



# K7EAR



October 2009

**EAARS open repeaters. PL is 141.3 unless noted otherwise**

**Helio** 146.860 and 440.700 EAARS Network, 146.900, 447.825 w/ closed remote PL 100.0 or 141.3. Packet 145.010 **MT. Lemmon** 147.160 EAARS Network **Pinal Peak** 145.41 EAARS Network **Guthrie Peak** 147.28 EAARS Network **Jacks Peak, NM** 145.21 EAARS Network  
**GMRS Repeater on Helio** 462.625 PL 123.0

## Next Meeting

Tuesday November 17th At the search and Rescue building in Thatcher. Arrive at 6:30 PM, eat at 7:00 PM

## South Mountain Repeater

We made the trip to South Mountain and did a lot of clean up and some painting. The building still needs a second coat of paint. We did NOT install the repeater. The forest service told Milt at the last minute that they needed a 30 day period to notify the current users and also the power had been shut off. As soon as the Forest Service gives the go ahead another trip will be planned. On the same trip, Joe and Larry went over to Greens Peak and worked on that repeater trying to find the intermittent problem that had been occurring. They ended up changing out the whole repeater and fixing some other possible problems. It hasn't acted up since. The old machine is now on Guthrie so, if it acts up it will be a short trip to troubleshoot.

## September Meeting

We had a great cookout. People came from as far away as Tucson, Deming, and Arizona City. If you didn't make it, you missed great steaks, beautiful weather, and great company.

## Arizona QSO Party

Partial Rules

**Objective:** Contact old friends, make new friends, and have fun! Join the party! Stations outside Arizona (AZ) contact as many AZ stations as possible. Arizona (AZ) stations, activating as many counties as possible, contact everybody.

**Contest Period:** 2nd full weekend of October, 1600Z (9am MST) Saturday to 0600Z Sun

day (11pm MST Sat), and 1400Z (7am MST) Sunday to 2359Z (5pm MST) Sunday, 24 hours total. For 2009, the contest will be held October 10-11.

Categories: Single-operator, single transmitter, Multi-operator, single transmitter, and AZ Mobile. Power categories: High Power (>150W), Low Power (<150W), and QRP (<5W). Use of spotting nets and other assistance allowed in Multi-Single category only. AZ Portable stations operate in the Mobile category.

Notice we are limited to a single transmitter and no overnight operation  
Contact Milt if you would like to participate.

*From ARRL Web*

## **Columbus Antennas to Take to the Skies**

By Rosalie White, K1STO

[k1sto@arrl.org](mailto:k1sto@arrl.org)

October 05, 2009

Something's always new with ARISS, the Amateur Radio on the International Space Station (ISS) program. ARISS volunteers, typical of many hams, thrive on working with challenging projects, which result in new opportunities for all hams. Right now, two projects are on the front burner.

In February 2008, the new Columbus module built by the European Space Agency (ESA) was attached to the International Space Station (ISS). When ESA first announced intentions for the module a number of years ago, the ARISS International team began planning how to get ham radio integrated. While ESA's blueprints were being drawn, hams made serious inquiries and gave presentations, and eventually won approval to have antenna feed-through connectors added to the module.

Now fast-forward to 2009.

Last month wide-area detection receivers destined for Columbus arrived in at the station aboard Japan's new H-II Transfer Vehicle. The experimental receivers will be used to track vessels on the world's oceans. The ships must carry Automatic Identification System (AIS) transponders that transmit navigation and ship identification data.

The receivers only need antennas to make them fully operational, and those will be traveling to the ISS via the space shuttle – along with Amateur Radio antennas for the Columbus module.

### **Antennas Clear Customs**

In early September, the ham antennas were packaged up for shipment from Europe to the US after having passed their space certification tests. Lou McFadin, W5DID, a member of the AMSAT Board of Directors and a key volunteer for ARISS, kept tabs on the antennas as they cleared US Customs. The shipment of antennas moved on to Kennedy Space Center (KSC). Lou, who lives in Florida, drove to the Cape on September 10 to supervise the unpacking of the antennas.

The hardware will head to the ISS on the currently scheduled mid-November launch of space shuttle mission STS-129. Lou showed the astronauts the best ways for them to safely unpack and assemble the antennas and associated cables once they and the hardware reach the ISS. They reviewed how to maneuver and install the antennas during the spacewalk. Lou also oversaw the re-packing of the antennas and the onboard flight kit that accompanies shipments going to the ISS. The Europeans who designed and built the AIS antennas created a special decal for their team, and printed a supply that may be included in the flight kit. (Documents await approval for the decals' trip to space.) Because AMSAT tested the antennas, the AMSAT logo is part of the decal's design; it honors the many volunteers who contributed work in various capacities.

### **Astronauts Do Antenna Work!**

Astronauts will install and deploy our ARISS antennas during the second spacewalk of STS-129. The ham team will monitor the spacewalk activity via a NASA real-time teleconference call.

The new antennas will increase opportunities for the many hams who covet making contacts with astronauts and cosmonauts. Frequencies available for transmission to and from Columbus will be 2 meters, 70 centimeters, L-band and S-band. To start, the two Ericsson radios (2 meters and 70 centimeters) that are already on the ISS (but seldom used) will be moved and installed in Columbus.

### **There's More...**

If you think this ambitious project is the only thing ARISS toils over, in addition to its very busy educational activities, think again. Another big project is ARISSat-1. (It deserves a whole story of its own.) Lou was assigned by AMSAT as project manager, and Gould Smith, WA4SXM, another of AMSAT's Board of Directors, was named project engineer after AMSAT proposed to the ARISS International Team that it could take on leadership of the final stages (funding, completion, and delivery) of ARISSat-1. You can see a preview of the satellite on the AMSAT-NA Web site <http://www.amsat.org/amsat-new/index.php>

Click on: New drawings of ARISSat-1 View.

For ARISS educational projects, it takes more than a village. It takes tens of hundreds of volunteers with varied skills representing a large number of organizations. The volunteers spend a great deal of time working on thousands of details. A heart-felt thank you from the ham community goes to everyone on the various ARISS-related teams! – *Rosalie White, K1STO*

### **2009 Officers**

President Lon Whitmer K7LON  
Vice President Quentin Kavanaugh N7QK  
Secretary/ Treasurer Larry Griggs N5BG  
Net Control Operator James Reid W1EYE  
Helio Site Trustee Joe Montierth K7JEM  
Technical Adviser Milt Jensen N5IA  
Newsletter Editor Dave Wells N7AM

### **Email Addresses**

Email all Officers at once  
Newsletter Editor

### **Club Address**

EAARS  
P.O. Box 398  
Solomon, AZ 85551

### **Nets**

**EAARS Net;** Sunday Night 7 PM general check ins  
**Smart Net;** Monday evening 7:30 to 8:30 Technical discussion  
**Weather Net** Daily 5:30 AM collect local weather information  
To get your own email at EAARS.com contact Larry, N5BG  
**EAARSOFFICERS at EAARS.COM**  
**NEWSLETTER at EAARS.COM**

Eastern Arizona Amateur Radio Society  
P.O. Box 398  
Solomon, AZ 85551

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