

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

September 2024



June Meeting Information

Our next meeting will be on Thursday, 26th September 2024, at the club Shack at Betcha Bingo hall on 2420 W Irving Blvd, Irving, TX 75061. We will start the business meeting at 7:00 pm, and club meeting at 7:30 pm. Everyone is invited to all parts of the meeting.

President's Corner

Ken Hansen N2VIP

President, Irving Amateur Radio Club, Inc.



Hello and welcome to the September newsletter, there's a lot that went on this past month, so lets get to it!

As decided at our August meeting, Bill Byrom and myself visited the Many Helping Hands charity to present them with a donation on behalf of the club to help support their organization. Both Bill & I were impressed with the scope of the services offered – they offer laundry service, showers, replacement clothes if needed, nutritious meals, and a safe space to rest off the streets. In addition, they help their guests apply for and receive assistance from local, state and federal programs. This is a very worthwhile program, and our club should be proud of our support of it.

As I write this on Sunday afternoon, the Texas QSO Party has finished. John Cheyney took the initiative and opened the Club Shack at Betcha Bingo 2. Lots of QSO were logged, and several club members came by to participate as their schedules allowed. The bands were hopping at times during the weekend, and our club station performed well. In a surprise to all, it turns out the two antennas at the Bingo hall don't interfere with each other, provided you are using each antenna on a different band than the other antenna. (As a reminder, we have a 40 – 6 meter cobweb antenna and an 80-10 dipole antenna on the roof.)

The club's 220 MHz repeater was mysteriously out of service briefly recently, but it soon came back online (I have no idea why, the short outage of a couple days was observed by several club members). The club owns two Bridgecom 220 MHz repeaters – one that is kept in service, another as a cold spare (ready to go, but not kept at the repeater site). The spare repeater appears to have bad finals (no RF output). This was confirmed with a watt meter and the repeater will be sent back to Bridgecom for repair. Once the backup repeater is returned to us, it will be installed in the EOC repeater location as a connected but powered-off repeater ready to be put into service should the primary 220 MHz repeater should fail. While the 220 MHz repeater doesn't get much use, it does get used by some members of the community. The club officers are happy to support the 220 MHz repeater, but if the expense gets excessive, the club may want to reconsider our commitment.

The Club's RemoteHams station is being used, but only a few members seem to be taking advantage of this unique club benefit – if you are curious and would like to try out the station, reach out to John Cheyney and he'll be happy to help you get started. We've got a great radio (Yaesu FTDX-10 HF/6m radio) and two strong antennas, though only the dipole antenna is accessible from the remote operating position.

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John Cheyney KF5PFP

Directors

Venzula Mathews KF5PJH

Ron Ford KF5OMH

Barry MacGregor N5SMW

Shane Outlaw KI5GBU

Newsletter Editor

Jerry Aberdeen KB3RWT

General/Business Meeting:
25 April 2024 @ 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 here for more
details. —

Contact Us

Irvingarc.org

P.O. Box 153333

Irving, Texas 75015-3333

Facebook:

<https://www.facebook.com/irvingarc.org>

President's Corner Cont'd

To operate the software you will need to install the client software on a windows computer, though there is an Android App for Android phones and tablets available, but it has to be purchased (as an iPhone user, this isn't an option for me to try).

You may have noticed the EchoLink node goes down from time to time, typically because of unplanned Windows software updates that were taking excessively long times. The EchoLink node is running on a Windows 10 desktop, but that desktop has a conventional hard disk drive (spinning rust). For reasons I've never heard Microsoft explain, Windows 10 runs very poorly on a conventional hard disk drive – updates, for example, take a long time to complete, and occasionally start “thrashing” (HDD activity increases exponentially) effectively slowing the computer to a crawl. Several months ago the Club Officers approved the purchase of a replacement computer, and it is expected that our club EchoLink node will be transferred to this new computer which also is running Win 10, but it is running on a Solid State Drive. Hopefully, once the node is upgraded to the new computer, the random drop-outs of the EchoLink node should be much less frequently.

Well, it's that time of the year when we start planning for the next Irving Hamfest. Our planning activities at this point is mainly about making the big decisions (Are we having a Hamfest? Will we charge the same as last year?) and start publicizing the event in publications, ham radio websites, etc. We also may decide to approve a budget for the event and (hopefully) find some new leadership for the event. We will discuss this at the September meeting.

I hope to see you at our September meeting at Betcha Bingo 2, where the club shack is located. The meeting starts at 7:00 PM, I hope you can join us.



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August 2024 Meeting Minutes

IARC August 2024 Meeting
25 July 2024
Betcha Bingo II



Officers Present:

President: Ken Hansen N2VIP
Vice President: Bill Byrom N5BB
Treasurer: Kim Bacak N5KCB
Secretary: John Cheyney KF5PFP
Director: Barry MacGregor N5SMW
Director: Ron Ford KF5OMH

Meeting called at 19:08 by Ken Hansen N2VIP

16 members and 1 guest

Pledge of Allegiance: Ken Hansen N2VIP

Prayer: John Moss KI5WRQ

Introduction of members and guests

Concerns:

Presentation by Tony Mendina NT5TM on Fox Hunting

Treasurer's Report from July:

Kim Bacak N5KCB read the report

Motion to accept with no changes: Billy Geer KA5OZC

Second: Bill Byrom N5BB

Unanimous

Ken Hansen N2VIP brought up that members can join or renew their ARRL membership through the club. The club gets \$5 per renewal and \$20 for new members. Members can renew in advance.

Minutes of the July meeting were posted in the August newsletter

Motion to accept with no changes: Bill Byrom N5BB

Second: Billy Geer KA5OZC

Unanimous

Ken Hansen N2VIP said the ARRL now has an interactive tool that allows you to find newly licensed HAMs in your area. He would like the club to do a mass mailing monthly to new hams inviting them to join the club. Ken will set that up and we will do until the end of the year and reevaluate.

Motion to accept: John Cheyney KF5PFP

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When Big Expectations Fall Short

by Ron Ford KF5OMH



We all know that the Texas QSO Party was this past weekend and many of us had big expectations of big scores. This event is all about contacting hams in the 256 counties in the state. Well, there may not have been operators in every county. Scores are based on operating mode, transmit power, and number of contacts. The event is open to all comers.

If you were on the Irving Net last Thursday you heard we all excited about my plans to operate mobile with a friend and cover multiple counties (the more counties the bigger the score). We knew of a place where you can be in three counties at once thus every contact you make is worth a triple multiplier (county). We were so confident that we were not sharing the location prior to the event. It would be heartbreaking to get there and find another operator firmly implanted in our spot. The plan was to sit at this location as long as we were making contacts then move along a route that would lead up to a third ham's home in Montague TX where he promised us lunch prior to turning around and following the same route back home.

Now for the rest of the story as Paul Harvey would say. We were all packed up and ready to go until we did one last radio check before pulling away from the house. The PTT was pushed, and a broadcast made asking for a radio check. "HOLY COW" I hear coming from the right seat. "THE SWR IS OUT OF SIGHT" my partner proclaimed. We were using my friend KD2KW's vehicle and radio setup that consisted of a homebrew "Wolf River Coil-like" antenna that he had recently mount of the tow hitch of the truck. Everything had been fine prior to Saturday morning, made lots of contacts and all was well.

So, we went to work trying to find the glitch. Our thought process was that it had to be something with the antenna installation because it was the newest piece of equipment. The radio was an older model Yaesu that, for the life of me, I can't remember the model. Antenna analyzer was deployed, along with a toolbox full of the obligatory stash of tools, a dummy load. After checking every connection etc., we put a different antenna into play – SWR still high. It's 10:30 and we're expected for lunch in Montague around 12ish. We were starting to get hungry for those hamburgers, potato salad and baked beans. The decision was made to stop the efforts to find the problem and hit the road.

Off we went hitting the trail to the appointed lunch. All along the route we're listening to contact after contact being made in not only the Texas QSO Party but the other four that were occurring this weekend. Being as broken-hearted as a teenager being rejected by a young lady when she refused his invitation to the prom we finally turned the radio off. Lunch was great and the company was wonderful. As we were sitting around the table letting lunch settle naturally the talk turned to the radio problem. Well, three heads must be better than two.

Sure enough, after a couple of initial checks of the obvious, the third head asked, "how about the radio ground?". Sure enough, we had not checked it and it turned out to be the culprit; almost two full turns of the bolt providing the ground of the radio to the frame. Did not intend to drag this out but it just had to be said to get it off my mind.

On the way home in the late afternoon, we only mustered eleven (11) contacts. Seemed like the bands had shut down for the day.

The moral of this story – never troubleshoot on an empty stomach.

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Shack Update

IARC Lending Library

The club has purchased a library of books from the ARRL. These books are in the shack and available for check out by club members only. We are working on a way for club members to get to them. For now you can check them out at any shack event, or by contacting Ken, John, or Kim and setting up a time to meet. Please only keep each book two weeks at a time.

- ARRL Technician, General, and Extra class manuals
- ARRL Handbook
- ARRL Antenna Book
- Basic Antennas
- RFI Book
- Understanding Basic Electronics
- Basic Digital Electronics
- And many others

Club Equipment for Loan to Members

The club has several pieces of equipment that members can borrow for testing their stations, or for use at events. If you'd like to use some of this you can pick it up at any shack event, or make arrangements with John or Ken.

- Rig Expert AA-600 antenna analyzer
- IFR Service Monitor
- Anderson Powerpole crimp kit (you have to supply your own connectors)
- Soldering equipment
- Several desktop power supplies
- MFJ-557 Morse Code practice oscillator (for practicing CW)
- Multiple sets of HT's and tape-measure Yagi antennas for fox hunting
- 25 watt Retevis 2M mobile radio in an ammo can (great for events like the parades)

In addition we can lend out the UHF/VHF go box (contains two radios), the IC-7300, the PowerWrx battery box, and a number of antennas and coax runs to support special events or for testing.



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Club Donates To Many Helping Hands

By Ken Hansen -N2VIP

On Monday 9th September, The Irving Amateur radio Club represented by it's President Ken Hansen -N5VIP and Vice president Bill Byrom-N5BB, made a donation to the Many Helping Hands organization in the sum of \$500.00. Below is a picture of them making that Cheque presentation.



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RACES/ ARES Corner

The Irving RACES/ARES group is always looking for amateur radio operators willing to join them in community service to the city of Irving, all you have to do is be a licensed amateur radio operator, and either work or live within the city of Irving. If you are interested feel free to contact Carry Johnstone KD5RFB.

Siren Test

Reminder to all,

Both the IARC and Irving RACES ARES group have committed to support the monthly Irving siren (ENS -Emergency Notification System) test.

Irving has 26 sirens located through the City, on City property. All sirens rotate and make a LOUD siren type noise, with the exception of the one that is located on top of the Irving Convention Center that does not rotate.

There is always a monthly test that occurs on the first Wednesday of each month at 1:00 PM and lasts 3 minutes. There are two types of tests, a full function test, siren and rotation (if it is designed to rotate), and a silent test (rotate only if it is designed to rotate). The silent test is only done if there is any possibility of a weather threat, or any other reason the OEM (Office of Emergency Management) feels it may confuse the citizens.

We will only monitor the test for full functionality, NOT the silent test. I will notify all that has a siren assignment if the test is silent (usually before noon on the day of the test), and get confirmation you received that notification.

The individual effort will take only around 5 minutes at the location, but may take a total of 15-45 minutes, depending on travel time to and from. You MUST be close enough to your assigned location to see it rotate and sound for the full 3 minutes (ear muffs and/or ear plugs are recommended).

A list of all the sirens with the ones needing to be observed identified to choose from will be sent to all the IARC and Irving RACES ARES group members the weekend before the test. You will need to notify me of your choice, and I will conform it is yours to observe, or request you to pick another because somebody else has picked it.

We, as Amateur Radio Operators, enjoy this hobby, and this is one way we can give back to the community. This is one of the reasons the FCC has allowed us to have assigned frequencies/bands to operate on, as HAMS, to enjoy and have the skills needed to support any government entity if needed, or during times of a national emergency. It is a GREAT and fun hobby.

Regards,
Billy KA5OZC

Note: Volunteers are needed to help test the Irving city siren system every first Wednesday of the month. If you are interested in helping, please contact Billy KA5OZC at 214 587 8729 or via email: wgeer@verizon.net



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Many Helping Hands Organization says thank you

Subsequent to a donation of \$500, to the Many Helping Hands Organization, The organization's Executive Director Lana Hansen sent the club a thank you note via our VP Bill Byrom-N5BB. See below a copy of their email to the club.



From: lana hansen <lana.hansen3@gmail.com>
To: bill@byrom.net
Subject: Heartfelt Thanks for Your Generous Donation
Date: Tuesday, September 10, 2024 2:34 PM

Dear Ken and Bill,
We want to extend our heartfelt thanks for your generous \$500 donation yesterday. Your support will undoubtedly make a meaningful impact in helping us serve our friends without homes.
Please pass along our appreciation to everyone at the Club as well!



For your compassion
For your kindness
For your generosity

From all of us at Many Helping Hands

Thank you!

With gratitude,

Lana Hansen
Many Helping Hands
Executive Director
469 730 6206

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Learning Morse Code with the Long Island CW Club (W2LCW)

John Cheyney KF5PFP



For years, mastering Morse Code was on my list of Amateur Radio goals. Despite numerous attempts with various apps and websites, frustration would eventually get the best of me. It was clear that I needed a new approach.

Enter the Long Island CW Club (LICW), an organization dedicated to teaching Morse Code to radio operators across the globe. The LICW welcomes members from all 50 U.S. states and 60 countries worldwide. While live meetups are held regionally, most of the club's activities take place online via Zoom, making it accessible to anyone with an internet connection and a camera.

Getting Started with LICW

The LICW offers a comprehensive orientation to familiarize new members with its methodology and technology. This includes setting up Zoom, joining the active Discord server and Groups.IO page, and understanding Morse Code basics. For those unfamiliar with Zoom, the instructors provide personalized assistance to ensure everyone is comfortable with the platform.

The club recommends starting with a straight key but there is no requirement for that. Many members use paddles. There are active bug/cootie user groups also. You don't need a key at all to start. Classes teach 'code talking' where we say the 'dit' and 'DAH' structure of the characters.

A Structured Learning Path

One of the standout features of the LICW is its structured class system. The curriculum is divided into three levels: Basic, Intermediate, and Advanced. The Basic classes are organized into three carousels:

- **Beginner's Carousel 1 (BC1):** Introduces three new characters each week over a six-week period. The carousel repeats indefinitely, allowing students to join at any time.
- **Beginner's Carousel 2 (BC2):** Spans nine weeks and covers 26 characters, the remaining letters, numbers, and prosigns.
- **Beginner's Carousel 3 (BC3):** Focuses on practical applications and protocols for different types of contacts, including POTA, SOTA, and various contests.

The LICW employs the Koch method, which teaches a small group of letters at a time and adds more as they are mastered. This method, based on Ludwig Koch's 1930s research, emphasizes learning at a speed of at least 10 words per minute (WPM) to avoid the pitfalls of slower learning speeds, which can create reliance on mental lookup tables.

To complement this, the LICW uses Farnsworth spacing. This technique involves sending characters at a faster speed with additional spacing to effectively slow down the transmission. Classes start at a Farnsworth speed of 12/8, where characters are sent at 12 WPM with enough spacing to reduce the overall speed to 8 WPM. This approach helps students learn characters by sound while allowing time to process them.

Engaging Community and Support

The LICW offers a wealth of resources beyond just Morse Code classes. With a diverse range of topics covered, from antennas to the National Traffic System, and specialized groups for operators with hearing difficulties, all-female classes, and even Spanish-language sessions, the club caters to a broad audience. The availability of classes throughout the day and the global reach of the community means that there is always something to participate in.

One of the most valuable aspects of my experience has been the community support. The patience of the instructors and the flexibility in class scheduling have been instrumental in my progress. The use of the Discord channel for setting up contacts has been particularly helpful, allowing me to get instant feedback and make adjustments as needed.

Of all the tools provided by the LICW, one of the most important is the Morse Practice Page. This is a web-based training tool that does drills, organized by the level of the student. It allows you to vary the characters, speed, and spacing of the drills so you can target specific issues you may have, all designed to work along with the class structure.

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Learning Morse Code with the Long Island CW Club (W2LCW) Cont'd

Personal Milestones

After completing the Beginner's Carousel series I've successfully logged 11 CW contacts. These include interactions with LICW members, POTA contacts, and entries in the K1USN contest. While these exchanges have been straightforward, they represent significant achievements in my Morse Code journey.

If you're interested in learning Morse Code or improving your existing skills, I highly recommend checking out the Long Island CW Club. Their structured approach, supportive community, and comprehensive resources provide a solid foundation for success in mastering Morse Code.

If you are interested in learning Morse Code, or getting better at what you already know, give the LICW a try.

For more information:

- Long Island CW Club (<https://longislandcwclub.org/>)
- LICW YouTube Page (<https://www.youtube.com/@longislandcwclub>)
- Ham Radio Crash Course video on the LICW (https://www.youtube.com/watch?v=NjvCr_2U5xs&t=2s)



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Irving ARC takes part in the Texas QSO Party

by John Cheney KF5PFP



Members of the IARC operated the 2024 Texas QSO Party on the 21st and 22nd of September.

We operated from the club shack at Betcha Bingo II using the two new Yaesu FTdx-10's.

Five club members participated:

1. John Moss KI5WRQ
2. Kirk Hooks N3KDP
3. Bill Byrom N5BB
4. Will Turk N5TLH
5. John Cheney KF5PFP

Across the two days we made a total of 141 contacts on SSB and CW. This was also the Washington, Iowa, and New Jersey QSO parties. Adding to that was a large number of active POTA stations that we were able to make contacts with.

We learned that the two FTdx-10's do a great job of operating side-by-side. We were able to work both radios on different antennas without any kind of interference.

Band conditions were very good. As always, 20 meters was super-active. Forty meters yielded many of our Texas contacts. On Sunday morning 15 and 10 meters opened to Eastern Europe.

We were able to make SSB contacts to Slovakia, France, Poland, Hungary, Germany, and Moscow, Russia. We added that to three Canadian contacts from Saturday.

All told we worked 34 counties in Texas. While that may not seem like much compared to the total number of counties, many counties don't get activated for this event.

Many thanks to everyone who participated. Hope to see everyone for next year's event.

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Technical Topic

Vacuum Tube Radios

by Bill Byrom N5BB



Bill will discuss and show off vacuum tube radios at the September 2024 IARC meeting. He will bring several vacuum tube radios to the meeting (see photos below), including:

- Hallicrafters S-38B, S-38C, and S-38E HF receivers. Various models of the S-38 series of receivers were in production from 1946 to 1961.
- National NC-109 HF receiver: Built by National Radio Co from 1957-1960. This was the first receiver I owned. I used it when I got on the air with my Novice license in June, 1969.
- Drake 2-B HF receiver: Produced by R.L. Drake Co from 1961-1965.
- Heathkit HW-101 HF transceiver: Produced by Heath Co from 1970-1993. This might be called a hybrid radio, since it includes two transistors.
- Heathkit SB-301 HF receiver: Produced by Heath Co from 1966-1970.
- Heathkit SB-401 HF transmitter: Produced by Heath Co from 1966-1975.
- Yaesu FT-101 HF hybrid transceiver: Made by Yaesu from 1971-1977. Most of the radio was solid state using transistors, with three vacuum tubes used in the transmitter section. Jerry KB3RWT is bringing his FT-101 to the meeting.

Early Amateur Radio equipment was in use before vacuum tubes were available. Various types of spark gap transmitters and receivers without amplification were used by unlicensed amateurs starting a couple of years before 1910. Amateurs were required to have a license starting in 1912. Both ARRL and the Dallas Amateur Radio Club were created 110 years ago in 1914. Amateur Radio was not allowed during WW I. Vacuum tubes started to be available around 1920, and in 1924 wideband spark transmitters were banned on the new 80, 40, 20, and 5 meter Amateur bands. In 1926 spark transmitters were completely banned. Vacuum tube equipment allowed transmitting and receiving CW (Continuous Wave) narrowband signals using International Morse Code, dramatically increasing the communication range and reducing interference. Eventually AM (and later SSB and FM) allowed analog voice communication. The first commercial AM broadcast station went on the air in 1920.

In 1927 the Federal Radio Commission was formed to regulate civilian radio communication, including Amateur Radio. The FCC (Federal Communication Commission) was formed by a law passed in 1934, and today we operate under amended versions of this law 90 years later.

Vacuum tubes were crucial to the development of radio communication as we know it. The main types of tubes used by hams were:

- Diodes: These rectify AC to generate DC voltage. They were used both in power supplies and in receivers to detect RF signals by converting RF or IF signals with varying amplitude to signals we can hear in the audio frequency range.
- Triodes, tetrodes, and pentodes: These are amplifying devices used in both receivers and transmitters to amplify audio, IF (intermediate frequency), and RF signals.
- Specialty tubes: CRT (cathode ray tubes) were used in oscilloscopes to display waveforms and spectrum analyzers. "Magic eye" tubes were used in some receivers and transmitters in place of meters for display of signal level and tuning. "Nixie" tubes were used to display numbers in frequency counters. Many specialized tubes were used for microwave communication and high power amplifiers.

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Technical Topic

Vacuum Tube Radios cont'd by Bill Byrom N5BB



A picture of some vacuum tube radios courtesy of Bill Byrom N5BB

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Some useful ham radio websites.

- 10-10 Organization- <https://ten-ten.org/>
- QSL - <https://qsl.net/>
- QRZ - <https://www.qrz.com>
- QTH - <https://qth.com/>
- Gigaparts store - <https://www.gigaparts.com/>
- Ham Radio Outlet- <https://www.hamradio.com/>
- OMISS - <https://omiss.net/>
- Icom America - <https://icomamerica.com>
- Yaesu - <https://yaesu.com>
- Kenwood USA - <https://kenwood.com>

From the desk of the editor

Let me take the opportunity to thank all our contributors to the current and past editions of the IARC club newsletter. I am always looking for articles that are ham related for the newsletter.

If you would like to contribute to the newsletter, please email your contribution to me at jerry.aberdeen@gmail.com, with the subject "IARC Newsletter and your callsign" e.g. IARC newsletter -KB3RWT

Going forward, I would like to have all articles for the newsletter sent to me on or before the Sunday of the week in which our in-person meetings are held., but I will accept articles as late as 8pm on the Tuesday before the meeting. This gives me time to organize, create and send out the newsletter in a timely manner. Thanks.

De KB3RWT