# Amateur Radio Club at Kansas State University WØQQQ



ALUMNI 60s & 70s	ALUMNI 80s & 90s	ALUMNI 2000 ON	ALUMNI LETTERS	ARRL
BIG 12	CONST.	EXAMS	FACEBOOK	HOME
INFO	LINKS	LISTSERV	MAARS	MEETING
MEMBERS	MINUTES	OFFICERS	ORG CENTRAL	PHOTOS
PART 97	QSL	SCANNERS	SOLAR	W1AW

ICOM IC-7300

Kurt Zoglmann's Morse Code Ninja

ARRL Collegiate Amateur Radio Initiative

KSUARC WEEKLY 2m NET THURSDAYS at 8:00 P WØQQQ REPEATER, 145.41-

## **DISCORD SERVER**



Join KSUARC (It's free!)



#### Manhattan Area Repeaters

Callsign	Freq. & Offset	Type	Tone	Other Information
KSØLNK	147.225 +	open	114.8	linked
KSØMAN	147.255 +	open	88.5	autopatch, wx net
KSØMAN	442.000 +	open	88.5	offset 447.000
WØQQQ	145.410 -	open	none	in service
WØQQQ	444.175 +	open	88.5	in service



## **OUR NEW ICOM IC-7300, OCT. 18, 2017**

Visit our IC-7300 page.

## Amateur Radio Club awarded \$2,500 ARRL Foundation Grant

November 10, 2022

Our adviser, Vern Wirka, WØVMP, submitted the following news release for today's K-State Today. (link)

The American Radio Relay League Foundation has awarded a grant to the  $W\emptyset QQQ$  Amateur Radio Club at Kansas State University, a registered independent student organization.

The grant funds transformative projects that encourage the growth of active amateur radio operators and training opportunities,

education programs for student groups and schools, and club revitalization. The ARRL Foundation, established by ARRL, The National Association for Amateur Radio®, administers the Club Grant Program.

The WØQQQ Amateur Radio Club grant is \$2,500. WØQQQ was one out of 24 clubs from across the nation that were notified that they are receiving grants. The American Radio Relay League Foundation received 128 applications for this round of grants.

The foundation has long recognized that it is in the best interest of amateur radio to encourage and support amateur radio clubs. Clubs historically have recruited, licensed, and trained new radio amateurs and have provided the community setting for them to continue their education and training. The grant, to the student organization registered as Amateur Radio Club, will help provide and expand important services, through equipment upgrades and a more extensive outreach effort to involve more students, faculty, staff and community members.

The Federal Communications Commission-licensed club station operates under the callsign WØQQQ. The station is on the fourth floor of Seaton Hall. For more information about WØQQQ, contact club adviser Vern Wirka, at vwirka@k-state.edu

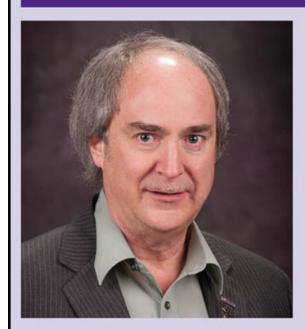


#### Message from the Secretary

David Yoder, KAØJPM April 22, 2020

Here's a shout out for the best instructional video I've ever seen. Our ICOM IC-7300 has a spectrum scope and waterfall display that I barely understood, until I found a video by Kevin Loughin, KB9RLW, <u>Spectrum Scopes and Identifying Signals Visually</u>. It runs 27 minutes. Kevin demonstrates how it displays various signals and modes. I honestly thought the display was mostly a silly gimmick, until I saw him put it to use.

# **WILLIAM KUHN**



Professor William Kuhn has retired after 24 years of service to Kansas State University. He taught courses at both the undergraduate and graduate levels in the Mike Wiegers Department of Electrical and Computer Engineering since 1996 covering linear systems, electronics, integrated circuits, communications theory, and radio and microwave/antenna hardware design laboratory experiences.

During his time at K-State, Kuhn's goal was to give teaching his highest priority, focusing in lab and lecture courses alike on empowering students by relating theory to practice. This orientation was induced from an early age as he acquired amateur radio and commercial FCC licenses while still in junior high school, worked summers in the TV repair business and held employment with a marine navigation company during summers in his undergraduate program years.

His formal advanced education began at Virginia Tech where he received a bachelor's degree in electrical engineering in 1979. From there he moved to California for his first professional job at Ford Aerospace. In 1982 he returned to school and earned a master's degree in electrical engineering from Georgia Tech in 1983 and subsequently worked at the Georgia Tech Research Institute for 10 years. Following that he returned to Virginia Tech, earned his doctorate and afterwards joined the K-State faculty.

Kuhn's Google Scholar h-index is 21 and his research publications have accumulated more than 1,900 citations since 1990. His main research contributions have included coding the XSPICE mixed-mode simulator, writing early computer code for Computer Music pitch detection used for vocal training, developing component technologies for wireless products, and conceiving and prototyping circuit/system designs applicable to future manned and unmanned NASA missions.

He is a senior member of the IEEE and a life member of the Microwave Theory and Techniques Society. Research and teaching awards include the Bradley Research Fellowship at Virginia Tech from 1993-95; the K-State College of Engineering James L. Hollis Award for Excellence in Undergraduate Teaching in 2001; HKN Distinguished Faculty awards in 2002, 2003, 2007, 2013 and 2014; a NASA group achievement award in 2009; and the Myers-Alford Memorial Teaching Award in 2015.

While at K-State Kuhn served as major professor for more than 30 graduate students, while teaching courses to 50-100 undergraduate/graduate students per year. In 2015 he began a five-year phased-retirement program, remaining fully engaged in both the teaching and research missions of the university each semester.

ECE UPLINK - Summer 2020

Many thanks and 73 to our excellent KSUARC adviser from 1996 to 2011, Dr. Bill Kuhn, KO4MH.

Vern Wirka Reflects on Radio, Teaching Career

Manhattan Mercury

December 2, 2018



KSUARC's adviser, Vern Wirka, WØVMP, is retiring from K-State's A. Q. Miller School of Journalism and Mass Communications this month. KSUARC members are pleased to report that as an emeritus professor, Vern can and will continue as our adviser! He has made outstanding contributions to our club. An Extra class licensee and experienced broadcaster, he has contributed his technical knowledge and skills constantly during his years at K-State. He has done extensive work on our antenna systems, equipment and repeaters, as just a few examples. He guided us through the transition to the university's new stance on student organizations. He's also been very welcoming and helpful to new student members.

Today, WØVMP was <u>featured</u> in the *Manhattan Mercury*. Be sure to have a look!

## Message from the President WØQQQ Third Nationally in the ARRL's Fall School Roundup

James Copeland, KDØICP November 9, 2018

I'm proud to announce that WØQQQ placed THIRD this year in the college/university category with 49,560 points! Thank you to all who participated in making this contest a reality. We've already been busy with responding to the flood of QSLs in the mailbox. You can check out the score breakdown <a href="here">here</a>. Check out our soapbox comment, and some pictures I posted to the ARRL page.

Again, thank you to everyone who participated in our most successful contest in recent club history!

Edit from KAØJPM: James submitted the good news about KSUARC's 3rd-place finish to the Midwest Division, and our Midwest Director (and former KSUARC member, Rod Blocksome, KØDAS), added it to the <u>December 2018 Midwest Division Newsletter!</u> It's available as as PDF in this link, as only the latest edition seems to be available on the Internet.

## Message from the President WØQQQ Antenna Updates

James Copeland, KDØICP July 30, 2018

It was a productive weekend at  $W\emptyset QQQ$ . Alumnus Bob Hitt generously donated his climbing skills to help knock out several projects. First of all, the 2m/70cm repeater antenna is now about 15 feet lower than it was, on a new bracket. It is believed that a lightning storm took out our Diamond antenna a couple weeks ago. Bob removed the Diamond, and it did indeed test bad. The coax feeding it was still in good shape. We will have to decide as a club on replacement options - either buying a new dual-band antenna or two separate antennas.

Second, the new CW dipoles for 17, 20 and 30 are now real slopers. All three have been run through pulleys on the tower.

Third, the MFJ vertical that Dr. Kuhn donated has been mounted on the picnic table. Anyone who is interested in a tuning project

is welcome to have at it!

Fourth, our 2-meter transceiver in the club has been hooked up to a new power supply (the old one was too small for full output), and is currently hooked up to the large 2-meter beam that has been mounted to the short piece of tower on the west fence. We are currently looking for either a dual-band or just a single-band base station 70 cm rig that can be used to monitor 444.175. Anyone got one lying around?

Thanks to everyone who came out Sunday, and if you haven't been to the shack recently, go check it out! More to come as we get closer to the start of the semester, but in the meantime, enjoy your summer!

## Message from the Adviser Antenna Updates

Vern Wirka, WØVMP April 30, 2018

An MFJ antenna and transceiver selector has been installed in the rack on the operating desk. The left switch allows the selection of either the Icom IC-736, the Icom IC-7300 or a third position marked "Open." The "Open" position goes to a coax cable that can be used for a third transceiver, or an easy way to connect an antenna analyzer. The right switch allows for the selection of any of the antennas which are now part of the WØQQQ roof-top antenna farm; the dipole fed with balanced line, TH6 Hy-Gain beam, 20-meter CW dipole, 17-meter dipole and a 30-meter dipole. The right switch also has a position for the dummy load.

It is recommended that when operation is completed, the left switch should be placed in the "Open" position (if no transceiver is connected), or one of the unused positions. Select the dummy load on the right switch, and leave it there. By selecting the dummy load position all of the antennas are grounded.

The additional dipoles will enhance our digital capabilities, as all of them are resonant in the part of the bands where the digital modes are used.

There are more improvements on the schedule; stay tuned.

73, Vern Wirka WØVMP

## Club Member Kurt Zoglmann, ADØWE, Describes His First CW Contact

April 22, 2018

I hope you don't mind me sharing a personal success. I am excited to have made my very first Morse code contact this weekend! And portable at that! I forgot the microphone at home. I kid you not. It helped me overcome my hesitation to get on the air after months of practice.

We went out to Randolph State Park. I appreciated that Jason came with me. He had fun painting with watercolors and listening to podcasts while I played amateur radio. My uncle Greg, NØZHE, listened intently 300 miles away to the South and encouraged me via text message to keep trying after a first failed attempt. I welcomed the moral support!

Unfavorable band conditions did not deter me. I called CQ for about 5 to 10 minutes on 14.035 Mhz using 75 watts. Then VE7UBC, the University of British Columbia Amateur Radio Society, came back to me. They are in Vancouver Canada! We had a short QSO. I gave my name, mentioned that this was my first CW contact, and provided the weather conditions at my location. Dan gave his location, radio, antenna, and indicated that my first QSO was going much better than his first one from years ago. That made me feel better.

What I wasn't anticipating was how nervous I became when someone came back to me. I was able to copy just fine, but my nervousness caused me to make a lot of mistakes in sending. I especially valued Dan's patience! He mentioned that QSB was making it extra hard for him to copy me. His signal was 559 with little-to-no QSB. I would have loved to rag chew, but I did not want to test his endurance. hi hi. I thanked him and was left smiling ear-to-ear.

As pictured, you can see that I am transmitting with my ICOM 7300 radio into an MFJ magnetic loop antenna. To the left of me, I am sending code with the Bencher BY-2 paddle and using the Begli CW Machine as a keyer. The Bencher paddle isn't the most portable paddle, but it worked splendidly. I was happy to have brought the battery boost. It enabled me to send more than 20 watts using the deep cycle, lead-acid battery.

I am hoping to participate in POTA (Parks On The Air) this spring and summer. I am looking forward to many more Morse code contacts! I am also looking forward to my Lithium-Iron-Phosphate battery coming in. It will be lighter and won't sag under high-amperage draws.

webmaster's note: Thanks to Kurt for permission to add the story of his DXpedition to our web page.





(click photos for originals)

#### **Message from the Secretary-Treasurer**

David Yoder, KAØJPM March 14, 2018

As webmaster, I'm taking the liberty of announcing a <u>feature article</u> in the March 13 <u>Collegian</u> on our outstanding president, James Copeland, KDØICP. James, a senior in broadcasting, is also the program director for 91.9 KSDB. He takes his responsibilities very seriously, and brings great energy to his work. I recommend having a look at this well-done profile, for a better appreciation of his leadership and hard work. (I didn't ask for permission to compliment him here!)



Collegian photo

In typical collegiate fashion, there was a flurry of activity during the last hour of the February 2018 school club roundup. KSUARC operators were able to finish the contest by contacting several other collegiate clubs on 40 meters. The old KSUARC record, set in October 2016 at 17,812 points, was surpassed by the new total of 22,627. A further breakdown follows:

• Total Contacts: 179

• Total States and Provinces Worked = 32

Total Countries Worked = 1
Total Number of Clubs Worked: 1
Total Number of Schools Worked: 17

There were many highlights of the event, but one of particular interest was talking to N3FJP, the creator of the software used to log the contest. Thanks to everyone who helped make this year's roundup a reality. Special thanks to Vern, WØVMP, for all his time put in and for making several CW contacts.

#### Kurt Zoglmann, ADØWE, Continues His Amateur Radio Adventures

KSUARC member (and past president) Kurt Zoglmann has posted a tremendous documentation of assembling a 20m QCX transceiver kit. He describes the entire process, and has photos, too. His first contact was with a station in California, on about 1 watt! You can find his story on QRZ.COM. Also, you can read other outstanding write-ups on learning CW, and his early QSOs.



Kurt has written about a number of recent projects and activities since taking on the kit-building project. They're all described in detail on his QRZ page, linked above, and include:

- · 2019 goal of Worked All States on CW
- scanning a full-length book to use for CW practice at various speeds
- participation in the CQ Worldwide WPX contest at WØQQQ
- reviewing the Morserino-32 practice trainer / keyer / CW decoder

**UPDATE**: We may have found Kurt's ultimate project so far, the <u>Morse Code Ninja</u>! Here's an excerpt of Kurt's goals - in his words - in creating this online course, which is now complete:

"The format of my Morse code course provides continuous and immediate feedback. For each character(s), word, or callsign sent in Morse code, it is then spoken after a one-second pause. This format accelerates the learning process, and reduces frustration. And it has proved to be popular in my more advanced practice videos.

The course is structured so that it is incrementally more difficult, and encourages head-copying from the start! There are 259 lessons. I introduce the characters in the same order as the Level 1 CW Academy class, so the course can be used as a supplement or stand on its own. If you have any feedback, please let me know! I'm open to improving the course. (Note that you will be able to make it through the first few lessons in no time flat. Just listen to the introduction videos until you get the character down. Then in the 1-second pause in the other videos, say out loud whatever you are able to copy. Then move on to the next lesson as soon as you reach 70 to 90% accuracy.)"

KAØJPM's comments: I really like the feedback after a word is sent, and it's sent a second time just after you hear the word

spoken. Also, I think it's good that the characters are sent fast, so you need to learn and react to the sound of the character, rather than trying to analyze it or translate it. That makes a huge difference when you try to get above 10 words per minute. You'd just as well learn from day one to have your hand reflexively write the character, rather than using your conscious mind to think about what you just heard. When I took my 20 WPM code test, I had virtually no idea what I had written over the five minutes, until I looked at it after the test. I passed!



## Radiosport

# Winter ARRL School Club Roundup: February 12 - 16

The winter event starts 1300 UTC Monday, February 12, and runs through 2359 UTC Friday, February 16, 2018.

- Objective: To exchange QSO information with other club stations that are part of an elementary, middle, high school or college. Non-school clubs and individuals are encouraged to participate.
- Entry Categories: Elementary, Middle/Intermediate/ Junior High School, High School and College/ University clubs.
- Modes: Operation using digital modes has been added to complement the activity on CW and phone.
- Submission: Scores must be submitted at www.b4h net/arrlscr, within 15 days after the operating period.

Send us your photos and stories! One of the best parts of School Club Roundup is showing off your team members and station. You can upload photos and text via the ARRL Soapbox web page, at www.arrl.org/soapbox.



Kansas State University Amateur Radio Club, WØQQQ (KSUARC), President James Copeland, KDØICP, pauses for a photo during the Fall 2016 School Club Roundup. James writes, "According to legend, the KSUARC has been in operation since 1927." [James Copeland, KDØICP, photo]

Complete rules, logging sheets, and other resources can be found at

www.arrl.org/school-club-roundup

KSUARC president James Copeland, KDØICP, was featured on p. 96 of the January 2017 *QST*, in a promotion for the Winter ARRL School Club Roundup of 2017. (**information**) Congrats to our outstanding president for this recognition! This story is archived in our <u>photos</u> section. Note: the promotion above has been tweaked to include dates and information for the winter 2018 School Roundup. (posted by KAØJPM, secretary-treasurer)

## ARRL

The national association for **AMATEUR RADIO** 

# SCHOOL CLUB ROUNDUP



## ARE PLEASED TO ACKNOWLEDGE THAT

WØQQQ, Kansas State University Amateur Radio Club

has enhanced communication with and among school Amateur Radio groups by

making QSOs in the February 2019

School Club Roundup

24,240

points.

attaining a score of 8th

Entry Class

States

15

College/University Schools 1 DXCC Countries 6

Clubs

Canadian Provinces

In the true spirit of Amateur Radio this has contributed goodwill and friendship among people.

President, ARRL

luck KSUR Rum KakiB

President, LIMARC



## ARRL

**AMATEUR RADIO** 

# **SCHOOL CLUB ROUNDUP**



Amateur Radio Club

#### ARE PLEASED TO ACKNOWLEDGE THAT

W0QQQ, Kansas State University Amateur Radio Club

has enhanced communication with and among school Amateur Radio groups by

making

QSOs in the October 2018

School Club Roundup

attaining a score of 49,560

points.

place College/University-W/VE

Entry Class

Schools 5 DXCC Countries 2 Clubs

Canadian Provinces

In the true spirit of Amateur Radio this has contributed goodwill and friendship among people.

President, ARRL

President, LIMARC



## ARRL

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# **SCHOOL CLUB ROUNDUP**



### ARE PLEASED TO ACKNOWLEDGE THAT

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School Club Roundup

attaining a score of

22,440

points. Entry Class

6th States 28

place College/University-W/VE

Schools 1 DXCC Countries 1

Clubs

Canadian Provinces

In the true spirit of Amateur Radio this has contributed goodwill and friendship among people.

President, ARRL

President, LIMARC



## ARRL

The national association for

AMATEUR RADIO

# SCHOOL CLUB ROUNDUP



Amateur Radio Club

## ARE PLEASED TO ACKNOWLEDGE THAT

W0QQQ, Kansas State University Amateur Radio Club

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making

QSOs in the October 2017

School Club Roundup

attaining a score of

4,872

place College/University-W/VE

Entry Class

Schools 0 DXCC Countries 0

Clubs

points.

Canadian Provinces

In the true spirit of Amateur Radio this has contributed goodwill and friendship among people.

President, ARRL

President, LIMARC





The national Association for AMATEUR RADIO

# **SCHOOL CLUB ROUNDUP**



## ARE PLEASED TO ACKNOWLEDGE THAT

W0QQQ, Kansas State University Amateur Radio Club

has	enhanced co	mmunication with	and among school	l Amateur	Radio groups by	
making	202	QSOs in the	February 2	2017	School Club Roundup	
	atta	aining a score of	26,058	Poi	Points.	
					ent.	

 5th
 Place
 College/University-W/VE
 Entry Class

 35
 States
 15
 Schools
 4
 DXCC Countries
 1
 Clubs
 13
 Canadian Provinces

In the true spirit of Amateur Radio this has contributed goodwill and friendship among people.

Kay Craigie

LIMARC President



ARRL

The national Association for AMATEUR RADIO

**SCHOOL CLUB ROUNDUP** 



#### ARE PLEASED TO ACKNOWLEDGE THAT

WOQQQ, Kansas State University Amateur Radio Club

has enhanced communication with and among school Amateur Radio groups by

making 122 QSOs in the October 2016 School Club Roundup attaining a score of 17,812 Points.

9th Place College/University-W/VE Entry Class
30 States 22 Schools 1 DXCC Countries 1 Clubs 3 Canadian Provinces

In the true spirit of Amateur Radio this has contributed goodwill and friendship among people.

ICay Craigie

LIMARC President



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