

Gold Country Nuggets

Newsletter of the Nevada County Amateur Radio Club

APRIL MEETING

April 12, 2009

7:00 PM - Salvation Army Bldg
10725 Alta St, Grass Valley, CA

Door Open – 6:30
Coffee & Sodas
“Free” Flea Market Table

“What Every Ham Should Know “

**OSCILLOSCOPES &
FREQUENCY COUNTERS**
by
Charlie Kotan, KOTAN

GUESTS WELCOME

UPCOMING EVENTS

APRIL 16 – 18

61ST ANNUAL INTL DX CONVENTION
Holiday Inn & Conference Center -Visalia

APRIL 24

EMERG COMM LEADERSHIP
Saturday, April 24, 9 A.M. to 2 P.M.,
U.C. Davis Sierra Foothills Research and
Extension Center,(Browns Valley)

APRIL 30 – MAY 2

EMCOMMWEST 2010
Grand Sierra Hotel Resort, Reno
Info: <http://www.emcommwest.org/>

President's Report

Walt, N6HNS

The main topic of this column is our club newsletter. Gerry Mitchelmore, AB7G, who has been doing all the work to get our newsletter out for about 4 years, has decided to let some of the rest of us take over. But before I make a pitch about someone taking on this duty, I'd like to take this opportunity to thank Gerry for all the excellent work he has been doing on both the newsletter and the club website.

I feel that the newsletter is the main thing that helps keep the club together. Meetings are also an important part of the club, but many members can't make it to meetings and having the newsletter is the way they can see what the club is doing. So, Gerry – THANK YOU!!

If any of you has a interest in getting involved with putting together the newsletter, please let me know.

Now that we are starting to get bits of nice weather, I've been looking at my antennas – again. If this initial spring enthusiasm stays around, I want to re-hang my Carolina Windom 80 antenna and also relocate at least one 2 meter antenna.

(Continued on page 2)

Club Officers

President

Walt Hammontree- N6HNS

Co Vice-Presidents

Charlie Kotan- KOTAN
Bill Bridges - W6FA

Secretary

Jon Gicker – WA6TNC

Treasurer

Chuck Murphey– KI6IND

Elected Board Members

Richard Miller - KI6IOV
“Doc” Dashiell- KG6YHH

LICENSE EXAMS

Morse Code No Longer Required

April 24

June 26

Sept 25

Nov 13

Contact Jon W6EXX for details
jf-morris@usa.net

President's Report (Continued)

If all that works out, I might even try to hang another HF wire antenna. If any of you are also looking at your antennas and thinking about changing or replacing any, bring your ideas to the next club meeting. This is the time to mention your upcoming antenna projects and see what kind of ideas others in the club have and who may be willing to help.

The April meeting will feature another Test Equipment session given by Charlie Kotan, K0TAN. This time he will focus on the oscilloscope and frequency counter.

And this leads me to ask: Has Charlie's test equipment presentations generated any interest in you about additional test equipment topics or other presentation topics? If so, talk to us about something you would like to see, AND if you are thinking about a topic you would like to give – please let us know.

Seeing Charlie's presentations got me thinking about doing a presentation on coaxial cable and coaxial connectors, which we might see at the May meeting. I also know that several of you have antenna analyzers, such as the MFJ-259, and many of you would like to see someone talk about some of the features and the operation of this very capable instrument. But, when you think about it, there are lots of things that would be interesting to all of us, so start looking around your shack or workshop and give some thought on what you might like to tell us all about.

So, there are several things you might give some thought to and discuss at the next meeting – the newsletter, further test equipment presentation topics, antenna projects, and anything you might want to do for a club presentation. If you come to the meeting, please let us know what you would like to see or to do. If you don't make it to the meeting, please send me an e-mail with your ideas.

Hope to see you at the meeting!

73
Walt N6HNS

MEMBERSHIP INFORMATION

The Nevada County Amateur Radio Club is an organization whose purpose is to further the interests of amateur radio and be of service to the community in times of need. Membership is open to anyone who shares these group goals.

GENERAL MEETINGS:

2nd Monday of each month at 7:00 PM, at the Salvation Army Center located at 10725 Alta Street, Grass Valley, CA 95945. - Visitors are welcome.

ANNUAL DUES:

\$20.00* per year. (* \$6.00 /yr for associate or additional household members). Membership is renewable January 1st each year. Members who fail to pay dues before January 31st will be removed from the club roster until membership is renewed. For further information and/or application contact N.C.A.R.C., P.O. Box 2923, Grass Valley, CA 95945...or see the club web site at <http://www.ncarc.org>

SEE LAST PAGE FOR RENEWAL FORM
Please contact the club secretary with any changes in email or contact information.

NETS

All Licensed Amateurs Are Welcome

NCARC	TUES	7:00 P	147.285 PL 151.4
10 M	TUES	AFTER 2M NET	28.453 USB
WX	MON- FRI	7:30 A	147.285 PL 151.4
ARES	THURS	7:30 P	147.285 PL 151.4

NCARC NEWSLETTER: *Published monthly. The Gold Country Nuggets monthly newsletter is compiled and edited by the Nevada County Amateur Radio Club. - All material contained herein is obtained from the sources credited and edited for this newsletter.*

NCARC WEBSITE: *For more club info see us at <http://www.ncarc.org>.*

WHERE ARE THE HAMS?

Locate other hams in your neighborhood

hams.mapmash.com/mapOneZip.php?hist=zipmatch:95946&zip=95946

NCARC MEETING MINUTES

General Meeting on March 3, 2010

Attendance: 26

After the usual introductions, Doc, KG6YHH, announced that he was a major prize winner in a CQ contest. Modest fellow that he is, he didn't disclose the amount of the cash prize, but that doesn't matter. We all know Doc is outstanding in his field, when he is not outstanding in his front yard or at his ham rig. - Congratulations, Doc!

Charlie, K0TAN, presented Part Two of his Mr. Wizard and Rocky extravaganza. This one was on the use of the multimeter. - Gee Whiz, it was fun! Next up is the Oh-sillyscope.

After the break, Treasurer Chuck, KI6IND, advised that the treasury reflected a balance of \$4429.72, including raffle proceeds.

Your Secretary read February's minutes.

Charlie, K0TAN, advised us on Placer ARES' activities with the upcoming Simulated Emergency Test.

And, Doc, KG6YHH, kindly volunteered to prepare our photo brochure featuring genuine John Hart photos.

The meeting adjourned at about 8:36 PM.

Respectfully submitted by Jon, WA6TNC, SECRETARY

NEWS FROM THE ARRL et al

EMERGENCY COMMUNICATIONS LEADERSHIP

The third annual seminar for Emergency Communications Leadership in the Sacramento Valley Section will take place Saturday, April 24, 9 A.M. to 2 P.M., at the U.C. Davis Sierra Foothills Research and Extension Center, 8279 Scott Forbes Rd., in Browns Valley.

The seminar is hosted once again by Art, K6ALC, Yuba and Sutter County Emergency Coordinator. The seminar is organized and presented by Larry, WD6FXR, Section Emergency Coordinator. All Section EMCOMM Leadership is invited as well as anyone who intends to step up to a leadership position.

All EMCOMM organizations, not just those whose title includes the ARES label, are urged to attend. Attendees need to bring a bag lunch. There is no food service available in the area. Also bring your go kit if you want to share your ideas, and any items you would like to discuss. Coffee, tea, and bottled water will be provided.

Directions: take I-5 to Hwy. 99, then Hwy. 70 Marysville. Take Hwy. 20 east 14 miles to Peoria Road. Turn left, and follow signs 5.6 miles.

EMCOMMWEST 2010 (APRIL 30 – MAY 2)

This year's EMCOMMWEST® will take place Friday April 30 - Sunday May 2, 2010 at the Grand Sierra Resort in Reno, NV.

Started in 1999, this event has grown to a full ARRL convention, with speakers and forums, a one day review of all the Technician Pool questions and a Technician VE exam. A hall of vendors will have all the latest Ham Radio goodies, and there will be a swap meet. <http://www.emcommwest.org/>

This year's speakers and schedule can be viewed at the site, which will continually update as new forums and sessions are added, so check back often. If you know of someone who would like to present at this event, route them to the website for a speakers package. Registration forms, vendor registration, banquet and breakfast tickets, room reservations etc. can be obtained here as well.

There are some very interesting topics to be discussed this year, including a presentation of special interest to those operating on the 420-450 band, on the USAF's

new RADAR system, formerly known as Pave Paws, in Northern California. Lt. Col. Corey J. Keppler and his staff who work directly with the project at Beale will make this presentation. They will present an overview of the unit mission, explain the project and their use of the 420 - 450 mhz. band, and why the mitigation of interference is important to the mission. Their presentation will be followed by a full session of Q&A to answer questions from the Amateur Radio community.

There will also be FEMA ICS and NOAA Weather Spotter training classes offered at the event, and a "get your ham license in one day" class along with VE license testing for all classes.

ARRL's CEO, Dave Sumner, K1ZZ will be the special Saturday night banquet speaker this year! Keynote speaker will be Mark Spencer, WA8SME of the ARRL. This year's EMCOMMWEST® will offer a new "Sunday Brunch" with special guest speaker, Tom Taomina, K5RC who's huge contest station in Virginia City Highlands, Nevada is legendary.

If you haven't been to one before, come to Reno's The Grand Sierra Hotel Resort, which features an indoor shopping mall, movie theatres, outdoor driving range, lots of restaurants and an on-site RV park. If you want to learn a lot, meet old friends and make new ones, have fun and "love Amateur Radio", then you just have to be at EMCOMMWEST® 2010! - ARRL Pacific Division Director: Robert Vallio, W6RGG , w6rgg@arrl.org

FCC NEWS: FCC ISSUES NOTICE OF PROPOSED RULE MAKING ON GOVERNMENT DISASTER DRILLS AND AMATEUR RADIO

On March 24, the FCC released a *Notice of Proposed Rule Making (NPRM)* proposing to amend the Commission's Amateur Radio Service rules "with respect to Amateur Radio operations during government-sponsored emergency preparedness and disaster readiness drills and tests.

" While current rules provide for Amateur Radio use during emergencies, the rules prohibit communications where the station licensee or control operator has a pecuniary interest, including communications on behalf of an employer.

In October 2009, the FCC released a *Public Notice* clarifying the Commission's rules relating to the use of Amateur Radio by licensed amateurs participating in drills and exercises on behalf of their employers. To date, the FCC has granted several dozen waivers under this new policy.

The FCC notes that while there are some exceptions to this prohibition, "there is none that would permit amateur station control operators who are employees of public safety agencies and other entities, such as hospitals, to participate in drills and tests in preparation for such emergency situations and transmit messages on behalf of their employers during such drills and tests."

Based on that, the Commission proposes to amend the rules to provide that, under certain limited conditions, Amateur Radio operators may transmit messages during emergency and disaster preparedness drills, regardless of whether the operators are employees of entities participating in the drill. – ARRL Letter

ARRL & RED CROSS SIGN MEMORANDUM OF UNDERSTANDING

On Thursday, March 25, ARRL President Kay Craigie, N3KN, signed a new Memorandum of Understanding (MoU) with the American Red Cross (ARC) at ARC National Headquarters in Washington, DC.

The MoU, which replaces an earlier Statement of Understanding that expired in 2007, provides a "broad framework for cooperation" between the ARRL and the ARC "in preparing for and responding to disaster relief situations at all levels in rendering assistance and service to victims of disaster, as well as other services for which cooperation may be mutually beneficial."

The ARRL Board of Directors approved the signing of the MoU at its January 2010 meeting following the completion of negotiations. The Red Cross requires the completion of a criminal background check to participate in Red Cross activities and provides a process by which a volunteer may have a criminal background check performed at no cost to the volunteer.

In the case of ARRL volunteers, the Red Cross has agreed to accept an alternative process: ARRL volunteers may arrange, at their own initiative and expense, to have the criminal background check performed by a state or local law enforcement agency.

The Red Cross also has agreed that ARRL volunteers shall not be asked or required to consent to credit checks, mode of living investigations or investigative consumer reports in order to provide a communications function.

The ARRL and the Red Cross encourage interested volunteers in their respective organizations to become members and to participate in the activities of the other

organization. ARRL volunteers should be aware that if they wish to become Red Cross volunteers, they may be required to consent to additional background checks in accordance with Red Cross policy that may include credit checks, mode of living investigations or investigative consumer reports.

Per the MoU, "both ARRL volunteers and ARC workers will work cooperatively at the scene of a disaster and in the disaster recovery, within the scope of their respective roles and duties as recommended."

During a Red Cross Disaster Relief Operation (DRO) and depending on their training and qualifications, ARRL volunteers may perform in one or more of several roles, including Amateur Radio Liaison, Communication Equipment Operator, Communication Equipment Installation/Repair and Disaster Assessment. ARRL volunteers who are assigned roles by the Red Cross during a DRO will be provided with Red Cross credentials as required by the role, consistent with Red Cross policy.

"Because of the importance of emergency communications, we are happy to be able to continue the League's long-standing relationship with the American Red Cross," said ARRL President Kay Craigie, N3KN. "The ARC and other served agencies give Amateur Radio operators the worthwhile missions in our communities that allow us to thank America for the privilege of being hams."
- ARRL Letter

FCC AMATEUR RADIO ENFORCEMENT CORRESPONDENCE POSTED

The FCC has posted new Amateur Radio enforcement correspondence on its "[Amateur Radio Service Enforcement Actions](#)" Web page.

Laura Smith, Special Counsel in the FCC's Enforcement Bureau, sent a letters to the Sacramento (California) Municipal Utility District and to Northwestern Energy of Helena, Montana; Northwestern Energy also received letters voicing these same matters in March and September 2009.

These letters concerned received complaints that equipment operated by these utilities may be causing harmful interference to Amateur Radio operators. Direct all questions about the Amateur Radio Service Enforcement Actions Web postings *via e-mail only* to the FCC Enforcement Bureau. – ARRL Letter

ADMINISTRATIVE LAW JUDGE SAYS WASHINGTON STATE LICENSEE CAN KEEP HAM LICENSE

In January 2007, the FCC issued an *Order to Show Cause* to David L. Titus, KB7ILD, of Seattle, Washington, to justify why his General class Amateur Radio license should not be revoked and initiated a hearing process to determine whether Titus "is qualified to remain a Commission licensee" in light of a 1993 felony conviction at the age of 18 for "communicating with a minor for immoral purposes."

According to the FCC order, Titus received a 25-month prison sentence for this act, and the Seattle Police Department has identified him as a registered sex offender.

On March 9, Administrative Law Judge Richard L. Sippel issued his *Initial Decision* -- saying that Titus "has been a law-abiding member of his community for many years" and ordered that Titus' license should not be revoked based on the evidence presented by the defendant and witnesses on his behalf, as well as the FCC's Enforcement Bureau failure to meet the burden of proof necessary for revocation.

The FCC has said that *The Communications Act of 1934, as amended* provides that the Commission may revoke any license if conditions come to its attention that would warrant a denial of the licensee's original application. In the past, the Commission has said that felony convictions, "especially those involving sexual offenses involving children," raise questions regarding a licensee's character qualifications. Sippel's *Initial Decision* shall become effective "and this proceeding shall be terminated 50 days after its release if exceptions are not filed within 30 days thereafter, unless the Commission elects to review the case on its own motion" - ARRL Letter

FCC PROPOSES TO ELIMINATE SPREAD SPECTRUM APC REQUIREMENT, REDUCE SPREAD SPECTRUM POWER LIMIT; CLEANS UP PORTIONS OF PART 97

In response to a 2006 ARRL *Petition* regarding spread spectrum issues, the FCC released a *Notice of Proposed Rule Making (NPRM)* on March 16 (WT Docket No 10-62), proposing to amend Part 97 to facilitate the use of spread spectrum communications technologies by eliminating the requirement that amateur stations use automatic power control (APC) to reduce transmitter power when the station transmits a spread spectrum (SS) emission and reducing the

maximum transmitter power output when transmitting a SS emission.

Through an *Order* attached to the *NPRM*, the Commission also made "certain non-substantive revisions" to the Amateur Service rules. In the *NPRM*, the FCC agreed with the ARRL that the APC requirement "may be unnecessarily impeding Amateur Radio operators in advancing the radio art," but the Commission does not propose to simply eliminate the APC requirement.

Noting that the purpose of the APC requirement is to limit interference to other stations, the FCC pointed out that commercial broadband Internet service providers operating in the 900 MHz and 2.4 GHz ISM bands argue that the APC requirement should be maintained in order to prevent interference to other users. They also referred to suggestions maintaining that if the APC requirement is eliminated, the FCC should lower the maximum power limit on amateur stations transmitting SS emissions so that interference is minimized.

Given these concerns, the FCC proposes to eliminate the APC requirement and reduce the maximum transmitter power output amateur stations may use when transmitting SS communications from 100 W to a peak of 10 W.

"We believe that this approach is consistent with both the ARRL's request that we eliminate a requirement that may be impossible to implement and the intent of the APC requirement to limit interference to other stations," the FCC stated in the *NPRM*. "We also believe that the proposed rule change would (1) encourage individuals who can contribute to the advancement of the radio art to more fully utilize SS technologies in experimentation, (2) balance the interests of all users in mixed-mode and mixed-service frequency bands until sharing protocols are sufficiently developed to avoid interference and (3) promote more efficient use of the radio spectrum currently allocated to the Amateur Service." The Commission is seeking comments on this proposal. – ARRL Letter

"BABY BLINDNESS" PIONEER ARNALL PATZ, EX-WA3EVC (SK)

Dr Arnall Patz, ex-WA3EVC -- an ophthalmologist who discovered and eliminated a major cause of blindness in premature infants -- passed away from heart disease on March 11. He was 89.

In 1954, Patz proved that treating premature babies with pure oxygen could destroy their eyesight. At the time, this was the most common cause of blindness in premature infants. Although the new understanding came too late for thousands of people who were made blind by oxygen --

including the singer Stevie Wonder, ARRL Connecticut Section Manager Betsey Doane, K1EIC, and her twin sister Barbara Lombardi, K1EIR –

it undoubtedly saved many more from a similar fate. "Barb and I are thrilled to learn that the doctor who discovered the effect of too much oxygen at birth was a ham. We only wish we had met him or worked him on the air. How exciting that would have been!" Doane told the ARRL.

Patz operated a ham radio from his home on behalf of the Maryland Eye Bank. According to his nephew Sam, Patz erected an 80 foot tower at his home and became known to amateurs across the country for putting out the word on the airwaves whenever corneas were needed for transplant. – ARRL Letter

NEW ARRL CONTEST ----ARRL ROOKIE ROUNDUP

The ARRL Rookie Roundup is designed to help newly licensed amateurs build their operating skills on HF.

It is a contest specifically for those new to Amateur Radio, similar to the ARRL Novice Roundup that ran from 1952 until 1995. The Rookie Roundup brings the fun and Elmering of the old Novice Roundup into the 21st century.

Three Rookie Roundups will be held each calendar year: SSB in April, RTTY in August and CW in December.

The Rookie Roundup will be scored 100 percent in real time through the www.getscores.org scoring system.

There are three ways to participate: by using your favorite logging software with the real time scoring support, by downloading a simple logging program from the www.getscores.org Web site or by logging your contacts directly into a www.getscores.org Web page. No separate logs are required -- it all happens online in real time and final scores will be available online within hours of the end of the contest!

More information is available on all of these options at www.getscores.org. Of course, you can get on the air and make contacts without logging them, but you won't have as much fun!

Who is a Rookie: Any ham licensed for 3 years or less. If you were licensed in 2008, 2009 or 2010, you can compete in the 2010 Rookie Roundup.

Non-Rookies may only work Rookies, while Rookies may work everybody. A major part of the success of this contest will be non-Rookies getting on the air and working the Rookies, just as in the Novice Roundup.

Entry Categories: Single Operator Rookie, limited to a maximum of 100 W. Spotting assistance or using call sign and frequency alerting systems is allowed, but self-spotting or asking somebody to spot you is not.

All Rookies must identify themselves as a rookie. Example: "Kilo Bravo One Quebec Alfa Whiskey, Rookie." Non-Rookies only need give their call; no designation is needed.

Awards: Certificates will be available for all participants to download. The top five high scores from each US call area, Canadian province and Mexican call area will be recognized on their certificate. No national winners will be recognized.

Go to www.getscores.org for more information on how to participate. Be sure to check out the April 2010 issue of QST for complete rules and other information. The Rookie Roundup -- a fun event for all amateurs! --ARRL Letter

LORAN-C SHUT DOWN

The Coast Guard published a Federal Register notice on Jan. 7, 2010, regarding its intention to terminate transmission of the LORAN-C signal Feb. 8, 2010 and in a series of small ceremonies February 8th the U.S. Coast Guard shut down Loran-C, a navigation and timing system that has guided mariners and aviators since World War II.

The death blow came last May when President Obama called the system obsolete, saying it is no longer needed in an age in which Global Positioning System devices are nearly ubiquitous in cars, planes and boats.

Shutting down the Loran-C will save the government \$190 million over five years, Obama said. But supporters of Loran -- including the man known as "the father of GPS" -- say the nation's increasing reliance on GPS paradoxically has increased the importance of maintaining Loran as a backup.

At 3 p.m. Monday, the U.S. Coast Guard turned off Loran signals at 19 of the 24 Loran stations. Signals remain at five stations because of agreements with Russia and Canada, but the Coast Guard expects those stations to be decommissioned by June after the United States receives verification that those countries have been notified of the change.

The five stations that temporarily remain on line are at Attu, in Alaska's Aleutian Islands, and Caribou, Maine; Nantucket, Massachusetts; Shoal Cove, Alaska; and George, Washington. -- ARRL Letter

ARECIBO DISH TO BE ACTIVATED ON AMATEUR RADIO EME

April 16, 17, and 18. This year, EOA has been graced with a special opportunity to use the Arecibo Dish as the ultimate "big gun" station on 432 MHz SSB & CW.

EME operation on 1296 MHz may also be possible. Arecibo has more than 50 dbi gain on 432 MHz so the team thinks it can be heard with modest equipment. This will provide hams with a unique opportunity to utilize modest UHF and 1296 stations to copy EME signals. -- ARRL Letter

WILMINGTON, NC SERVES AS A TESTING GROUND FOR MUNICIPAL NETWORK USING WIFI IN WHITE SPACES

Wilmington, N.C., that first made the news during the Digital TV Transition as the first market to switch from Analog to Digital TV is now serving as the test ground a municipal WiFi network using the "white spaces" between those DTV channels.

The network became operational in January and is the handiwork of Spectrum Bridge and TV Band Service. The latter comprises private investors and is locally based. The former, which is supplying the database to make sure the network does not interfere with TV stations in Wilmington.

The "smart city" network, as they have coined it, will not be competing directly with the wireless carriers for subs, the companies say, but will be demonstrating uses such as energy monitoring, government services, and public safety. Those are the sorts of "national purposes" uses of broadband the FCC will be promoting in its National Broadband Plan, due to Congress next month.

The network provides wireless cameras for traffic and general surveillance, monitors water level and quality testing and provides public WiFi to a park and school and is using the network as backhaul to provide wireless hotspots. In the park it is being used to control and monitor the ball field lighting and to turn the lights off after the last team has finished playing.

TV Band Service holds the 18 month experimental FCC license, but said they expect to reevaluate the test

in April, including doing some cost-benefit analysis and developing case studies.

This test will allow Spectrum Bridge to test its database and showcase it to the FCC and others. Testing in the real-world is a great opportunity to learn how it interacts with other devices and how to keep it from interfering with other protected users. So far there have been no interference issues, either in this test or an earlier one in October in Virginia.

[USA ARDF CHAMPIONSHIPS MAY 21 – 23 IN CINCINNATI OHIO](#)

May 21-23, 2010. This is one week after the [Dayton Hamvention®](#), where the annual Foxhunting Forum will be led by the championship's organizers.

The championship's headquarters will be in Franklin, Ohio -- halfway between Dayton and Cincinnati. Formal activities begin on Friday with a practice and equipment testing session.

The championship 2 meter competition will start early on Saturday in a nearby forest, followed by a banquet that evening. On Sunday, the 80 meter competition and medal award ceremony will take place in a different location.

Organizers of the 2010 championships are members of OH-KY-IN Amateur Radio Society, Orienteering Cincinnati (OCIN) and the Butler County VHF Association (led by Bob Frey, WA6EZV, and Dick Arnett, WB4SUV). These are the same folks who put on the very successful 2003 USA and IARU Region 2 Championships, although the 2010 competitions will take place in different forests.

Bob and Dick have won medals at previous USA championships and have been on USA's team to the World Championships four times. USA's ARDF Championships are open to all, regardless of radio-orienteeing skill level or ham radio licensing status. Medals will be awarded for the top three finishers on each band in 11 age categories: six for males and five for females.

Registration is now open. For the second year, there is no entry fee for first-time participants and for persons coming from outside North America. The form is available for download at the championship's official Web site. That site also has lodging suggestions and information about two optional days of intense ARDF training just before the championships. – ARRL Letter

[THE COOLING OF HAM RADIO](#)

What better time than now to consider some cool new ham radio applications for the coolest gadget that fits in your palm of your hand.

According to the kids, nothing is cooler than the iPhone, so it is nice to discover some brand new ham radio iPhone apps.

Visiting the iTunes store, I was surprised how many ham radio apps there are -- and about a quarter of them are free! Among the free apps are a satellite tracker, EchoLink app, ham utilities, APRS app, Maidenhead converter, direction finder, HF beacon app, VHF/UHF/SHF contest rover logger and a bunch of ham radio exam preparation apps, including some in partnership with the ARRL.

If you are willing to part with a buck or two, there are a slew of "unfree" ham radio apps, too. If you visit the iTunes store to search for ham radio apps, be sure to search on both "ham radio" and "Amateur Radio," since the search results are slightly different -- some apps only show up in one or the other search results.

There are also some pertinent apps that turn up when you search on "radio," but that search also turns up a lot of apps not related to ham radio that you will have to wade through.

If you have iTunes installed on your computer, you click on the "iTunes Store" button in iTunes and iTunes proceeds to access the store via the Internet. In other words, iTunes acts as your Web browser, but its browsing is limited to the iTunes Store. If you don't have iTunes installed on your computer, you can [download it for free](#). Thank you, Gerry Jurrens, N2GJ, for alerting me to the EchoLink app. - -ARRL

[GUIDE ON LIGHTNING PROTECTION AVAILABLE FOR DOWNLOADING](#)

The Institute of Electrical and Electronics Engineers (IEEE) has released a new lightning protection guide: How To Protect Your House and Its Contents From Lightning: IEEE Guide for Surge Protection of Equipment Connected to AC Power and Communication Circuits By: Richard L. Cohen, Doug Dorr, James Funke, Chuck Jensen, and S. Frank Waterer. This is a 52 page illustrated guide written by the IEEE Surge Protection Device Committee.

It covers lightning hazards, integration of the various components of a lightning protection system, AC and signal surge protectors, multi-port protectors for

equipment connected to signal and power lines, and grounding methods.

It is written in plain technical language, and is an excellent guide for all amateurs concerned about protecting their antennas, shack and homes from the effects of lightning. The guide is available at no cost from the following URL: www.lightningsafety.com/nlsi_lhm/IEEE_Guide.pdf - BRATS

VIDEO OF HO-68 OPERATIONAL MODES

Henk PA3GUO has produced a video showing all the modes available on the Amateur Radio satellite Xi Wang 1 (HO-68). This 2 minute video features the launch of the satellite and shows its various modes of operation - Beacon, FM, AX.25 Packet and SSB/CW linear transponder. Callsigns heard during the video include M3PQQ, N1AIA, KC9ELU, VA3FM, WA3CZY and I6IBE. You can find the video at <http://tinyurl.com/ycej4dg>

NZ3M has put a video of SSB contacts via the new Amateur Radio satellite HO-68. This video can be viewed at <http://tinyurl.com/ya2uyzs>

Piraja, PS8RF reported that a contact between Dean, ZD8DC on Ascension Island and Michel, F6HTJ, in France was completed via HO-68. --BRATS

SOFTWARE DEFINED RADIO (SDR) EXPLAINED

"Fists of Fourier Explained" is an interesting 3 part series explaining the fundamentals of Software Defined Radio.

It is available at website: <http://garage-shoppe.com/wordpress/?p=278#more-278>

2010 ARRL FIELD DAY PACKETS NOW AVAILABLE

It's that time of year again -- time to start gearing up for ARRL Field Day, June 26-27, 2010! ARRL's flagship operating event -- always held the fourth full weekend in June -- brings together new and experienced hams for 24 hours of operating fun.

Field Day packets are now available for download and include the complete rules (including changes for 2010), as well as other reference items such as forms, ARRL Section abbreviation list, entry submission instructions, a Frequently Asked Questions section, guidelines for getting bonus points, instructions for GOTA stations, a kit to publicize your event with the local press and more. -- ARRL Letter

ARRL INTRODUCES UNDERSTANDING BASIC ELECTRONICS, SECOND EDITION

UNDERSTANDING BASIC ELECTRONICS, SECOND EDITION -- your gateway into the exciting world of electricity and electronics -- is written in a friendly, easy-to-understand style that beginners and nontechnical readers will enjoy. This introductory guide is ideal for students with basic math skills, as well as radio amateurs and experimenters interested in gaining a more complete understanding of basic electronic principles -- anyone eager to unlock the mysteries of electronic circuits.

Authored by Walter Banzhaf, WB1ANE, this new edition features student-friendly math made easy -- an inexpensive calculator is all you need -- and now includes digital electronics. Even if you already have a foundation in basic electronics, you will enjoy the small module format of each chapter, allowing readers to digest "bite-sized" chunks of learning material. Real-world examples and clear illustrations make the study of electronics interesting and fun! A handful of small "kitchen table" projects are included to help bring abstract concepts to life.

Understanding Basic Electronics, second edition includes chapters on electronics, analog and digital electronic circuits, electrical terms, conductors, insulators and resistors, electricity and magnetism, capacitors and inductors, electrical circuits (both series and parallel), Ohm's law, techniques and tricks on how to solve circuit problems, energy and power, alternating current (ac), capacitors and inductors, transformers, impedance, resonant active device concepts, semiconductors, diodes, transistors and ICs -- and much more.

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