FEBRUARY 2024

FEEDBACK

W0ERH.ORG

A PUBLICATION OF THE JOHNSON COUNTY RADIO AMATEURS CLUB, INC.

President's Corner

Hope everyone survived the single digit temperatures and the snow-covered ground. The last days of January have warmed up and the snow has retreated to a few small piles.

I do not believe John (KØIZ) would quiz you on his article in January's 2024 QST, but congratulate him on being published.

We had a calendar conflict for the January 26th meeting, so the Elmer Program has been rescheduled for February 23, so please bring your questions.

The Club's Board met and decided on some changes that will impact the Club's store and membership. First, the Club's store will be handled by Jaimie. This will take effect as soon as it can be transitioned from Cal. The other item is membership. We are going to appoint a membership person to receive notice of a new member and follow up with that person. Both will lessen the workload of both Cal and Ted.

Another change will be how we handle the Club's expenses for such things as Field Day and Ensor auction activities. Going forward, the Club will pay for these items up front and not ask members to pay, then be reimbursed.

Field Day is the Club's biggest expense each year. The tent, tables, chairs and porta-potties being the big items. For the auction, the club must rent tables and a few chairs.

The Club sponsors five repeaters. See the Club's website for details (w0erh.org). We have been very lucky that there has been no weather-related damage to the repeaters. The last was the Black & Veatch site where we had to replace the non-penetrating roof mount after a high wind event.

Bill
KA2FNK

Upcoming Club Events

- Tue. Feb 6 @ 1830 - Club VE Testing - JoCo Library 9875 W 87th St, OPKS
- Fri. Feb 9 @ 1900 - Club Meeting - Biz meeting and presentation - Topic: WINLINK Global Radio E-Mail by Bill Gery KA2FNK
- Fri. Feb 23 @ 1900 - Club Meeting - Extended presentation with Q&A - Topic: Elmer Night! Bring your questions, or if you are an Elmer yourself, consider setting up your own Elmer display to showcase
- Tue. Mar 5 @ 1830 - Club VE Testing - JoCo Library 9875 W 87th St, OPKS
- Fri. Mar 8 @ 1900 - Club Meeting - Biz meeting and presentation - Topic: TBD

In This Issue

Meeting Minutes 11-10-2023

Johnson County Radio Amateurs Club

These minutes were approved by the membership in attendance at the 01-12-2024 virtual meeting.

Meeting Date: Friday November 10, 2023. The meeting Started at 7:00 PM.

Attendance: Self introduction with name and call sign. 27 signed the check in sheet. This was followed be the Pledge of Allegiance.

As per the new By-Laws, the Minutes of the previous meeting from October 13, 2023, were posted on the club website instead of being read. The posted minutes were approved unanimously.

The Treasurer's report was unavailable.

Old Business:
• We welcomed all 1st time visitors to the meeting.
• Repeater Update – Bill Brinker, WA0CBW reported that all Repeater are working well. The 223.94 MHz Repeater was down due a power issue but is back on the air.
• Kevin Van der Does, AD0IM reports the Club's VE team held a testing session on Tuesday November 7. We had 1 applicant. We are averaging 2 or 3 applicants per session. Kevin is very pleased with the VE Team.
• Wayne Jobe, KF0JWR was the winner of the $100 Associated Radio Gift Certificate for being a volunteer at the Ensor Museum for the month of October.
• The FEEBACK Editor is looking for newsletter articles.

New Business:
• The Club's Annual Christmas Party will be at the Church on December 8th.
• Tim Wiegman, KBØYQN, and Boulevard Limousine is offering a Holiday Lights Tour the night of the Club's Christmas Party. The tour will leave from the OP Christian Church promptly at 5 PM, returning no later than 7 PM so that riders will be able to partake in the club's holiday festivities. There are only 14 seats available. Each seat is only $35, a bargain for the experience, and 100% of each ticket minus payment processing fees will be donated to the Club. Register at https://jcracHLT2023.eventbrite.com

Reports:
• 6 m – NR.
• 10 m SSB Roundtable – 5 on 10/26, 4 on 10/29, 3 on 10/12, and NR on 10/4.
• 40m SSB Roundtable – 8 on 10/25 (tied the 440 net), 4 on 10/18, 3 on 10/11, and 4 on 10/4.
• Fusion Digital 440 net – 8 on 10/25, 12 on 10/18, 9 on 10/11, and 12 on 10/4 .
• 2m Wheat Shocker net – 14 on 10/26 , 15 on 10/19, 14 on 10/12, and NR on 10/5.
• HF Activity – Cameroon 20m SSB 100 watts
• Pota Activation – 1 at WW1USA.

Announcements:
• W0ERH Band Plan Mouse Pads for $5.

Business meeting adjourned at 7:42 PM.

Program:
The program was a presentation by David Schulman, WD0ERU on the process he goes through for his on-line auction website. John Raydo K0IZ took the pictures for his presentation.

Submitted by Ted Knapp, N0TEK Secretary.

Meeting Presentation 01-12-2024

For this club meeting, there was a business session conducted prior to our meeting presentation. The Meeting Minutes from this business meeting have not been approved by the membership at the time of this publication, but they are available for review on the club website at www.w0erh.org and will be voted on for approval by the membership at the February 9, 2024 meeting. Once approved, they will be published in the following issue of Feedback.

Due to the forecasted icy weather, this meeting was held virtually on Zoom. Following the conclusion of the business meeting, Bill Gery, KA2FNK, led the discussion of collecting ideas for presentation topics for club meetings throughout the 2024 calendar year. There were plenty of ideas that were shared, however, the problem that seems to persist is the lack of a presenter. So, if you are someone who is knowledgeable in a particular facet of Ham radio, or even something that is Ham radio adjacent, please feel free to throw your hat in the ring of presenting. Yes, we understand that not everyone is the best public speaker, but note that you are presenting to a group of club members and friends and not pitching a sales deck trying to earn the business of a new client. Have fun with it and try to be relaxed and not feel super pressured.

Meeting Presentation 01-26-2024

Normally, the second meeting of the month is to be an extended presentation. For this meeting, the topic was "Elmer Night." Unfortunately, due to a scheduling conflict at the church, our meeting location was unavailable and the meeting was cancelled. The topic of "Elmer Night" has been rescheduled for the February 23, 2024 meeting.

Hambone

"Hambone & the Darling"

A Hambone story by Jaimie Charlton ADØAB

Since Hambone's old friend, Joey, has reappeared along with his girlfriend, Foxy, Hambone and Joey have become rivals. Sure, they're still friends, but Hambone is now devoting most of his time trying to put daylight between Joey and Foxy. Of course, Joey realizes this and is always trying to keep Hambone as far from Foxy as he can.

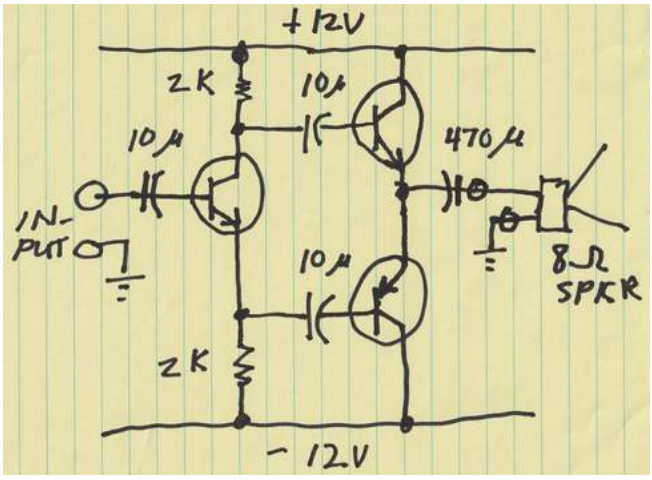
Although the boys try to hide their intentions, all the engineer-wannabes like Dude, Tim and other frat house lizards know what's going on and watch it like a soap opera. Now that they are back in school and since they are in the same class - Circuits 101 - the plot thickens.

Their quirky instructor, Professor Erlenmeyer Flask, has given the class a strange assignment. Each student is to design and build some sort of an innovative amplifier that is capable of driving at least a 10 watt load with no more than five milliamps of input current. The kick is that the design with the fewest components gets an 'A,' the next fewest components gets a 'B' and all the others get 'Cs,' as long as they work and meet the input and output specifications. By the way, only discrete components are allowed, no ICs or anything like that.

Hambone sees this as an opportunity to get closer to Foxy because, as luck would have it, Joey is absent. Although it's not widely known, Joey is still on probation due to his earlier indiscretions and is required to check in with his parole officer back in his hometown at regular intervals. So, he is missing-in-action for a couple of days.

Hambone cont'd

Hambone's hormone-driven plan is to build his design - which is a push-pull audio amp - and play it loudly for all to hear. Then, when all are suitably impressed with his prowess, he will offer to help Foxy – whom being a girl, will need help - with her project. Remember, Hambone is sort of a geeky guy and not great with the ladies but, this should work, shouldn't it?



"Look Tim, I think the best shot is a push-pull amp, don't you?

"Hammy, that's a pretty obvious answer, I think Flask is looking for something more creative. Besides, the simplest circuit that I know of has at least three transistors plus some other parts."

Hambone grabs a yellow pad and begins to draw. "Tim, here's a sketch of my striped down amp. I've cut those extra biasing and feedback resistors out of this circuit. I also found a transistor with a beta of 500 for the driver to give it a lot of sensitivity." "And, I've already made a breadboard and here it is."

Skeptical, but impressed, Tim helped Hambone hook up a power supply and a speaker to his breadboard. They used an MP3 player for the music source and turned it on.

"Holy crap, that sounds awful," shouted Dill, another frat boy who was not in that class but was enjoying watching the others scramble. His interest piqued, Dill wandered over to have a look at the project.

"No wonder that thing sounds so bad, it's as nonlinear as hell. You've got no bias and no negative feedback. What were you thinking?"

"Well," replied a demoralized Hambone. "I was hoping to slip through a loophole in Flask's specs. He set input and power levels but didn't say anything about linearity or usefulness."

"Not a good idea to jerk the teacher around," added Dude who had just joined the fun. "Remember, you may have a loophole, but he's got the grade book."

Later in class, Professor Flask is announcing the winners

"It looks like there was a common theme among most of the projects, push-pull audio amplifiers. I guess you assumed that I was looking for an audio amp, but the specs don't say that. Further, it looks like nearly everyone copied their circuit out of that hobby electronics book in the library. Those projects all got Cs for a grade.

"There was one project that although it was a push-pull audio amp, had fewer components than the others. That project was Hambone's."

A hand shot up attracting the professor's attention. "Professor! How can you consider Hambone's amplifier when it sounds so terrible?"

"Good question, Tim. First, I'm assuming that it meets the input current and the output power specifications."

"It does!" shouted Hambone.

"And yes, Hambone's amp does sound terrible, but low distortion was not part of the specs. So, he reduced his part count by leaving out parts necessary to make a low distortion audio amp."

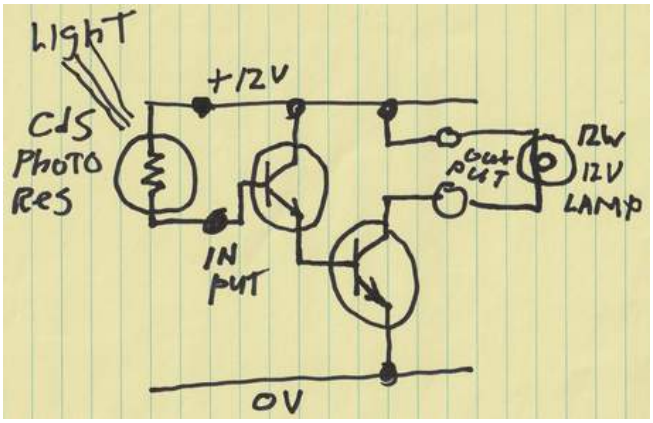
"Yes!" exclaimed Hambone in a whisper only loud enough for Tim to hear.

yes!

Hambone cont'd

The professor continued, "But Hambone only gets a 'B.' The best design goes to Foxy. Her *light amp* meets all the specs and only has two parts. Foxy, please come up and explain your project."

"Thank you, Professor." Foxy placed a sketch of her schematic diagram in the overhead projector as she explained its function.



"I call this a *light amp* because both the input and the output are light.

"The resistance of the cadmium sulfide light sensitive resistor drops when light shines on it. That causes the upper transistor to conduct and turn on the lower transistor. That allows current to pass through the incandescent lamp causing it to glow. The more light that hits the photo resistor, the brighter the lamp."

"I don't see why that circuit is any more sensitive than Hambone's amp," came a voice from the back of the room.

Foxy continued, "This is basically a Darlington configuration or Darlington amp. Usually, the two transistors in this configuration are identical. In my case, the lower unit is a small power transistor with a beta of thirty. The upper transistor is a signal device with a beta of fifty. Taken together, they look like a single transistor with a beta equal to the product of their individual betas."

The voice from the back of the room was about to speak, but Foxy cut him off.

"I know," she said. "You're going to ask what beta is. You should have learned that by now, but for you, I'll explain it.

"It's current gain. That is, the change in a transistor's collector current in response to a change in its base current. For example, in my circuit, the power transistor's beta of thirty means that for one milliamp change in base current, there will be a thirty milliamp change in collector current. The beat of the two devices together is 1500. I'll leave the math to that to the fella in the back row to figure it out."

Stopping to take a breath, Foxy was glad to see Dill raise his hand. "Foxy, that's a brilliant piece of work," praised Dill. "Would you please explain how you selected that particular circuit?"

"Sure, Dill. Thanks for the question. Professor Flask specified a fairly small current for the input which screamed current amplifier. From that, a circuit with a high beta, like a Darlington, came to mind."

"It seems like you should have put a bias resistor on the base of the upper transistor to be sure that leakage from the photo resistor doesn't turn the lamp on," stated Hambone trying to redeem a bit of respect in the class.

"You're right, Hambone. If this were a commercial product, I would have gone the way of caution and biased the first transistor off. But it isn't necessary for this project. The input has to overcome the drop of two base-emitter junctions which means any input must exceed about 1.4 volts before any current starts to flow. The dark resistance of the photo resistor is well over a megaohm so leakage hasn't been a problem. Besides, low part count was specified and good design practice was not- as you well know."

Hambone cont'd

After class, Tim and Dude ambushed Hammy. "You were right," said Tim sarcastically. "She was really impressed with your design and now she's your darling. Maybe she could help you with class projects."

Hambone said nothing and headed to the frat house and an ice-cold beer. Yes, it's winter, but a cold beer seemed like a good idea - it always is.

Jaimie "Unck" Charlton
ADØAB
Author of Hambone

This is Only a Test

Are you new to the hobby? Maybe you recently received your Technician class ticket and what you have learned is still fresh. Or maybe you have held your Extra class ticket for a while and have forgotten some of what you have learned. Regardless, let's keep those mental pencils sharp by reviewing some of the questions from each of the question pools. Only a Tech? Push yourself and try the higher class questions. You might surprise yourself and be encouraged to try your hand at upgrading!

General pool questions changed effective 1 July 2023. Amateur Extra pool questions will change effective 1 July 2024.

1. T4A10 – What function is performed with a transceiver and a digital mode hot spot?
   A. RTTY encoding and decoding without a computer
   B. High-speed digital communications for meteor scatter
   C. FT8 digital communications via AFSK
   D. Communication using digital voice or data systems via the internet

2. T1F03 – When are you required to transmit your assigned call sign?
   A. At least every 15 minutes during and at the end of a communication
   B. At the beginning of each contact, and every 10 minutes thereafter
   C. At least every 10 minutes during and at the end of a communication
   D. At least once during each transmission

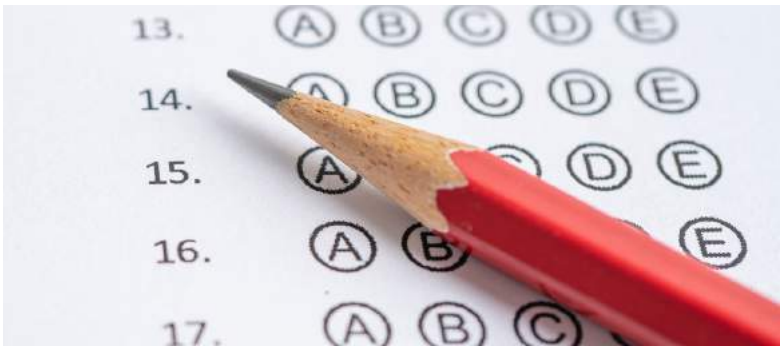
3. G9C12 – Which of the following is a characteristic of using a gamma match with a Yagi antenna?
   A. It is useful for matching multiband antennas
   B. All these choices are correct
   C. It does not require the driven element to be insulated from the boom
   D. It does not require any inductors or capacitors

4. G3A10 – What causes HF propagation conditions to vary periodically in a 26- to 28-day cycle?
   A. Rotation of the Sun's surface layers around its axis
   B. The position of the Moon in its orbit
   C. Cyclic variation in Earth's radiation belts
   D. Long term oscillations in the upper atmosphere

5. E5A16 – What is the resonant frequency of an RLC circuit if R is 33 ohms, L is 50 microhenries and C is 10 picofarads?
   A. 7.12 kHz
   B. 7.12 MHz
   C. 23.5 kHz
   D. 23.5 MHz

Test cont'd

6. E6E02 – Which of the following device package is a through-hole type?
   A. PLCC
   B. SOT
   C. DIP
   D. Ball grid array



Answers: 1d, 2c, 3c, 4a, 5b, 6c

How did you do?

If you got all the questions correct, *Congrats!* If you hold a Technician or General class license, this may be the sign you need to work on that upgrade. Plenty of resources are available for study. The JCRAC VE Team holds testing sessions on the first Tuesday of each month at the Johnson County Library at 87th & Farley in Overland Park. The VEs start arriving and setting up about 6:30 PM, but as long as you arrive by around 7:00 PM or shortly thereafter, you should be able to complete your test. The library does close at 8:00 PM.

Are you ready and don't feel like you can wait? Contact Kevin, ADØIM, and see if a pop-up VE session can be held. Only 3 VEs are needed and there a plenty of Club VEs, so it usually isn't too difficult to arrange. They understand that when you are ready, YOU ARE READY!

VE News

Submitted by Kevin van der Does, ADØIM

2023 was a great year for the JCRAC Volunteer Examiner (VE) team. Affiliated with the W5YI VEC, we conducted thirteen exam sessions and administered thirty-four exams.

New in 2024, we are now affiliated with the ARRL VEC. This changed gives us several advantages for the new year:

- It strengthens our Club's tied to ARRL.
- We are now permitted to administer exams to candidates under the age of 18 for $5 versus the normal fee of $15.
- Kids under the age of 18 who pass their Technician-class exam at one of our sessions are eligible for reimbursement of the $35 FCC license application fee, paid by the ARRL.

As in 2023, we will be holding thirteen exam sessions this year. This includes our "Fun in the Outdoors" session during Field Day.

I'd like to give a tremendous "Thank You!" to all our dedicated Volunteer Examiners:

Dianna Fiddick – KDØOBP
Bill Gery – KA2FNK
Andrew Pierce – KS1AE
Ted Knapp – NØTEK
Dave Porter – KØDVP
Dave Felter – KØDAG
Bill Brinker – WAØCBW
Steve Duffy – WØSTD
Curt Moore – NØJCM
Howard Cripe – NØAZ
John Critchfield – NØGMD
Mike Ralls – KØKCK
Bob Raker – WØBR
Sarah Dickey – N6OPE

73!

Kevin van der Does, ADØIM
JCRAC VE Team Lead

Intentional QRM

In case you were unaware, the best month to enjoy a cup of coffee or a cold beer is Feb-BREW-ary.

February 29th is always a frog's favorite day. Why? Because it is Leap Day!

The best month to tell a lie is Fib-ruary.

Some people eat black-eyed peas on New Year's Day to bring them luck. On St. Patrick's Day, it is often corned beef and cabbage. I have decided that on February 2nd to consume sausage to celebrate Ground Hog Day!

Not to brag or anything, but I already have a date for Valentine's Day. It's February 14th.

Upcoming Public Service Events

It's hard to believe, but in just a couple of months, Public Service Events will start back up again! In case you are new to the hobby, PSEs are a great opportunity to test your equipment, familiarizing yourself with it, as well as learn how to properly operate in a directed formal net. These are also great opportunities to meet other area Hams while giving back to our communities.

Below is a list of scheduled PSEs, but there may be a few changes and additions in the coming months. If you are interested in helping with any event, send an email to the Point of Contract provided.

April 20 - Garmin Olathe Marathon, Olathe - Herb F. NZØF - hfiddick@gmail.com

April 21 - Wild West Ride, Wyandotte Co./NE Kansas - Ray E. KØRSE - rerlichman@kc.rr.com

May 4 - MS Walk, Overland Park - Gary S. N2FSH - gary.schlotzhauer@gmail.com

June 9 - Summer Breeze, Raymore - Ray E. KØRSE - rerlichman@kc.rr.com

July 14 - Shawnee Mission Triathlon, SM Park - Mike R. KØKCK - wmralls@comcast.net

July 20 - Lenexa Moonlight Bike Ride, Lenexa - Steve R. WDØDPB - wd0dpb@comcast.net

July 21 - Lizard Under the Skillet (NEW), Douglas Co. - Ray E. KØRSE - rerlichman@kc.rr.com

August 10 & 17- Kill Creek Triathlons, Kill Creek Park - Mike R. KØKCK - wmralls@comcast.net

September 7 & 8 - Hawk 100 - Clinton State Park - Bill G. KA2FNK - ka2fnk@gmail.com

September TBD - Tour de BBQ (NEW), KCMO

September TBD - Bike MS, Olathe/Douglas Co.

October 13 - Octoginta (NEW), Douglas Co.

Announcements

The Wheatshocker Net Wants You!

Have you wondered what it takes to be Net Control? Do you want to be a Net Control for the club? If so, contact Dave Porter, KØDVP, expressing your interest in learning how to become Net Control for the Wheatshockers nets.

Dave and other veteran Net Controls will put together a training session to teach what it takes to become an effective Net Control, how to log check-ins, how to identify and handle "doubles," and other tips and techniques. Don't worry! Being Net Control is not a weekly commitment. And more Net Controls allows for more flexibility in when and how often you act at Net Control. Plus it provides experience when the need arises for a formal net.

Again, contact Dave KØDVP if you have interest in becoming at Net Control for the club.

February Classes

Know someone who is interested in becoming an amateur radio operator? Are they struggling to find appropriate material to study and pass their tests? Are they taking practice tests online and receiving undesirable results? Do they need the structure of a classroom setting to better grasp the information and better learn the material?

HamClass.org is hosting a Technician Class license class in January at Wyandotte County Emergency Management in KCK. For just $35 plus FCC fees, one can attend these classes held on February 17th and 24th. A VE testing session is held at the conclusion of the second class that Saturday afternoon. That means you could leave class the afternoon of February 24th having passed your licensing examination and be issued your license within just a few short days!

Signing up is easy! Just visit www.HamClass.org to enroll and you could be on your way to being a newly licensed amateur radio operator.

Announcements cont'd

W7P Special Event

Pluto was discovered on February 18, 1930, thus making this year the 94th Anniversary since its discovery. The Northern Arizona DX Association has been hosting a 10-Year Countdown Special Event, started in 2021, to commemorate the 100th Anniversary of the discovery of Pluto. This year is Year Four of the 100th Anniversary Countdown Special Event.

Beginning at 0000 UTC on February 10, 2024 and continuing until 2359 UTC February 18, 2024 (9 days for the 9th planet), club members of the Northern Arizona DX Association will be operating a special event station, W7P, from Lowell Observatory in Flagstaff, AZ, the location where Clyde Tombaugh discovered Pluto, as well as from their home QTHs.

QSL cards for the special event have featured Clyde Tombaugh, Pluto, moons of Pluto, and equipment used in his discovery. There is also an event certificate available in which you can add endorsement stickers for each year you have worked the special event.

JCRAC club member Doug Tombaugh, N3PDT, is Clyde Tombaugh's nephew, and will be operating during the special event as W7P/Ø. Should you make contact with Doug or a member of his team during the event, that contact will count as an additional endorsement to the certificate and can be used as a wildcard for any previous year.

Members of the Northern Arizona DX Association will operate on as many bands as modes as conditions and time permits. More information about this special event, QSL card design, certificate information, spotting information, planned center frequencies to be utilized, and how to get a hard copy of QSL cards and certificates, visit that club's website at www.nadxa.com.

Special thanks goes to John Raydo, KØIZ, for this info on this special event involving a club member.

An Easy, Inexpensive Voice Keyer

This little box with "Record and Play" pushbuttons is convenient for contesting operations.

By John S. Raydo, KØIZ

Featured in Jan. 2024 (p 30-31) edition of "QST"

I frequently operate my Colorado station remotely using voice-operated transmit (VOX) with a laptop and PC headset. But for contests and special events, a voice keyer in a little box with a pushbutton to record a message would be better (see the lead image). The ISD1820 voice recorder module fi ts the bill. It's capable of recording and playing back one 10-second-long message.

Parts and Construction

I fit everything in a 100×60×25-millimeter plastic box, including the module, speaker, switches, and battery (see Figure 1). The module is attached using two #4-40 screws and nuts, plus two small nuts for spacers. I drilled 3/32-inch holes in a 1.25-inch round pattern for the included speaker and attached it with two dabs of hot glue.

The module includes switches to record and play, but these are inaccessible for practical use, so I added two momentary contact switches: a red double pole double throw (DPDT) for recording and a black single pole single throw (SPST) or single pole double throw (SPDT) for playback. I used switches similar to C&K 8221 (DPDT) and 8121 (SPDT).

Voice Keyer cont'd

Figure 1 - *An internal view of the voice keyer. The ISD1820 module is on the upper left, and the battery is on the lower left.*

Using a headset microphone to record the message helps make it sound nearly identical to live audio. I removed the on-board microphone element and added a Dupont two-pin header. A 3.5-millimeter stereo jack makes the connection to the headset electret microphone.

The DPDT record switch transfers the headset microphone from output to the module microphone input and starts the recording. The default sampling rate is 6.4 kHz. I added a small resistor to increase the rate to 8 kHz for better fidelity. This reduced the available message length to 8 seconds, which is still adequate for my purpose. Add a 390 kΩ, 1⁄8 W resistor in parallel across R1, which is a 100 kΩ (marked 104) surface-mount resistor (see Figure 2).

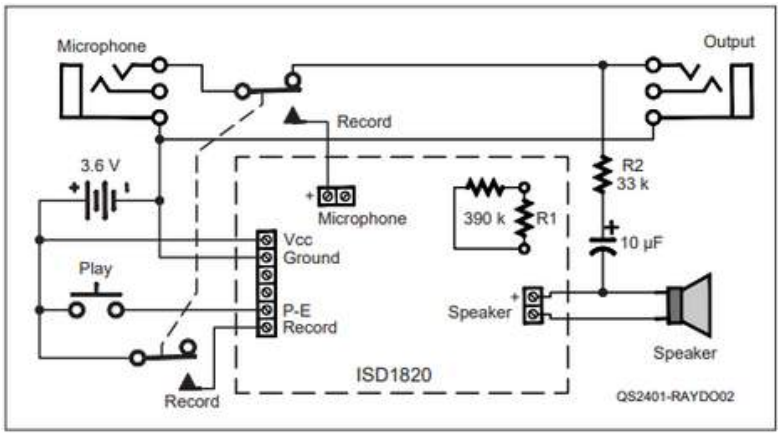


Figure 2 - *Schematic of the voice keyer.*

The headset microphone audio and module audio are combined in the output using a 10 µF capacitor (the value isn't critical) and a series resistor. Select the R2 resistor value that makes the message volume equal to the headset microphone volume. I used 33 kΩ. A small trim pot would allow adjustment, if desired. A 3.5-millimeter stereo jack provides the combined output to the laptop.

I used Dupont-type plugs to connect the battery and switches. These plugs are available online or from defunct PCs. You could also solder the wires to the pins.

The module needs 2.7 to 5.5 V. The current drain during recordings is 10 mA, and the playback is 30 mA. Standby current is essentially zero (0.5 µA), so no power switch is needed. I selected an ER14250 3.6 V lithium battery for its small size (1⁄2 AA) and good capacity (1200 mAh). I attached the holder in the box with double-sided tape.

PC-type headsets use an electret microphone element, which is the same as the module. A dynamic-type microphone could be used instead, if a capacitor of around 10 µF is inserted between the microphone and the module connection to isolate the microphone from the module bias voltage.

Setup and Operation

Plug the headset microphone into the proper jack, and press the record button to start an 8- to 10-second message (see Figure 3). Release the button at the end of the message. The module has a lot of microphone gain. Even though it has automatic gain control, the audio will distort if you're speaking too loudly while recording. Press the play button to hear the recording on the internal speaker. Your message will be retained until you push the record button again.

Figure 3 - *Press & hold the red button on the top left corner of the keyer to record an 8- to- 10-second message. Access the digital edition of "QST" (www.arrl.org/qst) to experience this voice keyer in action.*

Voice Keyer cont'd

I connected the keyer output (using a 3.5-millimeter stereo cable) and headset phones to a TRRS (four-pole) Y adapter to fit my laptop. My voice and the recorded message will trigger the VOX to transmit. This little device can record only one message. It's easy to use, inexpensive, and fun to build!

John S. Raydo, KØIZ, was first licensed in 1957 as KNØLMZ at age 13. He enjoys constructing equipment and has authored a number of articles in "QST," "QEX," and "Electric Radio." His most recent projects include a 13-tube SSB transceiver and a grounded-grid 813 amplifier. Other interests include contesting and special event operations with WW1USA, the National WWI Museum and Memorial. John can be reached at ***kcflyers@yahoo.com****.*

From the Editor

Well, I think I can speak for all of us when I say January can be summed up with one word... *Brrr!!* It was quite the month. We experienced snow, freezing rain, some gusty winds and sub-zero temperatures, and that was the actual temperature, not wind chills. No, those gusty winds yielded wind chills of -20 or colder at times. And if you have kids or a family member that works for an area school district, there were several days that the weather resulted in cancelations. I was starting to wonder if kids were still enrolled in school.

In all seriousness, though, I hope all of us made it out safely without having damaged vehicles, damaged antennas or frozen pipes or drains. And in case you didn't hear, our fancy new single terminal at the airport had a pipe burst in the baggage claim area during the extreme cold. I can tell you from my own experience since I frequent the airport for my job that it was rather cold in the arrivals area. Often times, people could see their breath as they were waiting for the luggage. I'm not sure who designed the HVAC systems for the airport, but it is obvious that the severe cold was too much. Now, we can just hope that the coldest of the winter season is behind us as we wait for our postal carriers to bring us those bulky utility bills to let us know what our damages are.

And on to what I really want to talk about.... you, the membership. I really want to thank everyone that contributed ideas and material to this month's newsletter. Because of you, it makes my job as the newsletter editor considerably easier.

To John Raydo, KØIZ... congrats on getting your voice keyer project published in "QRZ." It is neat to see someone I know get something published, whether it is big or small, local or national. I enjoy being able to read something or watch a video and say, "I know that guy." You have always been so giving to the club and the greater radio community. You lend us your station to operate remotely for special events. You educate us on proper contesting etiquette each year for Field Day. Thank you!

To Kevin van der Does, ADØIM... thank you for leading the Club's team of VEs. I know the entire team works hard hosting testing sessions each month with the occasional additional testing session when the need arises, including the Field Day testing session. Congrats on the move from W5YI to ARRL as the Club's VEC. The benefits, especially for youth examinees, see to be tremendous. Great job to you and the fourteen members of your team.

To Jaimie Charlton, ADØAB... thanks again for all the Hambone stories. I know that you dedicate quite a bit of time to write those, edit them, draw schematics, etc. Each month I enjoy reading the hijinks that Hambone, Dude and the rest of the frat boys find themselves in. I do question how much of that comes from your own college experiences... I guess like the number of licks it takes to get the the Tootsie Roll center of a Tootsie Pop, we may never know the truth on the origins of Hambone plots.

And to everyone else, thanks for being awesome fellow members. We each bring something special and unique making our so great.

73!

Tim Wiegman, Jr.
KBØYQN

What's Your Traffic?

Have something you'd like to announce to the club? What about a useful Tech Tip? Is there club member that should be spotlighted? Photos from a presentation?

Your input including ideas, photos, news bits, etc. will help me curate the monthly "Feedback" newsletters. Together, we can create an awesome publication to advance and further the Amateur Radio hobby.

Submit a contribution by emailing me at twiegman+feedback@gmail.com

Thank you to those that submit photos for events and meetings as well as provide tech tips and other information.

Club Nets

The club has weekly nets on Wednesday and Thursday. It is a great way to test your equipment. Many public service events conduct their communications in a similar way, so this is also a great way to gain experience applicable to assisting in public service events.

Wednesday @ 1900 - Yaesu Fusion net via Kansas City Room, also accessible from select local KC repeaters (visit www.kansascityroom.com for a list)

Wednesday @ Conclusion of Fusion net - 40M Roundtable ***near*** 7.273 MHz LSB

Thursday @ 1900 - Wheatshocker analog net on 145.29 MHz club analog repeater (negative offset, PL Tone of 151.4 Hz)

Thursday @ Conclusion of analog net - 10M Afterglow net on 28.475 MHz USB (within Technician Class portion of band)

Need Club Swag?

If want to show off your JCRAC pride and need some club swag, you may order some by visiting the "Store" tab on the club website where you can purchase hats, patches, name badges and shirts. Also, some items along with other goodies may be available for purchase at club meetings.

Club website: https://www.w0erh.org

FEEDBACK

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