

# IN-SERVICE



Winter

Volume 91

February 2005

## NEW REPEATER FOR LARA

With a very generous lead gift from one of our members, the Lamoni Amateur Radio Association (LARA, a chapter of ASCRA), decided to purchase a new repeater. The new repeater will be located at the home of Jon Barney (AAØOS) using an 18-foot fiberglass unipole antenna and duplexer donated by Milo Barnhard (KC5AZ). The antenna is mounted at the top of Jon's 70-foot tower, and the antenna tops off at nearly 90 feet above ground level. The antenna performance was measured at 1.5:1 SWR at 50 watts. Jon's QTH was chosen since we believe many of the equipment problems we have had result from the adverse temperature and humidity conditions extant in previous locations. Also, Jon has both DC and AC backup power available.

The new repeater is a Vertex Standard model VXR-7000. Vertex Standard is a subsidiary of Yaesu, Inc. The repeater can be run either at 5 watts or 50 watts. (At the current time, we are running with 50 watts.) The repeater can require sub-audible CTCSS (PL) tones on input, and it can provide tone on output. At the current time, we are running the repeater in open/open mode. Other repeaters in the area use a coordinated tone frequency of 114.8 Hz. If interference causes us to require tone on the repeater input, 114.8 Hz is what it will be. Physically, the unit is about the size of an HF radio, and includes the receiver, controller and transmitter all in one package. It can operate as a remote base, digipeater or analog repeater. It has DC power capability, so battery backup or even mobile operation are possible.

We are very pleased with the performance of this new system. We have worked stations as far north as Truro, Iowa (about 40 miles as the crow flies), east to Corydon, Iowa (about 32 miles as the crow flies), and south of Bethany, Missouri (about 30 miles as the crow flies). We were concerned that we would lose coverage as compared with the 400 foot cable TV tower we were using. The 7 dB gain of the unipole antenna appears to have compensated for the reduction in height above ground, and we have approximately the same reliable coverage we previously enjoyed.

The WØYO-L EchoLink node (node number 127318) operates on the frequency pair of the repeater. ASCRA members are invited to drop in at any time. Our Sunday evening net at 7:30 p.m. central time is also accessible to EchoLink users. We look forward to hearing from you.

73 de kgØii  
Bob Farnham,  
President, Lamoni Amateur Radio Association

## AMATEUR RADIO LICENSE CLASS

As reported previously, Bob Farnham (KGØII) conducted an Amateur Radio License class during the winter (January) term at Graceland University. There were initially seven students signed up, with five who took the final test. The final test was FCC Element 2 for a Technician class license.

All five participants passed the test. Their new call signs appeared in the FCC's ULS data base on Monday, January 24, 2005:

Michael Robins (KCØTSL),  
Brian Fonseca (KCØTSM),  
Ammon Horn (KCØTSN),  
Nathaniel Carter (KCØTSO) and  
Karim Martin (KCØTSP).

Michael Robins also brought in his uncle, Joe Robins, who also passed. Joe's new call sign is KCØTSK. Another individual who arrived to take the Element 3 test opted not to take it yet. Participating as volunteer examiners were Jon Barney (AAØOS), Hale Collins (W6RWH), Bob Farnham (KGØII) and Steve Murdock (NØZY).

The class was originally structured on the written test only. Winter term courses are generally graded on a pass/fail basis. If a student passed the FCC written test, she/he would pass the course. However, with over a week remaining, the students were doing so well that I decided to teach them Morse Code as well. The Amateur Radio Licensing class at Spec had to be completed within a week. The longer three-week format of Graceland's winter term not only made it possible to cover material in greater depth, but also to teach Morse Code. There would be nothing to lose and everything to gain. If a student passed both the Element 2 written examination and the Element 1 code test examination, she/he would be licensed as a Technician class with HF privileges. If a student passed only the Element 2 written examination, he/she would still pass the course, and would be licensed as a Technician class operator.

Please join me in welcoming Ammon, Brian, Joe, Karim, Michael and Nathaniel as new amateur radio operators.

73 de kgØii  
Bob Farnham  
ASCRA President

## SILENT KEYS

George Orth, WA4THT, passed away on Wednesday, December 8th in Independence, Missouri. He was a member of ASCRA and the local Independence Chapter for many years. He was 93 years old. George was a very colorful character on the ASCRA repeater when I first became a ham and involved in the local church group. George didn't pull any punches and you always knew how he felt about a subject. Sometimes he could be downright ornery. But if you got to know George you would have found out that he was a pilot for the RAF during the battle for Britain, before America entered WWII. That's where he learned Morse code. If I recall correctly, he was shot down at least once. He drove taxis in Florida for many years before coming to Independence. A memorial service was held for him December 15.

Michael Hahn KGØXU

Dr. Gene Peterson (I can't recall his call), 79, of Mobile AL since 1990, also passed away. Most Center Place ASCRA members will remember him and our picnics at his house in Lakewood. His visitation/service was held December 17 at Speaks Suburban Chapel in Independence MO.

David Bland KBØGR

Winnifred Piepergerdes, wife of Larry Piepergerdes, passed away December 22, 2004. Visitation was Sunday, December 26th from 6:00 - 8:00 p.m. at Speaks Suburban on 39<sup>th</sup> Street in Independence, Missouri. The Memorial Service was held on Monday, December 27th at Speaks Suburban. Please remember the Piepergerdes family in your thoughts and prayers during this time.

Larry Piepergerdes WBØLYE

**Historical note:** Larry Piepergerdes was treasurer of ASCRA in its early years.

## TSUNAMI EFFECTS

"With many roads impassable and communication systems down, final reports from church members will take time to confirm. In Sri Lanka, three church members are missing. Initial reports from India indicate no known deaths or major damages suffered by church members there."

"Ron Smith, president of the South Central Asia Mission Center, reported that the loss of life among the Community of Christ family appears to be small "but the tsunamis left hundreds of church people homeless and without food or resources. Whole villages, like Karamba, Sri Lanka, where we have a congregation, were washed away.""

Community of Christ web site as cited by Michael Hahn

**Editor's note:** The tsunami disaster generated a great deal of interest on the part of several ASCRA members and many other ham radio operators regarding the communication services that ham radio can provide in such emergencies. No ASCRA members were positioned to assist in the area affected by the tsunami, but other ham radio operators were there. Furthermore, we never know when and where the next disaster will strike, so it behooves us to make appropriate preparations. For example, see the proposal by David Cook in his letter to Jon Kirkpatrick on page 2 of the November 2004 edition of IN-SERVICE. David is continuing to pursue this matter on behalf of ASCRA.

## INDIAN HAMS AND THE TSUNAMI

The following is a condensation of an article published at <http://www.thehindu.com/thehindu/mp/2004/12/30/stories/2004123000350100.htm> on the web by the HINDU newspaper:

Four amateur radio operators from various parts of India obtained special permission to operate a DX station in the Andaman and Nicobar islands in early December, 2004. They went because this area is "high value" country for ham radio operators. It had been about 25 years since the last ham radio operator had broadcast from there.

They set up their equipment and had already contacted about 35,000 hams from around the world when the earthquake struck, followed by the tsunami waves that swept over the small islands. The devastation knocked out telephones and electricity. Loss of electricity took them off the air, but the group located battery power and they were back on the air about two hour later. For several hours, they were the only communication link from the Andaman Islands to the mainland. Other services such as the police and the army were busy with other essential roles involved with maintaining law and order.

The DXpedition became an emergency network contacting other hams from India and around the world. Two others hams joined them, and additional stations were activated. The Indian Army provided food, batteries, and other supplies. Any transportation required had to be by vehicles with diesel engines that could operate in flooded areas that would cause gasoline engines to stall.

One of the main concerns was to locate missing people for relatives who called from all over the world. The hams received these calls, asked where the missing person was last seen, and sent people to look for them. Any information they found was radioed back to the families. They also helped locate doctors and hospitals for injured persons.

Other hams were working in Sri Lanka where they moved to the devastated eastern coast of the island. Hams from many nations offered to help either with communications or by sending necessities such as bedding and cooking utensils. It was a good example of the efficacy of ham radio, and it led to a meeting between representatives of the Amateur Radio Society of India and the Home Department and Ministry of Communications that may lead to improved future relations.

HINDU article summarized by Fred Troeh NØELM

Thanks to Terry Redding for locating this article and calling it to our attention.

## HELPING NATIONAL WEATHER SERVICE

HAM Radio operators have been providing the eyes and ears for the NWS for years. Two-way radio, coupled with a little knowledge mixed with common sense, is a valuable service. Even with Doppler radar, the NWS still needs to know where to place the radar beam. To give you an idea of some of the limitations of radar, go out at night with a flashlight. Shoot the beam of the light into the sky and you will notice that some things get illuminated and others do not. With the weather spotter in the field, our eyes can help the NWS point their radar in the right spot.

With this concern, the ARES districts surrounding the Denver metropolitan area offer SKYWARN training. ARES means Amateur Radio Emergency Services and SKYWARN is a subset of this organization. The SKYWARN training John and I received was a little more intense weather training and radio net procedure.

Lately the NWS have been asking HAM Radio operators to include APRS with their radios. APRS means Automatic Positioning System. Weather stations do more than just report the weather, but also fire conditions. The county and the NWS are concerned about the vulnerability of phone lines during natural or manmade disasters, such as a wild fire, flash floods, etc. Packet radio was suggested as a possible backup communication. Packet radio allows computers to transmit their data over the air, like you using your phone lines. Today we call such technology "wireless transmission." HAM radio has been doing this for years.

During our Spring and Summer storms, some of the SKYWARN HAMS were using APRS and you could track their progress and the storm's progress on the Internet. It allowed the NWS to better position the Weather Spotter.

To know more about APRS, on behalf of our ARES District 24, I asked Russ Chadwick. (KBØTVJ) for some help. Russ is the founder of the CWOP (Citizen Weather Observer Program) and he is an engineer with NWS. Russ agreed to join us at the Franktown Fire Station on 10/21/04 and was able to demonstrate how a weather station connected to a laptop loaded with the most popular APRS program, and a radio, could log into the network with relative ease.

Russ demonstrated how APRS and the Weather Net (APRS/WXnet) with Amateur radio has a long and proud tradition of public service in the United States and around the world. One example was this year's poster children of bad weather, Hurricanes Charley, Jeanne, Ivan, and Francis, when they hit Florida. It provided emergency communications during these natural disasters.

The Amateur Radio Emergency Service (ARES) is a part of the American Radio Relay League (ARRL), the national organization of U.S. Amateur Radio Operators, that provides centralized management structure for these emergency services. But, the real heart and soul of amateur radio public service are the ham operators across the country, who donate their time, equipment, skills and data. Most of the data you saw on the TV screens came from APRS/WX net

One aspect of amateur radio public service is supplying atmospheric data to various users, including individuals and federal, state and local governments. Many amateur radio operators operate their own weather stations to collect local weather data and transmit these data for anyone to receive and use. Oftentimes, receivers capable of receiving and displaying this weather information are located at local National Weather Service Offices where forecasters can monitor the data.

The Automatic Position Reporting System (APRS) is a part of ham radio that provides an ideal way for weather station operators to distribute their weather data much further than the regions within their transmitter range. APRS was originally intended for position information data but actually provides a means for automatic transmission of all sorts of digital data. This is especially true now that the original APRS packet radio concept has been enhanced to include the capabilities of the Internet. The reporting of citizen weather data is a particularly useful application of the APRS Internet Service (APRS-IS).

The APRSWXNET/Citizen Weather Observer Program is a group of ham radio operators and other private citizens around the country that have volunteered the use of their weather data for education, research, and use by interested parties. The APRS-IS collects weather data transmitted from individual weather stations and communicates these data to the findu.com server. The server then organizes the incoming data stream and makes the weather data available to the Forecast Systems Laboratory (FSL) at 15-minute intervals. This is all done in the public service tradition of amateur radio and good citizenship.

The findu.com server acts as a database for APRS data and sends current weather data to the NØAA/FSL Central Computer Facility. These data go into the RSAS and LAPS data assimilation systems, and also help initialize the MM5 numerical prediction model. The data are also sent to the National Center for Atmospheric Research and components of the National Weather Service.

The APRSWXNET/CWOP data also go into the Quality Control and Monitoring System (QCMS) which runs routinely and checks data quality. Standard limit checks are done as well as spatial consistency checks that utilize local observations and gridded values from the RSAS data assimilation system, to interpolate "synthetic" observations for comparison with real data. Based on these comparisons, data may be declared questionable. Occasional questionable data is normal. However, a high percentage of questionable data may indicate instrument problems.

The results of this quality checking are then made available to the station operators on the QCMS QC Summary Page and on the CWOP web site. This feedback to the weather station owners can alert them when a problem has developed. The goal here is to provide tools for station owners to help them keep the data quality high so that the data can be widely used with confidence.

To find out more about APRS and Wxnet, check into the internet at <http://www.findu.com/citizenweather>.

Dave Cook KCØMHT

## COMMUNICATION SERVICES

This last year, I [David Cook] had a number of opportunities to serve our local community as a HAM Radio operator. My call sign is KCØMHT, and this hobby has taken me to some fun places and meeting some interesting people.

### Annual Poker Chip Motorcycle Race at Devils Head National Recreation - June 6th.

This event took place in western Douglas County's Rampart Range area in Colorado. Dirt Bike fanatics were given the opportunity to enjoy the paths and trails designed for their sport. This event, while enjoyable, has inherent risks, and the event coordinators requested the return of Douglas County Search and Rescue (DCSAR) to manage the medical needs of the event. The experience that DCSAR had last year made them realize that they needed help in the communication department.

DCSAR asked the local ARES District to provide emergency and medical communications for the event. For those of you who are not familiar with the acronym ARES, it means Amateur Radio Emergency Services. The ARES District I belong to is District 24, serving Douglas and Elbert counties.

My assignment for this event was called Check Point 5, which was where one of the trail heads stopped at Highway 67. I checked in with the Check Point Manager and his Assistants.

The event managers did not close the trails to the public, and so we did see other bikes riding up and down the trails and along highway 67, including some nice looking Harley's rolling along.

The event was primarily uneventful. The only casualties were a broken leg by a non-event participant (the rider was "T-Boned" as he tried to get out of the way of about a hundred dirt-bike maniacs coming his way) and one dirt bike that snapped in two. (The rider tried to jump a ravine and landed too hard. He came walking to our check point carrying the remains of his pride and joy.)

### Moonlight Bicycle Event – July 25:

Sponsored by Seniors Inc. As indicated by the title, this event started at midnight and had over 4000 bicyclists registered. This event started from downtown Denver, with a short 10-mile course and a longer 24-mile course for the crazy at heart. My son-in-law, John Grahn, assisted me in this event, and our assignment was at the corner of University and Evans.

There are few sights more awesome than 4000 cyclists bearing down on your location, except maybe a herd of rabid rhinos. But John and I stood our ground and directed the riders to make the turn on Evans. It is amazing how some folks would miss the turn, even with hundreds of folks making the same turn ahead of them. Guess some folks like to pass others on the road. Most of our assistance came with directing cyclists with flat tires to the next rest station.

### Colorado Half Ironman Triathlon – September 12:

Once again, DCSAR asked our ARES district to manage the emergency communication along the Front Range. This event started early with the participants having a wonderful swim in Chatfield Reservoir. Then they jumped on their trusty bikes for a hardy bike ride through Roxborough State Park, up to Devils Head, and back to Chatfield. You would not think this event would be too exciting. We had a little over 30 participants.

However, within the first mile, we had three emergencies that needed us to call Flight For Life rescue. Not sure of the extent of the injuries, but DCSAR did not take any chances. With our radio, GPS, and associate maps, we were able to direct DCSAR to the nearest meadow for a helicopter to land.

From my Checkpoint, I started to make note of how many Triathlon participants were finally making it to our location. The event managers started to compare our notes with the list they had compiled. We kept coming up with one rider short. There was a great concern, as it was mid-afternoon, and we had to find our rider soon. DCSAR and the Event Managers started to sweep the course.

The good news is we did find the rider. He took a wrong turn and continued to go in circles. He was so tired and dehydrated, that he was offering any amount of money to take him home and for some liquid nourishment.

### Another Annual Poker Chip Motorcycle Race at Devils Head National Recreation – September 19<sup>th</sup>:

This is the last event of this kind for this year. The Event Managers and DCSAR were pleased with our Net Control Skills in the last Poker Chip race, so they asked for our help again.

This time Donita Hilfinger joined me. Donita is also a HAM radio operator (KCØSWX). This was her first ARES event and it was great having her work with me. There were times at our checkpoint (#2), that we were swamped with questions on missing riders and relaying information to DCSAR

The casualties started to rack up on this event, between Check Point 1 and our Check Point (#2). Apparently there was a portion this leg of the trail, codenamed: the log jam, that created a horrendous traffic jam. From our location, we had three unconfirmed injuries – ranging from getting the breath knocked out of them and assorted bruises to a partially impaled foot. You would think it was more cases of too much testosterone, except one of the injured was of the female persuasion. The other three injuries – a broken collarbone and a dislocated shoulder (another non-participant), and two more sets of bruised ribs, were put on the DCSAR 6-wheel ATV and transported back to the starting line.

A lot of riders got separated from their groups. The event managers quickly used our radios and our net control skills to help folks find members of their group. All riders were accounted for at the end of the day!

## 20-M NET CHECK-INS

This is the list of check-ins on the ASCRA 20M net from 11/7/2004 to 1/23/2005 held 3:30PM CST, Sundays on 14.287 MHZ. Wrote a couple down wrong so hope I didn't miss you.

Ernie, WB2UJL

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|                              |                         |
|------------------------------|-------------------------|
| NØAIX, Larry Reagan          | WA4CIB, Jeff Ellen      |
| NØBGG, Larry Oiler           | AA4JV, Joe Duval        |
| NØELM, Fred Troeh            | N4WTW, Mike Glowaski    |
| WØFEN, Robin Cross           |                         |
| WAØIBS, Andy Ferrar          | N5ECP, Jeff Salmons     |
| KBØIGA, Jerry McClain        | N5LCL, Dave Gates       |
| KGØII, Bob Farnham           | W5QPT, Ellis Thatcher   |
| KBØGR, Dave Bland            | K5RY, Tom Alexander     |
| NØIYD, John Chapman          | N5ODQ, Sam Russo        |
| NØONN, Chuck Palmer          |                         |
| AAØOS, Jon Barney            | W6LMJ, Terry Redding    |
| NØPYH, Wayne McCormick       | KE6LVI, Bill Downey     |
| WØSHQ, ASCRA Robin, Operator | KE6ORO, Jim Finch       |
| NØTN, Jim Elliot             | W6RWH, Hale Collins     |
| NØWZH, Steve Hampton         | NC6Y, Mel Beals         |
| KGØXU, Michael Hahn          |                         |
|                              | N7DVM, Goutam Mukherjee |
| KD1K, Howard Pierson         | KI7ZU, David Glower     |
| KB1WI, Chuck Fisk            | K7NCG, Jim Fish         |
|                              | KA7VMA, Dick Wynes      |
| W2TFT, Tom Thatcher          |                         |
| WB2UJL, Ernie Miles          | K8QA, Mike Oiler        |
|                              | W8QK, Muirl Robinson    |
| VK3AQN, Fred Naylor          |                         |
| VE3SCP, Scott Price          | KB9KZW, Pamela Scott    |
| W3HEN, John Seither          | WA9YWK, Keith Peterson  |
| VA3RZ, Ray Else              |                         |

## ITEMS NEEDED FOR IN-SERVICE

The hopper is empty again, and we still have open space that could have been used for announcements or other short items if we had received them. The whole next issue is open now for whatever you may have that would be of interest to ASCRA members. We would like to hear about your ham radio equipment and/or experiences.

Items may be submitted via e-mail to [fttroeh@iastate.edu](mailto:fttroeh@iastate.edu) or by regular mail to Fred Troeh, 4117 Quebec St., Ames, Iowa 50014.

## ELECTION RESULTS

The following incumbent directors were reelected for the 2005-2006 term:

Robin Cross, WØFEN, Kansas City, MO  
Bob Farnham, KGØII, Lamoni, IA (current president)  
Michael Hahn, KGØXU, Independence, MO  
Ernie Miles, WB2UJL, Apalachin, NY  
Chuck Palmer, NØONN, Independence, MO (current treasurer)  
Doug Shaw, WAØEMX, Raytown, MO (current secretary)

We are pleased to report that \$243 in donations were received with 15 ballots cast. (Donations may be sent at any time to our treasurer: Chuck Palmer, NØONN, 700 S. Fuller Ave., Independence MO 64052)

Bill Shaw, KBØCDD  
Doug Shaw, WAØEMX, ASCRA Secretary

## ASCRA BOARD OF DIRECTORS MEETING

The ASCRA Board of Directors will hold its annual meeting in conjunction with the 2005 Community of Christ World Conference this year. The conference will be held on Thursday, June 2 through Sunday, June 5, 2005. The published conference schedule <http://www.cofchrist.org/wc2005/schedule.asp> indicates that the conference will conclude at noon on Sunday. To accommodate the conference schedule, quorum meetings and regular work schedules of Independence-area directors, the Board of Directors meeting will convene at 2:00 p.m. on Sunday, June 5 at a location to be announced.

There will not be a separate general meeting, but ASCRA members who wish to attend the directors meeting are welcome to do so. More information will be forthcoming as it becomes available.

73 de kgØii

## **IN-SERVICE**

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