

MO&O DE TR 07042 - Second Memorandum

How I Make Ladder-Line

by Tracy Reese WB6TMY

Air is such a wonderful dielectric! Consider that your signals are radiated from the antenna and travel through air (the ether) to their destination with remarkably little attenuation; the only dielectric better than air is a vacuum. One key to good ladder-line is to have the maximum amount of air and the minimum amount of intervening material that is not air. At commercial stations, the wires are drawn taught with high tension between supports and there are no "ladders."

My favorite "ladders" are swizzle sticks used for mixed drinks. You can buy them very inexpensively at the grocery store in the liquor department. Get a big bundle and they will last a VERY long time! As a rule I cut them in half before using them, and you don't need very many.

Take two pieces of wire, I'm partial to #18, but you can use any thickness. What I like about #18 is it is thin enough to be malleable and strong enough to last many years. Pick any two good supports in the back yard, I like doorknobs, fence posts, thick branches on trees etc. Stretch two wires between the supports as tightly as you reasonably can, just leaving a tiny bit of sag. If you get 'tinned' wire, soft drawn copper with a shiny silver like finish that is the best sort. The tinning will tarnish quickly giving your feed line near invisibility. Usually I make the antenna out of the same wire and for the same reason. Visibility is important at my house.

Soft cotton handkerchiefs work best for me, but I suppose you could use paper towels, the important thing is to safe guard your fingers from friction and irregularities in the wire. Take each wire, one at a time and place it in your hand with the four fingers in the direction of your travel and then press down with your thumb far enough to bend the wire. You need to plan on not looking where you're going, and keeping a sharp eye over your shoulder as you walk backwards, or else cross your arm across your body to hold the wire close to your waist as you walk forward. In any event, progress from one end of the first wire to the other end of the first wire bending it under your thumb as you go, then returning with the same motion on the same piece of wire. Repeat now for the other feed wire.

With every trip back and forth you will find the sharp bends in the wire releasing and the wires will sag farther and farther. It will be necessary to stop and refasten them when the sag becomes too great. After many trips back and forth you will decide the wire has no significant sharp bends and you will become concerned that the wire is "curling" from the repeated trips bending it back and forth.

With just a slight amount of sag begin to insert your half

swizzle stick ladders into the line. Cut up a goodly amount of #18 tinned wire into short pieces perhaps 3 inches apiece. My "rule of thumb" is to put a ladder in at every foot for every inch of separation. If the wire is spread 2 inches, I insert a ladder every two feet. Lay your first spreader at a mid-point between the end supports and take one of the 3" tie wraps and put the middle around the spreader and the feed line. On one side twist clockwise, and on the other counter clockwise. When you're done, the tie wire should form a spiral in the same direction as it goes along the feed wire with the ladder caught in a "Pocket" between the feed wire and the tie wire.

If you have an extension cord or a butane soldering iron it is nice, but not necessary, to solder the feed wire to the tie wire at each end of the tie wire, but be sure to allow the opening to remain for the ladder along with some open space before the solder flow. Take a couple of needle nose pliers and squeeze the tie wire against the feed wire so that the swizzle stick is slightly crushed flat. It should have significant friction, but not enough to sever the plastic. Now do the other side of the feed line.

Do the rest of the feed line without soldering, then remove the ladders and go back and solder them all, reinsert the ladders and crush them with the pliers; it's a much faster assembly that way. As you approach the ends, the tension across the spreaders will press them together with ever greater force and you will need to release tension on the wires and increase sag. When you do that, the feed line will begin to curl. Go back and use the four finger-thumb adjustment between ladders and bend it in a direction opposite to the curl. Eventually the feed wires will be straight and you will have beautiful cheap ladder line.

Get an insulator that is strong and about the same length as your ladders to use at the top of the line and another one to use at the bottom end. You may have a problem finding just the right insulator, but I've had success with the little egg ceramic or plastic insulators they sell down at HSC, they are close to the right length for me. It doesn't have to be exact. Take one end of the feed line at about the same length you would insert the next ladder, if you were using a ladder, and cut the feed wires just beyond that point. Form a loop around the ends of the egg insulator that is big enough the loop can "wiggle" freely around the insulator. Twist the ends and solder them to form the loop so it can't fall off. Now, likewise the ends of the antenna, they also, are in a loop around the end with plenty of wiggle room.

The objective is that when the antenna swings in the wind the wires don't bend and fall off from metal fatigue. The loop and the insulator form a "bearing" of sorts that absorbs the movement without bending the wire. Now, take a longer piece of #18 tinned, perhaps a foot long and wind

it around the antenna and feed line wires. Two pieces, one on each side of the insulator and the tie wire forms a loop that is "outward" from the insulator. At the point the tie wires touch the feed line and antenna wire they twist inward towards the insulator. They will make a big circle, but not so big they flop over each other. Solder them and be sure you are a reasonable distance away from the insulator. Hoist your antenna up in the air a little at a time allowing the feed line to follow laying on the ground. If your yard is like mine they will catch on the grass and the weeds, stones, and other irregularities, so you need to be watchful as it goes up a little at a time, stopping to "curl" any bends that appear in the vertical feed line as it goes up.

With your antenna fully raised take the loose end of the feed line and bring it over to your house. Insert another strong insulator at a point that allows a graceful bend in the feed line. I like it to go away from the house horizontally at a point high enough that someone won't walk into it. Usually I attach it to the eaves while on a step ladder. Do the same procedure as at the top of the feed line, this time not cutting the feed wires, taking them and passing them through the eye of the insulator and then twisting a loop and soldering it so the wire is free to move about the lower insulator. Drop the feed lines down alongside the house and put more spreaders in them until you reach the point of entry into the house. At the top end, put two more one foot pieces of tie wires around the ends of the insulators and bring them up to two nails on the inside of the eaves slanting up. Solder everything and hook the loops over the ends of the two nails. Use galvanized nails so they don't rust even though they are on the inside of the fascia where the rain won't reach. Don't be cheap, go to the store and buy a couple of small nails.

Go through the wall of your dwelling. This is a subject of debate. One easy way is to go through a door jamb, bending the wires so they conform to the door. Another time honored favorite is to go through a double sash window at the top or bottom, preferably the top again conforming the wires. If you have no point of entry that is easy, you will have to drill holes. If you have a window with small panes, remove it if you can and take it to a glazier, removing one small pane and replacing it with a pane of plastic in place of the glass and drill two holes in the plastic. A glazier can drill holes in glass and give you entry that way. If you have no window, or if the window cannot be removed, then you have to go through the wall.

Go down to the hardware store and buy a long bit of small diameter big enough to give room for your wire, and long enough to go through the wall. Try to find the studs in the wall and stay away from wires that might be carrying 117 volts. If you can't do this yourself, hire a handyman who can. You may have to pay him something and don't be cheap about it. Take a couple of insulated wires and push

them through the holes. Bend the ends on each side into a small loop and attach your feed line inside and outside to the eyes and solder them. Don't forget to weather proof inside and outside with some liquid silicone that will set to a firm seal. Inside continue your ladder line down to what ever tuner you have. Put a short piece of coax on the tuner to an SWR bridge and another link to the rig and you're done.

Your load will probably be very reactive on at least some bands, so you will either need a good tuner, or else use lumped constants. Those 3:1 tuners they put inside the transceivers will probably not be up to the job on all bands. This discussion is beyond the scope of this article and I will have to talk about it in a future article at a later date.

The sun will rot the swizzle sticks in about two years. If your feed line has been made of soft drawn tinned #18, it will hang straight of it's own weight as time passes and as the ladders begin to rot and fall out, the feed line will remain in perfect spacing, without any ladders. When the wind blows, the feed wires will swing, and at some point when enough ladders are gone they will swing into each other. By that time you will have only a few ladders left instead of the many you started with. Carefully lower the antenna and insert only enough ladders to correct the problem. It shouldn't take more than 10 minutes for a feed line of 50 feet or less.

May I assure you, you will have a VERY efficient antenna! You will get good signal reports on all bands. Remember my first article, make the antenna stretch from point A to point B etc, and don't worry about how long it is. Anything flat top over 3/8 wave will produce good results. If you want to go a lower band, tie the feeders together and drive them against ground.

VY 73, DE TR

Notice to Membership

At the meeting of May 2, 2007, the Board of Directors will request to members to vote on a proposal to restate and amend the Articles of Incorporation of the Sonoma County Radio Amateurs, Inc. to provide that the Corporation is a Public Benefit Corporation. This will permit the Corporation to obtain tax-exempt status with the IRS and permit members and others to obtain tax benefits for their contributions to the Corporation. All members are urged to attend. The text of the proposed amendments are available to members by email request to Pat Coyle at coy law@cs.com, or to Dave Harrison at w6ibc@arrl.net.

Pat, KG6JSL

SRJC Earth Station Links Australian School

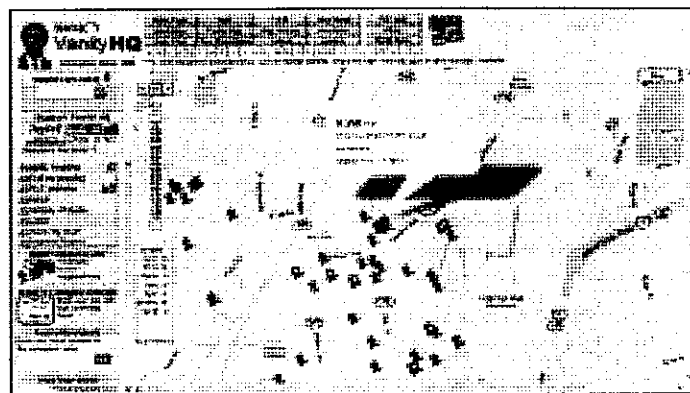
Satellite linkup handled by Bill Hillendahl KH6GJV

SRJC Earth Station Links Australian School to ISS An International Space Station Expedition 14 ARISS school contact was successfully carried out with students at the Salt Creek Primary School, Salt Creek, Australia on Thursday, April 12, 2007. The event began at approximately 08:10 PDT and continued uninterrupted for about 11 minutes while the space station remained in radio view of Santa Rosa. Telebridge station W6SRJ, operated by SCRA member Bill, KH6GJV, and located at Santa Rosa Junior College, successfully contacted Flight Engineer Suni Williams, KD5PLB operating under ISS callsign NA1SS, at approximately 08:10 PDT and then turned communications over to the students at the school. Local retransmission of this contact was provided via the IRLP Discovery Reflector node 9010 and the KF6SZA repeater in Santa Rosa.

Salt Creek Primary School is a tiny school with 20 students and 3 staff located 80 km north of Kingston on Highway 1 in South. Australia. Salt Creek consists of a Roadhouse, School, a Parks & Wild Life Headquarters and half dozen houses. The School caters for isolated sheep and cattle farmers in the area. When the children reach high school age they either come to Kingston or go to boarding school. Tony, VK5ZAI set up a relay station at the school on the day the students spoke with the space station.

Before the space station rotated beyond view of the earth station, some of the school's 20 students were able to ask questions, such as: In space are you weightless?; How far away are you from earth?; What do you eat?; Do you run in to any asteroids?; How long does it take to orbit around the earth?; When was the space station made?; Have you ever seen a black hole and if you have what does it look like?; What does the sun look like?; Have you seen any U.F.O.S?; What jobs do you have in space?; How do you get food up there?; and so forth. Astronaut Williams provided detailed, interesting answers to these questions during her brief QSO with the school children.

ARISS is an international educational outreach program partnering the participating space agencies, NASA, Russian Space Agency, ESA, CNES, JAXA, and CSA, with the AMSAT and IARU organizations from participating countries.



Surfin': Hamming Maps

By Stan Horzepa, WA1LOU Contributing Editor
ARRL Website April 20, 2007

Finding hams on maps is a piece of cake at this week's featured Web site.

Using N4MC's "Locate Hams in Your Neighborhood" tool, you can map the hams in your environs.

Last week, "Mapping Hams" using the new Google My Maps tool was the topic of this column; needless to say, it spawned a few e-mails regarding hams and maps. One such e-mail from Nick Proy, KB3LSR, suggested that I mosey over to N4MC's Web site Vanity HQ and check out the cool "Locate Hams in Your Neighborhood" tool.

The tool is simple to use. Under "Zip Code Map," enter the 5-digit ZIP Code of the area you wish to view, select your options (map data source and map size) and then click on the "Map Neighborhood" button. Moments later, the tool displays a Google map overlaid with pushpins that represent the locations of all the hams in the ZIP Code you entered. Click on a pushpin and the tool displays a balloon containing the call sign, license class, name and address of the ham that is represented by that pushpin.

Like other Google maps, you can zoom in and out of the map for a greater or less detailed view. You can also switch to a Satellite or Hybrid view by clicking on the appropriate buttons. The Satellite view displays a satellite/aerial image of the area; the Hybrid view overlays map data (town names, street names and such) over the Satellite view.

You can also use N4MC's tool to map the location of an individual ham. Under "Single Ham Map," simply enter the call sign of the ham you are trying to locate and click on the "Map Ham" button.

Until next time, keep on surfin'.

Looking for a Few Good Elmers

The Elmer Program is underway, but we still need a few more members to step forward to add their names to the list of Elmers. Remember, you don't have to be an expert in all aspects of ham radio. Even if your interests are focused in only one or two aspects of ham radio, you probably have valuable knowledge to pass along to a new ham.

If you could be an Elmer, please e-mail me the following information:

Name:

Callsign:

Telephone No:

e-mail address:

Area in which you could offer assistance (i.e. station setup, DX, QRP, repeater operation, antennas, etc):

Best time to call:

Also, if you are looking for an Elmer, please e-mail me the following information:

Name:

Callsign:

Telephone No:

e-mail address:

Area in which you need assistance (i.e. station setup, DX, QRP, repeater operation, antennas, etc):

Best time to call:

If you would like more details about this program, feel free to e-mail me or give me a telephone call.

73, Brian Torr, N6IYY
n6iyy@arrl.net (707) 575-5871



QST Magazine
from 1916
(I think that is
what it reads?)

Minutes below from March 14 meeting

Sonoma County Radio Amateurs, Inc. Board of Directors Meeting, March 14, 2007 Minutes

The meeting was called to order by President David Harrison, W6IBC, at 6:45 PM. Present at the meeting were David Harrison, W6IBC, Brian Torr, N6IYY, and Pat Coyle, KG6JSL, and John Felton, KE5RI. Bob Arthur KG6ZDN arrived later. Approval of Minutes. The minutes of the last meeting were approved as published.

Old Business:

Toaster and Generator: There was a discussion of the sale of the comm van (Toaster). Pat will investigate availability of obtaining a slot at the fair grounds sales lot.

There was a discussion of sale of the generator. Dave reviewed correspondence he has had with Antique Military Vehicle Association. It was moved, seconded and passed that we investigate placing an add in their newsletter.

Field Day: Discussion was held regarding allocation of field day duties. John will continue to investigate site acquisition, including the Oakmont site.

Net Script Reversion. A discussion was held regarding the structure of the club net operations and reversion to the prior format. Brian, N6IYY will discuss the News-line format with Brian (????). Brian moved and John seconded that we revert to the prior script for net control operations. Motion passed.

Corporate Status: Nothing to report at this time.

Repeaters: John has obtained the new amplifier which he brought to the meeting. He reports that the new power supply will be delivered shortly. He will perform the installation. We will also proceed with the process to coordinate the Castle Rock repeater. John will be our representative to NARCC.

New Business:

Email list: Discussions were held regarding ownership and access to the club email list. Brian moved that the club investigate and undertake efforts for the club to obtain ownership of the list with the internet provider and determine access.

KPH Field Trip: David reported on a letter from the KPH regarding the possibility of a club trip to the facilities. Dave will follow up with a possible trip on April 21, 2007.

Membership Drive and Promotion: David showed a promotional flyer he designed for distribution at VE and other public events to promote membership in the club. Participation at the PCAM air show was discussed and it was generally agreed that we should attempt to obtain a presence this year.

Mentoring Committee: Brian reported that progress is continuing and he is compiling lists of members and Elmers.

Repeater double beep: The source of the double beep was discussed. Brian moved and passed that we disconnect the link between the Geysers and English Hill repeaters in furtherance of efforts to trace the source of the problem.

There being no further business to come before the Board, the meeting was adjourned at 8:10 PM.

Patrick Coyle, Acting Secretary



Disasters and Implications to Amateur Radio Part II

by Rich Freitas KF6SZA, Sonoma County
ARES District Emergency Coordinator

This continuation of last month's article explores the characteristics of disaster response.

Emergencies are taken care of on a local level. It is what emergency services are staffed and trained to do. By definition, anything that is beyond the capabilities of the local services or severely impacts the local emergency services requires outside help. As well, disasters often cross local jurisdictional boundaries – this means that multiple agencies will respond to the situation. As an example, in a Detroit plane crash, there were 69 fire departments and a total of 288 different organizations that eventually responded.

People and equipment will converge. Everyone and their dog will show up; this includes off-duty, retired, probationary, volunteer, fired, and wanna-be personnel. Red Cross, Salvation Army, church groups, Disaster Child Services, SPCA, ARES, RACES, CERT ... dozens or hundreds of organizations will arrive to help. The local media will be augmented by regional, national and international media all looking for unique stories and, especially if children are affected, every relative will come looking for their missing family members. Emergency services will be overwhelmed with something they rarely allow otherwise with the addition of volunteers and spectators will interfere with the responders trying to reach the scene. Finally, because the exact needs are unknown, supplies will be ordered approximately three times more or three times less than what is actually required. The lack of information on the scope of the disaster, the number of people affected, and the most severely affected areas means that supplies will be poorly allocated.

Logistics issues become huge. Not only does the over- or under-supply of scarce resources cause problems, but the transportation issues become enormous. Which roads are blocked... what bridges are out... what streets are gridlocked by fleeing evacuees and responding agencies and relatives? Allocating scarce resources becomes a task with no 'right' answer. Who gets the ten generators when there are thousands of needs... the hospitals... the shelters... the fire stations... the water supply... the gas stations to supply fuel for the fire trucks ... the utility companies ... the Red Cross... the Amateur Radio operators? Financial issues are ignored until later. There is an attitude in the disaster response of "someone will pay for this" but no one knows who. At the end of the day, the government will want to see the authorizations and the receipts; in the heat of response, they may not exist.

"Who is in charge" also becomes a major issue due to legal requirements, multi-jurisdictional devastation, multiple agencies and conflicting priorities. Much time will be spent initially picking the top person and much more time will be spent debating and working against one another. Situation reports are given infrequently and are not updated. Emergency organizations may know that their situation has changed, but they rarely advise outside organizations, agencies, or the public because they never do it on a regular basis. Rumors start in the absence of reliable government or response agency information and spontaneous sources

of information will spring up in the absence of a widespread, easily-accessible official source of information. Emergency services will turn to these ad-hoc sources because they, too, are not getting all the information they need.

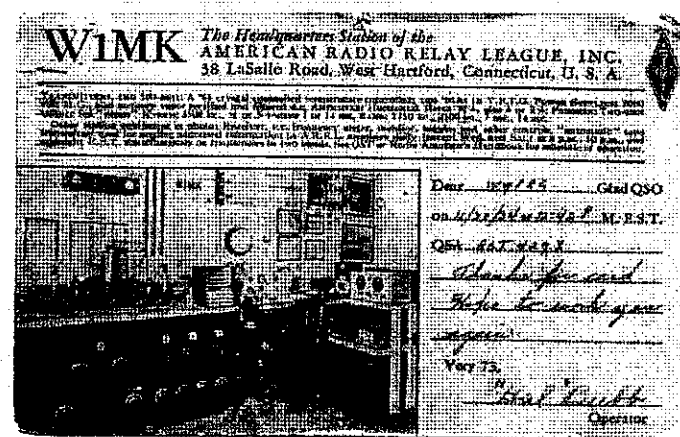
Whatever works! With fire trucks destroyed, roads blocked, and water mains broken, emergency response becomes very, very creative. This creates unusual responses and unusual locations. Firefighters may use bulldozers or helicopters rather than ladders and hoses and inmates may be used to cook for first responders. Garbage dumpsters may be used to transport essential supplies and naval vessels may be used to power reception facilities. Rescue workers may use heavy dump trucks to reach flood victims and trains may be run down streets with no rails to supply power to buildings. Airport terminals may be used as hospitals and burger joints may be used as police headquarters. Breweries may be used to supply water for hundreds of thousands of people and highways may be used as aircraft landing pads.

Incident Command will be used. It is the best system known at this time for disaster response and it deals directly with many of the most critical management, safety, and logistical issues that arise in every disaster. There will be confusion because different agencies use different versions of incident command, agencies take only the parts of incident command that they like and disregard the rest, and new positions and titles are added to keep people happy or reflect their normal organizational structure. If there is one phone left in the entire country, responders will attempt to make communications by phone because that is what they know and that is what they are comfortable with. In a disaster there is no time to learn how to use a satellite phone, a radio, or any other type of communications system not normally utilized.

At the end of the day, there will be a huge effort to list the "lessons learned". This will be given to the people who have just learned the lessons of this once-in-a-lifetime experience and will be ignored by those who are about to go through a disaster.

Next month, in Part III, we will explore the amateur radio response.

The ARES net meets on Mondays at 7:30 pm on 147.315 MHz, + offset, 88.5 PL. All members and guests are invited to check-in.



American Radio Relay League QSO card from 1934

Sonoma County Radio Amateurs, Inc. Board of Directors Meeting, April 11, 2007 Minutes

Board Members Present: David Harrison W6IBC, Fred Polkinghorn KQ6OB, Brian Torr N6IYY, Pat Coyle KG6JSL, and John Felton KE5RI
Guest Present: Bill, KH6GJV

1. Call to Order: Verification of Quorum – President Dave Harrison, W6IBC called the meeting to order at 6:50 PM. The meeting was held at Narsi's Restaurant, Santa Rosa. A quorum was present.
2. Approval of Minutes – John KE6RI made a motion that the minutes of March 14, 2007 meeting be approved. The motion passed.
3. Officer and Director Reports
 - a. President – Dave W6IBC – No report
 - b. Secretary – Fred KQ6OB – No report
 - c. Treasurer – Brian N6IYY – Reported bank balances.
 - d. Directors
 - e. Pat KG6JSL – No report

Old Business

1. Update on Corporation Status – Pat KG6JSL received a copy of the original Articles of Incorporation from 1956 and verified that we are currently a "Mutual Benefit" corporation. Pat has drafted modifications to these articles to make the club a "Public Benefit" corporation. The club Constitution requires that the membership be notified and vote on any changes to the Articles of Incorporation. It was agreed that the membership would be notified by e-mail and that a vote to adopt the new articles would be would taken at the May meeting.
2. Comm. Van – The Comm. van has been moved to Pat's home so that it can be prepared for sale. Pat needs to obtain the tags and registration from Rich KF6SZA. Most of the electrical work is done. The only question is the brakes. Dave W6IBC will write a letter to Knight Electric thanking them for storing the Comm. Van for the past 2 years.
3. Inventory of Club Assets – Tracy has expressed an interest in buying the club generator. After some discussion, it was decided that a price of \$1200 would be fair. Dave W6IBC will contact Tracy.
4. Brian N6IYY and Pat KG6JSL have conducted an audit of the club books. Everything is in order. Pat KG6JSL will send an e-mail to the Secretary indicating the results of the audit. Pat has purchased a copy of Quicken to make bookkeeping easier for the Treasurer. The Board approved this expenditure.
5. Net Control Script – Brian N6IYY has updated the Net Control Script. The script has also been modified to keep the net open until the conclusion of News Line for late checkins.
6. Membership Renewals – Brian N6IYY has received approximately 60 renewals to date. These names need to be forward to Rich KF6SZA for inclusion in the mailing list. Dave W6IBC volunteered to call members who have not sent in their renewals.
7. Email List – Bill KH6GJV is currently the administrator of the club e-mail list. He would be happy to share this responsibility with other Board members. Brian N6IYY was requested to send the names of the new club member to Bill so that he can update the list.
8. Field Day – Plans are underway for Field Day which will be held on June 23-24. The event will be held at the same site as last year in Oakmont. Brian N6IYY is organizing the antennas.
9. Repeater – John KE5RI reported that the new amplifier and power supply have been installed. He has also renewed the club licenses. The board approved the expenditures for the license renewals.

New Business

1. Repeater Control Ops – The current Control Op for the club repeaters is John KE5RI. Additional Control Ops are needed in the event that John is not available. It was agreed that Dave W6IBC and Kevin K6BSG would be added to the list. Craig

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Sonoma County Radio Amateurs, Inc. Membership Meeting, April 4, 2007 Minutes

1. Call to Order - President Dave W6IBC called the meeting to order at 7:05 at the Luther Burbank Arts and Garden Center.
2. Introductions - Dave W6IBC introduced the board.
3. Program - Brian N6IYY gave a very interesting PowerPoint presentation on the function of a Net Control Station and what it takes to be a good Net Control Operator. He described the role of a Net, the types of nets, the components of a net, different ways to conduct checkins and the importance of net discipline. He finished with examples of different types nets.
4. Brian also gave a presentation on the Automatic Positioning Reporting System (APRES). The system uses packet radio and GPS to transmit the location of a moving vehicle. A special Windows software program is used to visualize the location of vehicles equipped with this system. APRES data has been available on the Internet since 1997. Using this data, APRES equipped vehicles can be tracked any where in the U.S. and Canada. Brian demonstrated the APRES system by downloading data from the Internet and showing the movement of several vehicles.
5. Business Meeting
 - a. President - Guests included Joe KI6HCZ, Rob Ke6QHT, and Kristine KI6ISH.
 - b. Secretary's Report - The minutes from the March meeting were approved.
 - c. Treasurer's Report - Brian N6IYY reported that membership renewals are a little behind. The club is also receiving additional income from advertising in Short Skip.
 - d. Repeater - John KE5RI reported that the new power supply and amplifier have been installed. He has also eliminated the double beep. The licenses for the club repeaters have also been renewed.
 - e. Public Service - Craig K6XLT indicated that additional volunteers are needed for the upcoming public service events. These include MS Walkathon on April 22 from 8-12. The Wine Country Century on May 5-6 (need 12-15 people), the Human Race on May 12 (need 4 people), the Terrible Twos on June 16, and the Wave to Wine on September 29-30. Many volunteers are needed for the last two events.
 - f. ARES - Rich KF6SZA reported that there will be a Safety Fair on April 14 in downtown Santa Rosa. EMCOMM West will be held in Reno on May 4-5. There will also be a face-to-face training meeting of ARES members on Monday night, April 23. The training will cover Go Kits. ARES needs additional volunteers. It is very important for amateurs interested in emergency service to sign up now in order to get their ID badges and be trained. Most of our served agencies will not allow volunteers to work in their facilities without proper identification and training.
 - g. VE Sessions - Brian N6IYY announced that a VE session was conducted on March 24. There was one candidate and he passed. The next VE session is scheduled for late May.

Old Business

- a. Club Audit - Dave W6IBC reported that Brian N6IYY and Pat KG6JSL made an audit of the Club books. The books are in order.
- b. Comm. Van - The Comm. Van needs some work before it can be sold. The work items include the brakes and some electrical. Pat KG6JSL is coordinating this work.
- c. Field Day - Dave W6IBC announced that Field Day will be held on June 23-24 at the same location as was used last year near Oakmont. Dave encouraged everyone to participate if they can.
- d. Articles of Incorporation - Pat KG6JSL reported that he is working on amending the Articles of Incorporation to change the club from a "mutual benefit" to a "public benefit" corporation. All club members will be notified of these amendments and they will be brought to a vote at a future club meeting (probably

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Board of Directors Meeting, April 11, 2007 Minutes

- K6XLT will also be added for Public Services events.
2. Repeater Contest - The Club will sponsor a repeater contest in early June. Fred KQ6O will plan the event. The Club will supply a prize for the winner.
 3. Membership - Dave W6IBC suggested that the Club have a "Welcome Back" meeting in June. Old members who have not renewed their membership in the last few years will be contact and invited to the June meeting.
 4. Field Trip to KPH - Dave W6IBC indicated that the trip to KPH scheduled for April 21 will have to be rescheduled. He will work with the supervisor at the station to come up with an alternative date.
 5. Pacific Coast Air Museum Show - The PCA Show is scheduled for August 18-19. Dave W6IBC will look into the possibility of having a booth at the show.

The board meeting was adjourned at 8:15.

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Membership Meeting, April 4, 2007 Minutes

- the May meeting).
- e. Visit to KPH - Due to a conflict at the station, the trip to KPH scheduled for April 28 has been canceled. Dave W6IBC is working on a new date.
 - f. Next Meeting - Will be held on May 2. The program will be Antennas and Antenna Analyzers.
 - g. Board Meeting - The next board meeting will be held on April 11 at Narsi's Restaurant. All members are welcome to attend.
 - h. Net Control Ops - The following member volunteered to be control ops for the club net: April 10 - Craig K6XLT, April 17 - John KE5RI, April 24 - Becky KG6, May 1 - Bob Kxxx, May 8 - Dave W6IBC, May 15 - Brian N6IY, May 22 - Fred KQ6OB, and May 29 - Dave W6IBC
 - i. ARRL News - Bill KH6GJV gave a summary of upcoming section and ARRL events.
 - j. Adjournment - A motion to adjourn the meeting was made by John KE5RI and seconded by Rich KF6SZA.

The meeting was adjourned at 9:15 PM.

Attention All Amateurs

FCC poised to cut vanity call sign fee by more than 40 percent

Full story on ARRL Website

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Photo with rain spot on lens by W6IBC

Santa Rosa ARES Participates in Safety Fair

Members of Santa Rosa Amateur Radio Emergency Service (ARES) participated in the annual Safety Fair held in Old Courthouse Square on Saturday April 14th, 2007. ARES members, also members of SCRA, passed out literature and answered questions about emergency communications and ham radio in general. Turnout was smaller than expected because of rainy weather. Nonetheless, a number of very interested members of the public stopped by the booth and learned about the vital role of amateur radio during emergencies and also about SCRA. Pictured in the photo are John, KI6CAU and ARES Emergency Coordinator-Sonoma County Fred, KQ6OB. Dave, W6IBC also worked in the ARES booth; Bob, WB6TGI worked at the CDF booth; Lee, KE6EAQ acted as event photographer; and, Becky, KE6PZV and her family enjoyed the Fair and the booth.

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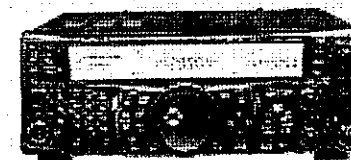
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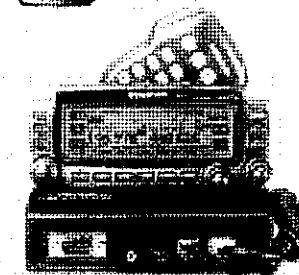
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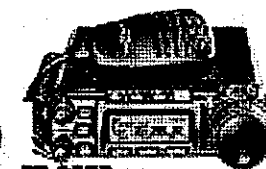
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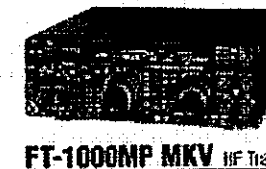
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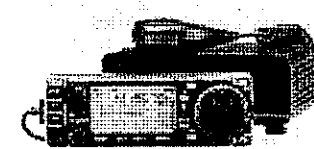


DJ-196T 2M/HT

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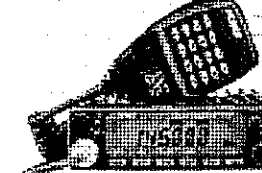
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2007 Club Officers

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|--------------------------------|------------------|--------|--------------|
| President | Dave Harrison | W6IBC | |
| Vice President | | | |
| Secretary | Fred Polkinghorn | KQ6OB | |
| Treasurer | Brian Torr | N6IY | 707 575-5871 |
| Director | Bob Arthur | KG6ZDN | |
| Director | Pat Coyle | KG6JSL | |
| Past President | John Felton | KE5RI | 707 539-5831 |
| Public Service Chairman | Craig Gaevert | K6XLT | 707 545-4133 |
| Repeater Chairman | John Felton | KE5RI | |

Short Skip & Web Staff

| | | | |
|-------------------------|-------------|--------|--------------|
| Editor | Vicki Cero | KF6ZCT | 415 279-3859 |
| Hank's Swap Shop | Jeff Basham | KK6JAB | 707 542-3860 |
| Web Master | Bob Arthur | KG6ZDN | |

Contacts

| | | | |
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| Public Relations | Bill McCall | W6WDM | 707 538-2844 |
| Public Relations | Jeff Basham | KK6JAB | 707 542-3860 |
| Refreshments | Fred Polkinghorn | KQ6OB | |
| Volunteer Exam Liaison | Brian Torr | N6IY | 707 575-5871 |
| ARRL DXCC/WAS Mgr | Chuck Ternes | N6OJ | 707 763-2528 |

| | |
|----------------------|--|
| SCRA Hotline | 707 579-9608 |
| SCRA E-Mail | scra@sonomacountyradioamateurs.com |
| SCRA Web Site | http://www.sonomacountyradioamateurs.com |

Tuesday Night Net

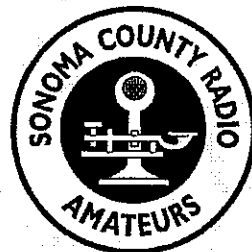
Remember to check in to the SCRA net each **Tuesday** evening on the **147.315+ (PL 88.5)** repeater at **7:00 PM**. Announcements are made of upcoming SCRA and other amateur radio activities in the area and what is listed in Hank's Swap Shop. You will also hear the weekly *Amateur Radio Newline* broadcast.

Short Skip Advertising Rates

| | |
|--------------------------------|----------------|
| Business Cards | \$12 per month |
| 1st Quarter Column | \$13 per month |
| Each Additional Quarter Column | \$4 per month |
| Full page (one side) | \$35 per month |
| Pre-printed inserts (each) | \$35 per month |

For more information, Contact the Editor

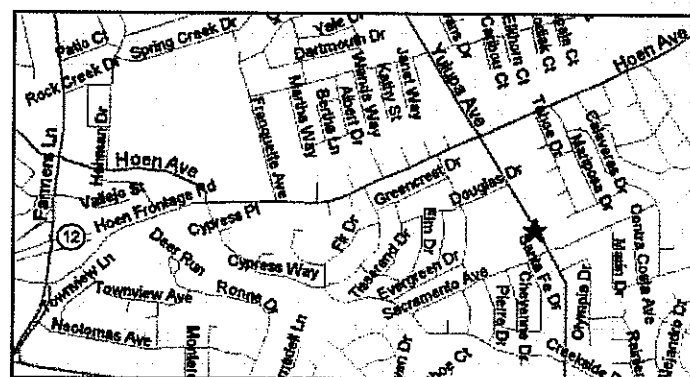
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**SCRA Club Meetings**

The club normally meets the first Wednesday of each month. Exceptions are holidays or other big events.

Next meeting is Wednesday, May 2nd at 7:00 PM at:

Luther Burbank Art & Garden Center
2050 Yulupa Avenue
Santa Rosa, CA



All are welcome!

Please join us at our next meeting. Anyone interested in Amateur Radio may be eligible for membership. A membership application is included in this newsletter.

For more information, contact any SCRA officer, director or member.

Hungry before the meeting?

Join us for dinner! We meet at Coco's restaurant, 1501 Farmers Lane (corner of Farmers & Hwy 12), Santa Rosa. People start showing up at 5:30 PM. No RSVP is required.

See you there every month except December.

If you are not getting the ARRL San Francisco Section news by e-mail and you are an ARRL member, be sure to subscribe under your Members Only information or go to these websites:

<http://www.arrl.org/sections/?sect=SF>

<http://www.pdarrrl.org/sfsec/>

Contest Corner

by Kevin Alt K6BSG

Hello contesters. Something for everyone this month. One of the largest CW contests of the year (CQWW) over Memorial Day weekend, one of the annual meteor scatter contests next weekend and several RTTY and digital contests this month. Happy DX'ing!

- 5 May - Microwave Spring Sprint - all modes, 902 MHz and above.
See: www.sysadnet.com/vhfsprintrules.htm.
- 5-6 May - 10-10 International Spring Contest - CW/Digital.
See: www.ten-ten.org.
- 5-6 May - Indiana QSO Party - CW/SSB, 160-10 meters.
See: www.hdxcc.org/inqp.
- 5-6 May - ARI International DX Contest - CW/SSB/RTTY, CW/SSB: 160-10 meters, RTTY: 80-10 meters. See: www.qsl.net/contest_ari.
- 5-6 May - New England QSO Party - CW/Phone, 80-10 meters.
See: www.necp.org.
- 5-6 May - 7th Area QSO Party - CW/SSB, 160-2 meters. See: www.7qp.org.
- 5-6 May - IPA Contest - CW/SSB, 80-10 meters (one mode per day).
See: www.iparc.org.
- 5-6 May - Radio Club of America QSO Party - Phone, 80-15 meters with specific times for each band. See: www.radioclubofamerica.org.
- 5-6 May - Portuguese Navy Day - CW/SSB/PSK31, 80-10 meters (CW/SSB) and 20-10 meters (PSK31).
See: www.nra.pt/php/bdContestRules.php?lang=en.
- 5-7 May - North American High Speed Meteor Scatter Contest - FSK441 or JT6M, 50, 144, 222, 432 MHz, via meteor scatter.
See: www.ykc.com/wa5ufh/Rally/NAHSMS.htm.
- 6 May - MARAC CW Contest - 80-10 meters. See: www.countyhunter.com.
- 12 May - Nevada QSO Party - CW/SSB/RTTY, 160-6 meters. See: nv.arrl.org/NQP.

- 12 May - FISTS Spring Sprint - CW, 80-10 meters.
See: www.fists.org/sprints.html.
- 12-13 May - Armed Forces Amateur/Military Crossband Communications Test - SSB/RTTY/MT-63, 80-17 meters.
See: www.netcom.army.mil/mars.
- 12-13 May - Mid-Atlantic QSO Party - SSB/FM/CW, 160 meters - 432 MHz.
See: www.maqp.info.
- 12-13 May - CQ-M International DX Contest - CW/SSB, 160-10 meters.
See: www.cq-m.andys.ru.
- 12-13 May - 2 GHz and Up World Wide Club Contest - 2.4 GHz and higher.
See: www.ham-radio.com/sbms.
- 12-13 May - Alessandro Volta RTTY DX Contest - 80-10 meters.
See: www.contestvolta.com.
- 12-13 May - 50 MHz Spring Sprint - all modes.
See: www.sysadnet.com/vhfsprintrules.htm.
- 19-20 May - 40th Annual Baltic Contest - CW/SSB, 80 meters.
See: www.lrsf.li/bcontest.
- 19-20 May - EU PSK DX Contest - 80-10 meters. See: www.srars.org.
- 19-20 May - His Majesty King of Spain Contest - CW, 160-10 meters. See: ure.es.
- 19-20 May - US Counties QSO Party - SSB, 80-10 meters. See: www.marac.org.
- 19-20 May - All America Contest - CW, 80-10 meters.
See: www.powerline.com.br/cwif.
- 19-20 May - EU EME Contest - any mode, 1.2 GHz. See: www.dubus.org.
- 26-27 May - CQ WW WPX Contest - CW, 160-10 meters. See: www.cqwp.com.
- 27 May - QRP ARCI Hoot Owl Sprint - CW, 160-10 meters.
See: www.qrparki.org/.
- 27-28 May - MI QRP Memorial Day CW Sprint - 160-6 meters.
See: www.miqrp.org.

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Address _____ H Phone _____ W Phone _____

City/State _____ Zip _____ E-Mail _____

ARRL Member? Yes ☐ No ☐

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| Other - _____ | \$ _____ |
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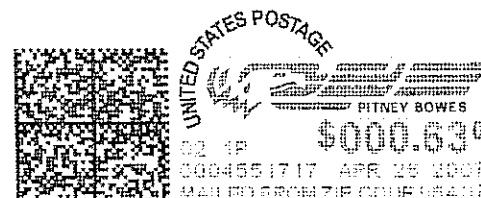
Mail to: SCRA, P.O. Box 116, Santa Rosa, CA 95402

| MAY 2007 CALENDAR OF EVENTS | | | | | | |
|-----------------------------|--------|---|---|----------|--|---|
| SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY |
| | | 1 | 2 7:00 PM SCRA Meeting Luther Burbank Art & Garden Center 2050 Yulupa Ave., Santa Rosa | 3 | 4 7:30 PM Marin ARC Meeting, Alto Clubhouse, 27 Shell Road, Hill Valley | 5 10:00 AM KOVARC Meeting Red Oak Victory Ship, Point Richmond Directions: www.svredoakvictory.org |
| 6 | 7 | 8 | 9 7:00 PM REDXA Meeting Alister McGee's Restaurant, Petaluma 6:30 PM SCRA Board of Directors Meeting (note date change) | 10 | 11 | 12 |
| 13 | 14 | 15 7:30 PM Hamilton Wireless Association Building 549, Hamilton Field, Nevada | 16 7:30 PM VMARC Meeting McDonnell Hall, Sonoma Dev. Center, Glen Ellen | 17 | 18 8:00 PM SFARC Meeting Veteran's Administration Medical Center, Auditorium of Bldg. 7, 42nd & Clement St., San Francisco | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 | | |

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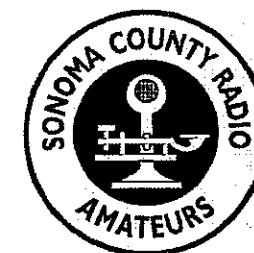
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REPEATER STATION
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VOLUME 32 NUMBER 5

MAY 2007



SCRA Radio Activity

by Dave Harrison, W6IBC
SCRA President

In case you haven't noticed, it's that time of the year when SCRA members engage in a lot of ham-radio-related activities. We have a full public service calendar in May and June, including The Wine Country Century bike-a-thon on May 5th and The Human Race on May 12th. The all time classic "Terrible Two" bike race occurs on June 16th (This one is a really great training experience for ham radio operators, with a ton of traffic to pass to net control from the eight rest stops scattered about Sonoma County). If you've participated in these events in the past, I hope you'll participate once again. If you haven't, now is a great time to volunteer and find out what you've been missing. Public service activity is not only a prime opportunity to hone your traffic handling skills, it also enables you to check out the operability and range of your mobile/portable radio equipment, and you'll be working with non-ham volunteers who are inevitably very interesting people. Each event provides our club with a wonderful public relations opportunity. Many thanks to Craig K6XLT for managing SCRA public service activities this year.

Our program for May features my friend, Dale NX6S, who will be discussing antennas and antenna analyzers. In case you don't know, Dale is a professional instrument designer and is the designer of the Timewave TZ-900 "AntennaSmith" digital HF antenna analyzer. I'm sure he'll have some interesting insights about the various considerations that went into designing and developing this very capable instrument. He's also conducted a lot of experiments with various antennas and designs, and will be able to share his knowledge and experiences. This should be a great program, and I hope you'll make every effort to attend our May 2nd meeting.

At our business meeting on May 2nd, the SCRA board

will present its proposal to amend the club's articles of incorporation from "mutual benefit" to "public benefit" non-profit status. This is an essential first step in an effort to qualify SCRA as a tax deductible donee organization. Your presence and vote at the meeting will be greatly appreciated!

This year SCRA will participate in Field Day on June 23-24 at the Oakmont site we used last year. Thanks to John KE5RI for making needed arrangements with the land owner and with the Oakmont management association. These fields to the west of Hwy 12 and just south of the Oakmont Drive intersection provide a large area for antennas and operating areas. Brian N6IYY will head up the antennas department. John WB6FRZ and I will manage the operating positions (We again expect to operate as a "Two-Alpha" station with phone and CW(+digital) and also a GOTA position). We'll be sure to have fun, and we might learn a thing or two from each other.

I want to thank John KE5RI for his terrific work with the repeater system. Also, thanks to Pat KG6JSL for his work on the bylaws and on the Toaster project. Finally, many thanks to Brian N6IYY for putting on a superb program at our April meeting covering ham radio nets, net control operations and APRS. Brian covered a lot of very interesting and useful territory in his presentation. Stay in touch. We'll see you at our May 2nd meeting and on the radio.

"What's Your SWR?"

"SCRA's May meeting features Dale NX6S who will be presenting a program on antennas and antenna analyzers. Dale is the designer of the Timewave TZ-900 "AntennaSmith", a computerized hand-held antenna analyzer that presents SWR data in several forms including a Smith Chart display. Mark your calendars for May 2nd and be sure not to miss this interesting program"

Dave W6IBC

