

# Eastern Arizona Amateur Radio Society

EST. 1974

[www.eaars.com](http://www.eaars.com)

INC.



[facebook.com/groups/eaars](https://facebook.com/groups/eaars)

Club Address: EAARS, PO Box 398, Solomon, AZ 85551



*March, 2024*

## JOIN EAARS on Facebook

EAARS has a presence on Facebook and you are invited to **JOIN** the page. This is a great media to quickly share news, photos and events that are EAARS related or might be interesting to the members. If you utilize "Notifications" on the EAARS Facebook page, you can receive club updates AS THEY HAPPEN.

To reach the page, please visit **facebook.com/groups/eaars** and **JOIN** the page. You must have a Facebook account to be part of the EAARS group.



## EAARS Open Repeaters

PL 141.3 unless noted otherwise

**Echolink:** 614350 **IRLP:** 7787

### **Heliograph Peak at Safford, AZ:**

146.860, 440.700 Linked

146.900, 447.8250 Not Linked

### **Jacks Peak at Silver City, NM:**

145.210 Linked

### **West Peak at Ft Thomas, AZ:**

145.350 Access to link to network

### **Pinal Peak at Globe, AZ:**

145.410 Linked

### **South Mt at Alpine, AZ:**

145.270 Linked

### **Caballo Mt at TorC, NM:**

145.470 Linked

### **Greens Peak at Show Low, AZ**

146.700 Linked

### **Little Florida at Deming, NM:**

147.060 Linked

### **Mule Mt at Bisbee, AZ:**

147.080 Linked

### **Mt Lemmon at Tucson, AZ**

147.160 Linked

### **Guthrie Peak at Clifton, AZ:**

147.280 Linked

### **Downtown at Tucson, AZ**

147.28 Output

146.26 Input, PL 127.3

# Gals on the Air!

**EST. June 2015**

Calling all Gals of any class ... Join us every Monday night for the  
**Gals Night Net @ 7:30 pm (AZ) on the EAARS system!**

**Facebook.com/groups/galsnightnet**

## Upcoming Events

*Would You like to see your event posted for the membership to see?  
Email your information to [emberfire@cox.net](mailto:emberfire@cox.net).*

**2024**

April 6 ----- Tucson Spring Hamfest

*Clubs, send me the events you would like shown here.*

### **WEEKLY EAARS' NETS**

**Every day:**

*Down Under Net - 4:15 am*

*Weather Net - 5:30 am*

*NTS Traffic Net - 6:30 pm*

*All times are noted on  
Arizona time.*

**Sunday:**

*EAARS Net - 7:00 pm*

**Monday:**

*Gals Night Net - 7:30 pm*

**Wednesday:**

*Skywarn Net - During Monsoon, Every Wednesday at 7:30 pm,  
Off Season, every third Wednesday of month at 7:30 pm*

# EAARS Officers and Staff

## Board Officers

President	Dan Quaintance	AF7EF
Vice President	Joe Montierth	K7JEM
Secretary/Treasurer	Larry Griggs	N5BG

## Staff

Site Trustee	Joe Montierth	K7JEM
Net Manager	Chris Buchanan	N7JND
Newsletter Editor	Angie Buchanan	N7EMB

## Net Control Operators

Rick	W8YBM	1st Sunday
Larry	KG7VLN	2nd Sunday
Chris	N7JND	3rd Sunday
Angie	N7EMB	4th Sunday

## ARRL RADIO CONTESTS

March 2024

2-3 International DX- Phone

For details on all ARRL contests and for non-ARRL contests,  
visit <http://www.arrl.org/contest-calendar>

## New EAARS Members!



Angel  
Alicia  
Gary  
Steve  
Mary "Beth"  
Chris

(KK7QYL) KK3APA  
KF6GSE  
KK7MXD  
AC7E  
KM6PDS  
AJ6AT





## **Senators Roger Wicker and Richard Blumenthal Introduce S.3690 to Eliminate Private Land Use Restrictions on Amateur Radio**

ARRL - 02/14/2024

On January 30, 2024, US Senators Roger Wicker (MS) and Richard Blumenthal (CT) introduced S.3690, the Senate companion bill to H.R.4006, introduced last June. Both bills reflect the Congressional campaign efforts by ARRL The National Association for Amateur Radio® to eliminate homeowner association land use restrictions that prohibit, restrict, or impair the ability of an Amateur Radio Operator to install and operate amateur station antennas on residential properties they own.

Amateur Radio Operators repeatedly are relied upon to provide essential communications when disaster strikes, but their ability to do so is being impaired by the exponential growth of residential private land use restrictions that hinder their ability to establish stations in their homes with which to train and provide emergency communications when called upon.

In announcing the introduction of S.3690, Senator Wicker said: “Because communication during natural disasters is often hindered, we should be making every attempt to give folks more options. Reliable access can make the difference between life and death in an emergency. Our legislation removes roadblocks for amateur radio operators looking to help their friends, families, and neighbors.”

In a similar announcement, Senator Blumenthal stated: “Our measure will help clarify the rules so ham radio enthusiasts can successfully continue their communications. In the face of emergency or crisis, they help provide vital, life-saving information that allow listeners to properly and safely respond, but prohibitive home association rules and confusing approval processes for installing antennas have been an unnecessary impediment. The Amateur Radio Emergency Preparedness Act resolves these bottlenecks and ensures that radio operators can function successfully.”

ARRL President Rick Roderick, K5UR, and Director John Robert Stratton, N5AUS, Chair of the ARRL’s Government Affairs Committee, both extended on behalf of ARRL, its Members, and the Amateur Radio community their thanks and appreciation for the leadership of Senator Wicker and Senator Blumenthal in their continuing efforts to support and protect the rights of all Amateur Radio Operators.

# Why was the Eiffel Tower Kept? Radio!



*Did you know? The Eiffel Tower was supposed to be dismantled after 20 years. Fortunately, things didn't happen that way, and we have radio to thank for it!  
... By Bertrand Lemoine.*

In 1910, the Eiffel Tower could have been demolished! After being built and inaugurated for the 1889 Paris Exposition Universelle, the Tower had to be returned to the City of Paris, as Gustave Eiffel had only been given a 20-year permit to use the land. But its use as a giant radio antenna saved it from destruction!

The Tower's continuity wasn't a sure thing when it was built. A major attraction at the 1889 Universal Exhibition, it would revert to full ownership by the City of Paris on 1st January 1910. But following its heyday in 1889, the Tower's lagging popularity at the 1900 World's Fair and a certain weariness at seeing it constantly lord over the skies of Paris didn't guarantee that it would be preserved beyond that date. After all, in 1906 the City decided to destroy the Gallery of Machines from 1889, the largest building in the world, because it hadn't found a use for it.

## Wireless telegraphy takes the stage

From very early on, Gustave Eiffel knew he needed to find a use for his Tower beyond its function as a symbol of progress and a fair-time spectacle. He immediately started looking for a scientific justification for its existence. A new technique in signal transmission called wireless telegraphy (TSF) was emerging in the 1890s thanks to the combined efforts of various thinkers (Hertz, Marconi, Tesla, Branly, Popov, Tissot, etc.). Following the first Hertzian transmissions in 1895, things accelerated quickly.

## 1898 sees the first radio contact

On 5 November 1898, Eugène Ducretet established the very first radio contact in Morse code between the Eiffel Tower and the Pantheon, four kilometers away. A transmitting station was then installed permanently on the Tower. In 1899, it enabled radio transmissions with London. At this point, military authorities became interested in this nascent radio technology. They tasked Engineering Corps Captain Gustave Ferrié, a 31-year-old graduate from the Polytechnic, to conduct experiments. Since 1897, he had been in charge of the newly founded Military Telegraphy School. In 1900, he published a reference tome on the technology and in 1903, he perfected receiving devices.

## A 6,000-kilometer range in 1908

Gustave Eiffel then put the Tower at his disposition and offered to finance the installation of an antenna stand at the Tower's summit from which a cable could be run to the center of the Champ de Mars. Ferrié set up shop in a shack at the foot of the south pillar to pursue his experiments with a small team of specialists. The following year, he established communication with eastern forts 400 kilometers away, then with the naval base at Bizerte in Tunisia, and finally, reached out to a distance of 6,000 kilometers in 1908. In 1909, a permanent station was built underneath the Champ de Mars. The Tower's strategic interest was confirmed and Gustave Eiffel was granted an extension to his concession for another 70 years, starting on 1st January 1910.



## A decisive role in 1918

Since then, the Tower has continued to serve as a transmitter and receiver for radio broadcasts. It's from the Tower's summit that many German messages were intercepted during the First World War. In March 1918, a coded radiogram was intercepted and then deciphered over three days of hard work by Polytechnic graduate Georges Painvin. Its contents allowed the French to thwart the German attack and henceforth turn the tide of the war and push through to final victory. The Tower's strategic importance was thus amply demonstrated. Later, Radio Eiffel Tower would begin broadcasting regularly in December 1921.





## Amateur Radio Operators Needed for Help with Solar Eclipse Project

ARRL - 02/23/2024

The Case Amateur Radio Club, W8EDU, the club station at Case Western Reserve University in Cleveland, Ohio, is asking for amateur radio operators to help with a research project centered around the April 8, 2024, solar eclipse.



W8EDU club member Adam Goodman, W7OKE, said the project centers around studying the effects of the eclipse on propagation to better understand the recombination time of the ionosphere.

"To do this, we are recruiting North American amateur stations interested in recording the Canadian time standard station CHU (Canada's WWV) for two weeks surrounding the eclipse," added Goodman. "Anyone with a KiwiSDR or a rig that can interface with analysis/recording software such as Fldigi is encouraged to reach out to us to participate."

W8EDU club member and project software manager Maris Usis, KE8TXG, said that while the software is simple to use, there is some detailed work involved. "We can help make it easier and there are good online instructions as well," said Usis.

**All of the participation details are on the club's website at <https://w8edu.wordpress.com/chu-eclipse-data-collection/>.**

W8EDU club faculty advisor David Kazdan, AD8Y, said the research project has received positive attention from the ARRL Collegiate Amateur Radio Program community, the Ham Radio Science Citizen Investigation (HamSCI) community, and Case Western Reserve University's engineering deans. "It is already a truly international effort, and we are collaborating with more than 20 stations across the continent, from collegiate and high school stations, to a representative from the Radio Amateurs of Canada, to a station in Mexico," said Kazdan.

The 2024 solar eclipse will over Mexico, the United States, and Canada. ARRL is a partner with HamSCI to help promote this opportunity for radio amateurs to participate in an active science experiment, through the Solar Eclipse QSO Party.

# The First Amateur Radio Station on the Moon



Posted February 6, 2024 –

The Japan Aerospace Exploration Agency (JAXA) successfully landed their Smart Lander for Investigating Moon (SLIM) on January 19, 2024. Just before touchdown, SLIM released two small lunar surface probes, LEV-1 and LEV-2.

LEV-2 collects data while moving on the lunar surface, and LEV-1 receives the data.

The JAXA Ham Radio Club (JHRC), JQ1ZVI, secured Amateur Radio licence JS1YMG for LEV-1, which has been transmitting Morse code on 437.41 MHz since January 19. The probe uses a 1 W UHF antenna with circular polarization and is transmitting “matters related to Amateur business.”

Radio Amateurs have been busy analyzing JS1YMG’s signal, with Daniel Estévez’s, EA4GPZ, blog introducing the method and extraction results for demodulating Morse code from the signal, as well as extracting the code string.

It’s unclear how long signals will be heard. JAXA has said that SLIM was not designed to survive a lunar night, which lasts about 14 days, and is due to return in a few days.

SLIM was launched on September 6, 2023, and landed on January 19, 2024, with the mission of analyzing the composition of rocks to aid research about the origin of the moon. SLIM’s landing made Japan the fifth country to achieve a soft touchdown on the moon. The landing was achieved with exceptional precision — within 180 feet of its targeted touchdown location.

*Courtesy of: AMSAT News Service and ARRL News*

## Errata to the 2024 - 2028 Amateur Extra-Class Question Pool Released

ARRL - 02/15/2024

The National Conference of Volunteer Examiner Coordinators (NCVEC) Question Pool Committee (QPC) has released errata for the new 2024 - 2028 Element 4 Extra Class Question Pool, which goes into effect on July 1. The errata includes minor question changes, the removal of one question, and one modified graphic. These updates are reflected in the new downloadable files, dated January 31, 2024. The ARRL VEC advises the community to regularly check the NCVEC website at <https://www.ncvec.org/> for updates to the question pools. Submit feedback or questions to the Question Pool Committee.





# **RST** Radio Society of Tucson

## **TUCSON SPRING HAM (fest)**

**Saturday April 6<sup>th</sup> 2024**

**7 AM - 11 AM**



**Buyers - Free Admission & Parking**  
**Sellers - Shaded Parking**  
**Seller Setup Starting at 6 AM**



**Calvary Tucson Church**  
**8711 East Speedway in Tucson**

**Morning Snacks by Scout Troop 157**

**Seller/vendor spaces - \$10/parking space.**

### **RAFFLE**

**Tickets: \$2 each, 3 for \$5, 7 for \$10, 15 for \$20, and 40 for \$40.**

**Need not be present to win.**

**Online Raffle Ticket Sales: [www.k7rst.club](http://www.k7rst.club)**

### **Raffle Prizes**

**Yaesu FT-991A HF/VHF/UHF Transceiver**

**Yaesu FT-710 AESS HF and 6M Transceiver**

**Yaesu FTM-500DR 2M/70cm Dual Band C4FM Transceiver**

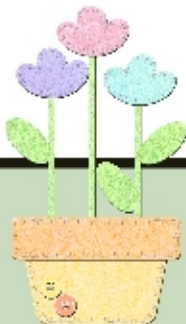
**Comet CAA500MKII Antenna Analyzer**

**LDG AT200PROII Auto Antenna Tuner**

**Comet CN901HP HF SWR Wattmeter**

**Comet CN901VN VHF/UHF SWR Wattmeter**

**Map and info at [www.k7rst.club](http://www.k7rst.club)**



**Wishing you and yours a very Blessed Easter!**





# Other Club Stuff

*From Diane AA3OF: RST VE Testing will be held at Immanuel Presbyterian Church, Witherspoon Hall, 9252 E 22nd St, at 7pm.*

2024	March 11	April 8	July 8	October 14
		May 13	August 12	November 11
		June 10	September 9	December 9

If you live in the Graham or Greenlee County and are interested in a VE Testing Session, please feel free to contact Dan Quaintance AF7EF, (928) 235-1152.



## **Rise and Shine!!! with the Made it through the Night Gang Weather Net**

**0530 Mountain Standard Time Daily  
on the EAARS Repeater System**

**Weather and  
Conversation**

Get a handle on the local weather from your fellow HAM operators around the EAARS coverage area and get to know them better.

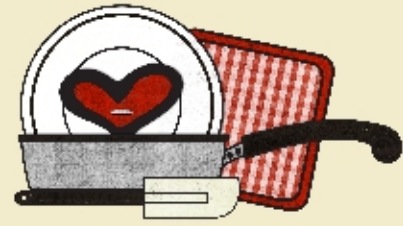
We do a technical question of the week on Wednesday  
and the "Flea Market of the Air on Fridays

**W7GSP – Steve  
Net Control  
K1VM/N7CDW  
Keith/Carrie**

Radio Society of Tucson (RST) is now conducting two monthly events for new operators. 1) Radio Days in the Park will meet the 2nd and 4th Wednesday, Reid Park, Ramada #22. 2) Newbies Net on Thursdays, 8pm on 147.000 MHz. Listen on 147.000 MHz, transmit on 147.600 MHz with a tone of 110.9 Hz.

**Do you have any club news to share? It can be posted on this page.  
Send your info to Angie - emberfire@cox.net.**

Cooking up  
Some Magic



## Cabbage and Smoked Sausage Pasta

*A touch of the Irish alternative...  
Happy St Patrick's Day!*



### Ingredients

1 (16 ounce) package farfalle (bow tie) pasta  
 $\frac{1}{2}$  cup butter  
2 cloves garlic, minced  
 $\frac{1}{4}$  cup olive oil  
1 large head green cabbage, shredded  
salt and pepper to taste  
1 pound smoked sausage, sliced  
 $\frac{1}{4}$  cup grated Parmesan cheese



*Courtesy of allrecipes*

Prep Time: 15 mins  
Cook Time: 20 mins  
Total Time: 35 mins  
Servings: 6  
Yield: 6 servings

### Directions

**Step 1:** Fill a large pot with lightly salted water and bring to a rolling boil over high heat. Once the water is boiling, stir in the bow tie pasta and return to a boil. Cook the pasta uncovered, stirring occasionally, until the pasta has cooked through, but is still firm to the bite, about 12 minutes. Drain well in a colander set in the sink.

**Step 2:** Melt the butter in a large pot over medium heat. Add the garlic, olive oil, and cabbage; season with salt and pepper; cook until tender, about 15 minutes. Stir in the sausage and bow tie pasta; cook until completely heated, about 5 minutes more. Top with Parmesan cheese and serve immediately.

kiss the  
**COOK**