Independent Radio Club WA6IRC Newsletter

Volume 5, Issue 1

Winter 2007

Presidents Corner

Comments from IRC president Leon KC6JAR.

I'd like to thank everyone for their support of our club last year. We are all having a good time using the system and it's great to hear you all out there. If an emergency comes up in the future, we will be there to help out and that's one of great thing about ham radio.

I'd like to especially thank Steve KG6GIK, Shane KG6GIN, Russell KG6RUS, and Mark KC6HMO for helping us out up on Blueridge. They were vital in climbing the tower, getting the antennas up, and running all of the coax. I'd like to give special thanks to Mark and Steve for really going out of their way on the tower at Blueridge. Those poor guys sat on that tower, froze their butts off and practically turned into popsicles to get everything up and running. They accomplished weeks of work in a single weekend and came back again when we needed additional help. They did the same thing for the DSTAR system on Contractors.

continued on page 2

INSIDE THIS ISSUE

- **1** President's Corner
- **1** DSTAR Repeater Comes Online
- 2 Field Day at the Beach
- **3** Blueridge Repeater Back in Service
- 4 Technician License Class
- **5** Baker to Vegas Race

Digital Radio Repeater

DSTAR Repeater Comes online

The IRC has now started our DSTAR radio project. DSTAR is an open standard digital radio format developed by the JARL. DSTAR is a digital voice system and a data transmission system. The VHF and UHF bands allow digital voice along with simultaneous 1200 baud data and the 23cm band allows digital voice and high speed 128K baud data transmission. The repeaters can be linked to the internet through a gateway which allows voice VOIP connections with other DSTAR repeaters in the national network and internet connectivity through the high speed data radio.

The DSTAR system has many interesting features and is very flexible which is likely to lead to many interesting applications that we haven't yet conceived. The system is capable of callsign squelch which will only open your squelch when you receive a call from the desired station. The system will also allow you to crossband through the local repeater using the repeater controller at the users command. On a gateway equipped system, the repeater keeps track of the last repeater you called on and if someone calls you from another repeater in the network, the system automatically routs the calling station to the last repeater you were heard on.

One of the most interesting features is how the system handles data. The system encapsulates the data which makes it work like a data pipe. DSTAR applications do not need to adapt to the DSTAR protocol to use the system. Data comes out of the system in the same format it came into the system.

continued on page 4

Steve really went out of his way at Contractors one night when we were trying to get the DSTAR up. He was sitting on the top of the pole and it was starting to get real dark and he was having trouble seeing. It was very dangerous work and we really appreciate his efforts. I especially want to thank Dave KC6CNL for welding the new antenna cross arms. I took it over to him at night, he worked in the cold and wind sitting on the ground and made an extra effort to get it all welded so it would be ready to install the next day. I was pleased to see it go up as fast and as well as it did. I want to thank you all for your help and for braying the cold and nasty weather.

Things are starting to get rolling with DSTAR. DSTAR has a lot of potential and is going to be a lot of fun. I thought it would have limited coverage and drop out like P25 but it has performed much better than I expected. The support for DSTAR seems to be growing everyday. I know the equipment is a little expensive but please bear with us. Anytime new electronics come out it is very expensive but later the price comes down as the sales volume goes up. Try not to be put off by the price.

Be sure to stay tuned and watch the calendar. We have a lot stuff going on this year. We are doing Field Day at the beach and we are also going to do a beach camping trip later in the summer. We've got a couple of technician classes and a general class coming up. We will be helping run the ARRL Southwest Division Convention and operating Amateur Radio Expo at the LA County Fair. Your support is why we do this.

We thank you for coming to our club events because when you support our club we get to meet other people who are trying to learn about us. Whenever you do a club event remember that we not just having a good time, we are also helping newcomers to the hobby. When people are new to the hobby, we want to welcome them and give them a place to come to so they won't feel intimidated as they get used to operating. When you hear someone new out there, introduce yourself, be polite, and make them feel comfortable. After all we were all there once and someone gave us a hand and encouragement.

de Leon KC6JAR

Field Day at the Beach

We are set to do Field Day at El Capitan

We were able to bray the state park reservation system and managed to reserve a spot at El Capitan State Beach for 2007 Field Day. We reserved the Cabrillo group camp site where we operated Field Day in 2003. The Cabrillo site is set on a bluff above the beach. It is surrounded by trees which is a rarity at the beach.

El Capitan is a great place to take your family. It has an excellent beach, hiking trails, and a bike trail that follows the ocean down to Refugio State Beach. El Capitan State Beach is located 15 miles up the coast from Santa Barbara.

This year Field Day will be held on June 23 & 24. Station setup will begin at 11:00am Friday June 22. We have reserved the group site for the evenings of Thursday June 21, 22 and 23 so you can come early if you wish. On Saturday night we will have our traditional potluck dinner. The club will provide the main course and we ask everyone to bring a side dish or dessert and their own drinks. We will also be conducting a VE testing session at the campsite on Sunday June 24 at 1:00 pm after Field day is over. It's a perfect opportunity to upgrade your license.

We will be operating on every amateur band allowed for Field Day from 80 meters to 23 centimeters. We plan to set up three HF stations and a weak signal VHF/UHF station all operated on batteries. We plan to operate phone, PSK-31, SSTV and D-STAR digital. It's a great way to try some new modes or bands and have fun at the beach at the same time.

This will be a popular trip so you will want to get your reservation in quickly before the campsite fills up. The site has plenty of tent sites and a limited number of RV sites. To get a space contact Ken W6CPA at <u>w6cpa@ircradio.org</u> and he will set a spot aside for you. Hope to see you there as you won't want to miss this one!

Blueridge Back in Service

Remedial Work Complete at Blueridge

The Blueridge repeater work has been completed. The Blueridge repeater is the keystone of our Los Angeles to Las Vegas link. Blueridge is in the Angeles National Forest overlooking Wrightwood. The repeater covers the Antelope Valley and the high desert into Barstow. The Blueridge equipment was in a facility owned by a major corporation who is not sympathetic to amateurs. They had threatened us with a major rent increase which would make the facility unaffordable. We were able to make arrangements with another amateur who has a facility on Blueridge to rent from him.

We moved the 220 repeater and the associated link equipment from the old facility to the new facility in November. In addition to the move, we updated the link equipment and 220 repeater, installed new antennas and feedline, and installed a 440 repeater (446.860 – PL 82.5). The 220 and 440 repeaters are linked full time into our system. We were under pressure to get the new equipment installed quickly because the site is not accessible during ski season as several of the local resorts ski runs cross the access road. We completed the work four days before they started making snow and closed the road.

This was a big project that was made much easier by all of the help we got. A special thanks to Steve KG6GIK and Mark KC6HMO who spent eight hours on the tower and about got hypothermia. Even after that, they were back up there a week later fixing some things that didn't go right the first time. We would also like to thank Shane KG6GIN, Russell KI6RUS and Chris KF6RSF for their help in putting the station together.

We still have some fine tuning to do with the station to improve the audio coming from the Las Vegas area. We should have everything in top shape when spring rolls around and we can get back to the site.

IRC E-Mail List

Keep up with what's happening by e-mail

You may not be aware of the IRC e-mail lists. Thanks to Craig WA6EKP, there are two e-mail lists relating to IRC. There is a general discussion list and an announcement list. The announcement list sends emails of club happenings and current events. The general discussion list is a place where members can discuss club activities or amateur radio in general.

To participate in either or both lists, you can click on the link on our web site <u>www.ircradio.org</u> or go directly to Craig's web site <u>www.zdi.net/mailinglists.html</u>. There are instructions on the web page explaining how to sign up for the lists. You can stop participating in either list at any time. Once you sign up, e-mail the address in the instructions and everyone on the list will get a copy of your e-mail. It's a great way to keep up!

Check in to Our Nets

Show your support for the club by checking in

Another way to keep up with what is happening with the club is to check into our nets. You will get the most current club information as well as showing support for the club.

Our first net is every Tuesday night at 6pm. The Tuesday net starts with Newsline at 6pm followed by check ins right after. The net is run by Lowell KG6AJF and its worth showing up to hear him talk about Leon if nothing else.

Our second net is held every Thursday night at 8pm. The Thursday night net is hosted by Ed KB6THO. It is a great time to bring up tech topics or items of general amateur interest as Ed is well versed in both.

Our new DSTAR net is held every Tuesday night at 7pm on our DSTAR system after the analog net. The DSTAR net is hosted by Ed KB6THO and is a great way to try out your new DSTAR radio. Hope to see you there!

This opens it up to many interesting possibilities. One of the earliest applications is DChat a keyboard to keyboard text messaging program that works on simplex or through repeaters. The DSTAR radios are set up to accept GPS data out of the box which allows for APRS applications. APRS can be used at the same time the voice system is being used due to the simultaneous voice/data channels in the radio. Due to FCC regulations, the high speed data capabilities are only available on 23cm. The 23cm high speed data radio is not designed to replace your internet service, but allows for field access to web sites and e-mail. It also allows the exchange of any kind of data at high speeds between DSTAR 23cm radios.

Our DSTAR repeater system is located at Contractors Point above the San Fernando Valley. The system consists of a 2 meter, 70 cm and 23cm digital voice repeaters and a 23cm high speed data repeater. The system will also have the internet gateway installed. Currently, all of the voice repeaters and the data repeater are operational. The internet gateway is under construction but will be finished shortly.

The system is operating on:

WA6IRC A 1282.650 -

WA6IRC B 446.870 -

WA6IRC C 147.210 -

And for data WA6IRC A 1299.700

Currently, Icom is the only manufacturer offering DSTAR radios although Kenwood has displayed DSTAR prototypes at radio shows in Japan. The next time you are in HRO give the system a whirl and see what it's about. They have a couple of radios set up to operate on the system.

Ed KB6THO our gateway administrator has set up a web site to describe our system and where we are with its construction and to explain the DSTAR system in general. You can access the website at <u>www.ladstar.org</u>. Come give it a try. It's a lot of fun!

Technician License Class

Do you know anyone who wants to get licensed?

The IRC is offering a technician license class and VE testing session May 12 and 13. The class will be held at Eagle Rock City Hall, 2035 Colorado Blvd, Eagle Rock. Eagle Rock City Hall is located on Colorado Boulevard near the Hwy 134/ Hwy 2 interchange. The class will run 9:00am to 5:00pm Saturday May 12 and 9:00am to 3:00pm Sunday May 13. The class will be followed by a VE testing session sponsored by the IRC.

We have found that taking a license class over one weekend and immediately testing right afterward is much more successful than taking classes over a series of weeks. Testing the student before he has a chance to forget the material works very well.

Signing up at the class is ok, but we would prefer it if you would preregister. You can preregister by emailing Ken at <u>w6cpa@ircradio.org</u> or by printing and mailing in the coupon from our web site at <u>www.ircradio.org</u>. One advantage of preregistration is that prestudy will increase your chances of success dramatically.

The cost of the class is \$50. The cost includes a study book and the required VE testing fee. Should you fail the first test and need to take a second test a \$14 additional fee is required. All students should bring picture ID and their social security number (the SSN is required by the FCC).

The VE testing session on Sunday May 13 at 3:00 pm is open to all. We will be offering all test elements so it's a perfect time to upgrade. You need the following items to take a test, a picture ID, \$14 in check or cash, a copy of your license (if any), and any CSCE forms. Please have a copy of your existing license and exact change for the test fee. You can still take a test if you don't bring a copy of the license, but you will only receive credit for the elements passed. Any license upgrade would be held up for ARRL VEC verification. Any questions call or e-mail Ken at (818) 957-1699.

CALENDAR OF EVENTS

JANUARY CLUB MEETING

LAMPLIGHTER RESTAURANT 5043 VAN NUYS BLVD. VAN NUYS, CA FRIDAY JANUARY 26 AT 7:00 PM

FEBRUARY CLUB MEETING

LAMPLIGHTER RESTAURANT 5043 VAN NUYS BLVD. VAN NUYS, CA FRIDAY FEBRUARY 23 AT 7:00 PM

MARCH CLUB MEETING

LAMPLIGHTER RESTAURANT 5043 VAN NUYS BLVD. VAN NUYS, CA Friday March 30 at 7:00 pm

TECHNICIAN LICENSE CLASS

EAGLE ROCK CITY HALL 2035 COLORADO BLVD. EAGLE ROCK, CA SATURDAY MAY 12 & SUNDAY MAY 13 AT 9:00 AM

FIELD DAY

EL CAPITAN STATE BEACH CABRILLO GROUP CAMP NORTH OF SANTA BARBARA, CA FRIDAY JUNE 22 AT 11:00 AM - SETUP SATURDAY JUNE 23 & 24 AT 11:00 AM - OPERATIONS SEE ARTICLE ON PAGE 2

Southwest Convention

Help us with the 2007 ARRL Southwest Convention

This year our club has agreed to help operate the 2007 ARRL Southwest Division Convention. The convention will be held on September 7, 8 & 9, 2007 at the Torrance Marriott in Torrance. The convention consists of classes, speaker presentations, social events and a radio vendor display. The convention attracts hams from all over Southern California and Arizona.

Our club has agreed to perform security for the convention. Our job principally will consist of checking tickets of people entering the convention and patrolling the vendor display area at night.

In exchange for helping to operate the convention, our club will receive a share of the convention profits. Please mark your calendar to give us a hand. It's a great way to see what's new in amateur radio, help out our club and have fun at the same time.

Baker to Vegas Race

Communications volunteers needed

The Baker to Vegas Challenge Cup Relay is an annual race of law enforcement personnel who race from Baker, CA to Las Vegas. This race is the largest and most unique law enforcement race in the world. The race will be held this year April 21 & 22. Amateur radio is an integral part of the race. Amateurs provide emergency communications, early warning and timekeeping services to the race. The times recorded by the amateur volunteers are used to judge the race winners.

Amateur radio volunteers are desperately needed to help support this worthy cause. If you would like to help with the race, contact Joy Matlack KD6FJV at <u>rbvcom1@b2v.org</u> or you can check out the radio communication web site at www.b2v.org.

FINANCIAL INFORMATION

Independent Radio Club, Inc.

Statement of Income and Expenses

January 1, 2006 through December 31, 2006

Income:

Equipment Purch Donation 50 Class Income 31	95)0
Expenses:	
Bank Charges9Equipment Purchase61Party Food14Site Rent1,05Telephone38	3 0 0 4
Total Expenses	2,277
Excess of Expenses over Income	(76)
Independent Radio	Club, Inc.
Balance She	et
December 31,	2006
Operating Funds 1,2	223
Total Cash	1,223
Other Assets:	
	06
Total Other Assets	206
Total Assets	1,429 ====
Total Liabilities	0
Unrestricted Fund Balance 1,4	29
Fund Balance	1,429
Liabilities and Fund Balance	1,429 ====

Club Repeaters

KC6JAR/R repeater 445.340 MHz minus CTCSS 103.5 Contractors Point

K6VE/R repeater 224.480 MHz minus CTCSS 110.9 Contractors Point

W6DMV/R repeater 927.9625 MHz minus CTCSS 100.0 South Pasadena

W6CPA/R repeater 446.860 MHz minus CTCSS 82.5 Blueridge

W6CPA/R repeater 224.480 MHz minus CTCSS 100.0 Blueridge

Club Contacts www.ircradio.org Information: Leon (KC6JAR) kc6jar@ircradio.org Ken (W6CPA) w6cpa@ircradio.org Webmaster: Larry (KG6EJT) kg6ejt@ircradio.org Net Control: Lowell (KG6AJF) kg6ajf@ircradio.org