate as a 1 E, Patio Portable for 2021. Difference is that this year, I was able to invite others to join me.

The radio again was my FT847 powered by the 20AJ Bioenno Power, Lithium Iron Phosphate battery. I started intending to work 10 meters on HF but as it got towards 1PM, I saw that even the CW beacons I had heard earlier in the morning had disappeared and so felt better of the decision and reconfigured the Buddlpole dipole to 20 Meters.

I, of course, also set up my satellite antenna system which consisted of an Alaskan Arrow (1 elements on 70 CM and 4 Elements on 2 M which is actually owned by Bill, N5BB), with duplexers for filters and preamps for both bands, all mounted on a getting old in the tooth camera tripod.

I had a general invitation out for anyone who wanted to stop by to do so, but invited three specific individuals for specific reasons.

First was Bill Byrom, N5BB, who although, he has been an AMSAT member since the 70s, and is a very accomplished CW operator, had never made a satellite contact, much less one on his "passion" mode of choice, CW. He got three for N5HYP, one each on RS-44, CAS 4A and CAS-4B. Morse code on satellite is very doable, but has unique challenges as compared to HF. Even with a computer controlling doppler shift correction, there can be drift between stations frequency wise and fading due to satellite rotation.

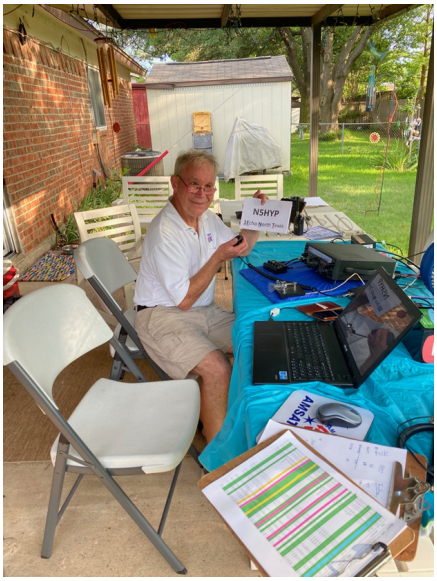
My second guest was Guy Dineen, K1GBD, Guy is a newer Ham but has been diving into the hobby. He told me he was developing a home brew azimuth/Elevation rotator system specifically for portable satellite operation, driven wirelessly off the Mac Doppler satellite tracking software. He was pleased to bring it over and see if it would work. Like all work in progress projects, he had quite the time getting things first talking, then properly driving the antenna, (His own Alaskan Arrow). Finally, he overcame the obstacles and we got him making his first voice satellite contacts using his own portable antenna system.

Then there was Thomas Doyle, KI5JCM. I have been monitoring him on satellite communications and knew also that he had never worked any HF. Got him his first satellite contacts via W5RRR the NASA Houston club an K4BFT, the Huntsville/Marshal Spaceflight Center Club stations. Also logged some HF with him on the mic as well. He was pretty stoked by the experience. For me it was a long day starting at 8AM. With Bill and Guy having to leave for other opportunities and Thomas having a long day too, we decided to break down already at 6P. It still took me a few more hours to bring everything in and put it all away.

Did I make the QSO count my station totalled last year, NO, but, I do consider this a very successful FD event. Field Day should always be an opportunity to help people do things they have never done before, get a chance to experiment with different technologies, and learn new concepts. I always learn things at Field Day and I am grateful for those in the past, who exposed me to new things.

Total QSO count for N5HYP was 36, with 8 of them on satellite, and 3 of the satellite QSOs were on CW.

Bill Byrom N5BB working CW on the RS-44 satellite



Tom N5HYP working patio portable

N5HYP pushing his antenna stack manually while Guy, K5GBD watches his antenna rig track the same satellite.

Club Repeater and Shack Updates

The 146.720 MHz and 442.675 MHz repeaters are back up and running as normal and usually will be linked together. The end tone after the sending station stops transmitting is a low audio frequency for the 2M repeater, higher for the 1.25M (224.400 MHz) repeater, and even higher for the 70cm (440) repeater. So if you are listening on 2M and you hear two stations (the first on 2M and the second on 70cm), the end beep audio frequency after they stop transmitting will be higher on the 70cm station. The beep frequency is based on where they enter our repeater system, not where you are listening.

We are having difficulties with the 224.400 MHz repeater. I'm going to try to get it working again this weekend. When it comes back up, you will need to use a 110.9 PL tone on your transmitter, just as you have needed with our other repeaters.

All repeaters now transmit a 110.9 Hz PL tone, so you can optionally enable "tone squelch" with a 110.9 Hz setting on your radio. But you don't have to do this. But you must transmit a 110.9 PL tone when you transmit, even for the 1.25m (224.400 MHz) repeater.

A new 20m vertical antenna was installed at the ham shack on the IC-7300. We can now broadcast on 20m without interfering with the Bingo Hall's PA system. Two new antenna switches were also installed. Each switch has a center position that isolates the antenna from the radio. it's no longer necessary to disconnect the feed lines from the radio when you are done.

City of Irving July 4th Parade 2021

John Cheyney KF5PFP

After missing 2020 because of the Covid-19 pandemic, the City of Irving held its 2021 July 4th parade on Saturday 3 July. The Irving Amateur Radio Club and Irving ARES/RACES teamed up to provide communications for the parade operations. Ron Tabb KC5HPO put together a team of 10 operators to monitor parade flow, communicate to parade control, and catch candy thrown by the participants.

Back Row: Tim Fooks N5MBQ, Ron Tabb KC5HPO, Jon Sheets N5JBS, Billy Geer KA5OZC
Second Row: Mark Corona KD5TTT, Bill Byrom N5BB, Carrye Johnstone KD5RFB
Bottom Row: Susan Corona KD5UQA, Tom Schuessler N5HYP, John Cheyney KF5PFP

Estate Sale

The Estate of Duane Baade W5PNM SK is up for sale. Items included in the sale are a series of Flex, iCom, and Yaesu radios, amps, and power supplies, Tektronic test equipment, RC Sail Gliders, and more. All proceeds will go to Duane's family estate and wife. All sales are final as is, with no returns.

Date: 08/07/2021, 9 am to 3 pm
1562 Glenmore Dr.
Lewisville, Texas, 75077
Google Maps Link
Facilitated by KG5RJR, KC5AMT, KG5ZAU

Irving ARES/RACES Report June 2021

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: 3
NTS liaison is maintained with the: DFW Net
Number of ARES drills, tests and training sessions this month: 3
1 Dallas Training
1 Irving Training
1 MCLC Radio Test
Person hours: 22.1
Number of ARES public service events this month: 0
Person hours: 0
Number of ARES emergency operations this month: 0
Person hours: 0
Total number of ARES operations/activations this month: 3
Total Person hours: 22.1

IARC Meeting Minutes June 2021 (Pending Approval)

Tom Schuessler N5HYP

In attendance.
Tom Schuessler
Bill Byrom
Billy Geer
Steven Beltser
Patric Jancoyak
Ron Tabb
Dennis Brady
Ron Tabb
Jim Nordgren
Calvin Gluk
Ron Ford
Venzula Matthews

Meeting called to order at 7:05 by Bill Byrom, N5BB, IARC Vice president.
Pledge of Allegiance

Minutes of the May meeting were sent out to leadership and published in club newsletter.
Billy, KA5OZC motioned to accept, Ron KC5HPO seconded. Minutes approved by acclimation.

No treasurers report for June as Ken Hansen is out of town for the month.

Discussion on the upcoming Field Day operations. Dennis Brady and Ron Tabb will be at club shack for the 1PM start and until no one wants to operate.. People are invited to come by. Calvin Gluck talked about QRUQSP.org and FD logging.

There was discussion on 20 meter interference issue at the Bingo Hall and possible solutions. Dennis Brady felt that installation of a 20 Meter vertical might be a possible solution. He had researched several options and then made a suggestion seeking to spend $250 on a ComTech 20 M vertical. Club members agreed. It was also decided to add some coax switches to the shack installation to easily move between antennas on the roof without unplugging cables repeatedly. Total club expenditures would total about $400.

Ron Tabb will act as Net control for the City of Irving parade on July 3rd. Bill, N5HYP, has met with the new parade director for the city. Need for as many people as possible to assist.

Bill, N5BB discussed the upcoming Bylaws vote on July 22nd at next meeting at Senter Park. There is a need as many of the club members to attend as possible to allow for a quorum. Bylaws have been sent out to all members and per the current bylaws, members can request an absentee ballot if they cannot attend in person.

Tom Schuessler, N5HYP reports that the City Parks department has approved all of IARC requests to use the Senter Park facility from July through November. Meeting in person does present concerns to some and not so much to others. Discussion was had on the Club's needing to be sensitive to the various opinions. There was also some discussion on what to do for upcoming programs and activities at these meetings.

Finally there was a discussion on how the two QSO Parties for club members went. Most enjoyed but there was discussion about including non-club members into the mix. Also some comments on encouraging mobile operation to increase QSOs that can be gained.

Meeting was called to a close at 9:05PM

Respectfully submitted by Tom Schuessler, N5HYP, Irving Amateur Radio Club Secretary.

Mission Statement
To provide radio communications with honor and integrity and

To honor the amateur radio code of ethics and

To provide technical support services to others so interested and

To support citizens of our community in times of need and disaster and

To provide radio communications as needed during local emergency situations.