

SHORT SKIP

W6CF SEPT. SPEAKER ARES Training Pays Off

At our club meeting on Friday, Jim W6CF will speak about a mode we're all at least aware of, Morse Code. Jim's presentation will be called Why Morse Code?. Jim has a thorough understanding of all the sentiment for and against Morse Code requirements in amateur radio licensing. His talk will help us understand Morse Code's value in the present and the future. You'll find it interesting and informative no matter what your feelings about Morse requirements!

Jim will also give us a quick ARRL Pacific Division update. Jim will become our Pacific Division Director at the end of this year, with the retirement of Brad Wyatt K6WR. Our eyeball session and ragchew after Jim's talk will be another good chance to get your input to a leader of the only serious amateur radio lobbying organization, ARRL — The National Association for Amateur Radio.

It promises to be another fun meeting. Remember to bring your goodies and cash for the swap table. Dan AA6GD is bound to help you get a good deal!

The club meeting is at 7:30PM at Dominican Hospital Education Center (as usual), but come an hour early at 6:30PM if you want to join the board members for the club board meeting. It's time to start thinking about forming a Nominating Committee for November's club officer and board member elections. Come to the board meeting if you'd like to help.

Some biographical info about Jim, plagiarized from the Pacific Division web

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On Sunday August 15, 1999, I went fly fishing on the Upper Sacramento River near the Castle Crags State Park with my brother Tom, his son Ben, and my son Peter, KE6HCN. This is some of the most rugged and beautiful terrain that I have ever visited. The Upper Sacramento is in a narrow, steep sided canyon covered with pine and hardwood. We pulled into the dirt parking area along the river and started to gear up for fishing when two young girls carrying an inner tube walked by and asked us if we had seen a blue Jeep Cherokee pass by. We told them no, but we would keep an eye out. The girls continued to walk along the trail beside the river.

A few minutes later, I noticed a helicopter making a low pass over the river. I asked Tom (who is a helicopter pilot for CDF and a former search and rescue pilot for Sonoma County) about the helicopter type and what he thought they were doing. He replied that it was a CHP helicopter (a French machine, very high powered) doing a body search along the river. We then noticed that the helicopter began to repeatedly circle over our area. At that time, Tom started to scratch his head and put two and two together. He said that most of these types of searches were the result of people (frequently kids) floating down river and not meeting up at a predetermined place and time with the people (frequently parents) driving the vehicle. In nearly all of these types of cases, the kids are on the bank, safe and looking for their ride. Given his experiences, my brother concluded that the CHP helicopter was looking for the two girls who spoke with us when we arrived.

Being a good citizen, Tom broke out his trusty digital cellular telephone and tried to call the CHP and let them know that we may have found the people they were looking for (and spending over \$500/hour for the helicopter). Unfortunately, due to the deep canyon we were located in, he could not connect to a cell site. I, however, was prepared. I whipped out my ARRL repeater directory (pocket size, 1995-1996) and located a Mt. Shasta (W6OMR) 2-meter repeater at 146.820-MHz, minus offset, no PL, operated by the Shasta Radio Club. I powered up my trusty Yaesu FT-530 HT, tuned in the frequency and offset, and with 5-watts of awesome power radiating from a rubber duck, bounced the repeater. Then, I called out to stations monitoring the repeater that I might have found a couple of missing girls that the CHP was looking for and needed someone to make a call to CHP and relay the information. A fellow named Roy (didn't copy his call sign) came back to me and copied down the information on my location, a description of the girls and what they were carrying, and made the call to the CHP. By this time the girls came by again and we let them know that the helicopter might be looking for them and had them stick around.

Roy called me back a few minutes later and told me that the CHP was indeed looking for the two girls with the inner tube and said thanks for the help. A minute later, a Sheriff cruiser and a Blue Jeep Cherokee pulled up and the girls were reunited with their parents, and the helicopter flew off to the south. I went on to have a brief QSO with Roy who informed me that the repeater I pulled out of the book was linked with two others, providing coverage from Redding to Alturas to the Oregon border, and was affiliated with RACES. During emergencies, their Ham repeater system provides the most reliable communications in the

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CLUB MEETING FRIDAY SEP. 17, 7:30P.M.

SHORT SKIP

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Free to members.

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Prez Sez

Some times the wind does not blow. I helped out at the windjammer sailboat race over labor day weekend. During my shift on the end of the wharf no boat made it. The wind just would not cooperate. I understand that the first boat finally made it around 1:30 Sat morning. You know life can be that way sometime. The wind does not always blow when we need it. A couple of boat kept at it and finally finished at 12:30 PM. thirty minutes after the race committee had gone home. They still wanted to do it anyway.

We need that type of perseverance in our club. It will not be long before we are electing new officers and directors. Volunteer to help out. It is not real time consuming and a lot of fun. Usually the wind is blowing in our direction.

Have you finished all those antenna projects that you were going to do this summer? It not get on it , the rains will be here before we know it. See you at the next meeting

— 73's Bruce W6FKD.

ARES Reports

Other than the Run through the Redwoods in Felton for San Lorenzo Valley ARES, August has been a quiet month for ARES.

With the millennium but a little more than 3 months away, Y2K at the government level is getting more and more attention. FEMA has a Y2K preparedness training course (available at the FEMA web site), geared for civil authority types but available to anyone interested.

It appears that the most likely scenario for which government is preparing is one of civil disturbance spawned by an interruption of infrastructure services (e.g., power brown or black outs, telecommunications interruptions, and so forth.). Our own county government is ramping up for potential problems. The office of emergency services is planning meeting at the EOC on the morning of September 25 (refer to the RACES notice elsewhere in this newsletter).

ARES will be represented at this meeting by the staff of Santa Cruz County ARES, including yours truly and the EC's or their representatives. (Since we will be attending this meeting and will be briefing county ARES members, the general ARES membership doesn't need to attend.)

By the time you read this, the County Fair will be in full swing. Again this year, ARES has been asked by the Sheriff's Office to help out by facilitating communications

between the local law enforcement net, emergency medical personnel, private security, and fair admin. Like last year, ARES operators are being written into the Fair Incident Operations Plan. Though communications are not on Amateur frequencies, the practice is invaluable for, during a county-wide disaster, we could be called upon to serve where we would be communicating over public safety frequencies. This year we have been asked to coordinate getting and using COMM17, which should make returning volunteers happy since it's much more comfortable to operate in than the Sheriff's Search and Rescue van.

Coming events include the annual SET, the Aptos Fireworks, and a Red Cross/MERC exercise. Details will be announced later regarding the SET (but you don't really need details since you are ready right now for whatever may come, right?).

ARES has facilitated communications at the Aptos Fireworks at Seacliff Beach for the past four years, working with the Sheriff's Office, State Parks, State Parks Lifeguard, US Coast Guard, private security, and the event organizers. Like to last year ARES operators are being written into the Fireworks Incident Operations Plan.

The Santa Cruz County Chapter of the Red Cross has asked for our communications

help during a co-exercise with the Loma Prieta and the San Lorenzo Valley Mountain Emergency Response Corps (? MERC). this exercise is scheduled October 23.

It should be obvious to all that Santa Cruz ARES has gained the reputation with county public safety agencies as a "can-do" organization. Let's keep up the good work and make ourselves a hard act to follow!

Keep your batteries charged, your grab-and-go bags packed, and be ready to go on a moments notice.

— 73's Jim / KD6YKL



ARES REPEATERS

The Santa Cruz County Office of Emergency Services furnishes three repeaters to ARES. The repeaters are operated by ARES. All repeaters require a PL of 94.8. The frequencies and locations are as follows:

KD6FXQ	147.015+	Watsonville
N6IYA	146.745-	Bonny Doon
W6FKD	146.835-	Summit

Watsonville ARES meets each Thursday night 8:30PM on the K6BJ and K6EH (linked) Repeaters at 146.79- / 147.945- Mhz.

The Santa Cruz ARES meets the second Tuesday each month at the Santa Cruz Red Crosson Soquel Avenue at 7:30PM. Net meets each Monday at 8:30PM on 146.836 - PI 94.8

Lawrence Cullom, W6CRP, SK

I was saddened to read about the death of Lawrence Cullom, W6CRP. Lawrence was a long-time club member who was first licensed back in the early 20's. He once gave me one of his old QSL cards from back then, when he was known as 6CRP.

Phill Eschle, KG6XY and myself got to know Lawrence in 1986 when we helped him get an antenna up so that he could get back on HF after many years of not operating. Eventually his wife, Maie, became licensed as KD6FUL, and checked in regularly on our two-meter net.

I always will remember Lawrence fondly by the statement he made when we were getting him back on the air with all this newfangled ham equipment: "Everything has gone to hell since they invented the tube!"

—K6TG

Here is the obituary in today's Santa Cruz Sentinel:

Services will be Saturday for Lawrence Cullom, who died Tuesday at Dominican Hospital. He was 92. Mr. Cullom was born and raised in Santa Cruz, graduating from Santa Cruz High School in 1925.

He was in the Navy during World War II, working in radio communications in the Pacific. He later worked for the state beaches and parks system and retired in 1972.

Mr. Cullom was a member of Santa Cruz Masonic Lodge #38.

He is survived by his wife of 42 years, Maie Cullom; a daughter Judith Hickey of Redding; daughter-in-law Teresa Wright of Santa Cruz; six grandchildren; and nine great-grandchildren.

His son, John Wright, died in 1977.

Services will be at 2 PM Saturday at the First Methodist Church, 250 California St., Santa Cruz. Graveside services will be at 3 PM Friday at Oakwood Memorial Park, Santa Cruz.

Friends may call today (Thursday) from 4-8 PM at Chapel of the Four Seasons, 1050 Cayuga St., Santa Cruz.

Contributions are preferred to the First Methodist Church, 250 California St., Santa Cruz, CA 95060.

— Tom



By Art Lee W F6P

CHATTER

Our last club meeting was highly informative. If you have ever wanted to work Earth-Moon-Earth (EME), this was the "lecture" not to miss. Actually we had about 45 members in attendance. Dave Rank, KO6RS, did a great job of explaining the ins and outs of this type of advanced communication. EME, or "Moonbounce" is not for everyone, as many advanced technical aspects of the hobby must be mastered first. Long-winded QSOs, for example, are not conducted. But, imagine the thrill of using the 'bounce' to transmit and receive a message! Although it is only a call sign and acknowledgment, this type of out-of-this-world communications with fellow hams is fascinating and quite a challenge. We were treated to first rate slides and overhead projections. Perhaps in the future Dave will develop a presentation of meteor scatter communications (Hint! Hint!). This method of communications has a serious side as the U.S. Army can use these bounce signals for practical purposes if other methods fail.

Was down at the yacht harbor a few days ago, working on my friend's Cal 34, Misty. We were removing the lifelines for some welding of tubing on the stanchions. A magnificent Catalina 40 pulled up to the end tie as I admired the insulated backstay. The husband and wife team were headed to Baja. They are hams and plan to check in on the Manana Maritime Mobile net and, now get this, use email daily. Hmmm ... Cell phones anyone? (Actually, the Coast Guard claims that a large percentage of distress calls come in, not from Marine VHF, but cell phones.)

I was talking to Terry Parks, N6NUN, on the Baja Net the other morning. We QSY'd to 10 meters (28.303 MHz) and had a long chat. When we signed, I received a call from Linn, N2LR, in Monterey. Linn has a Ph.D. in Psychology, and at age 82, says he doesn't know what he wants to be when he grows up! First licensed in 1935, he was a 3rd year student at the University of Pennsylvania in Veterinary Medi-

cine when WWII reared its ugly head. Linn served in the Navy as a Radioman on ADM Halsey's flag ship in the battles of the Pacific from 1941 to 1945. Turns out that Linn is a "regular" cw pal of Jeff Grudin, AC6KW. Linn invited me to the Quarter Century Wireless Club meeting on October 23rd at 1200. The club meets at the Country Waffles Cafe.

After I signed with Linn, Lloyd Cabral, AA6T, broke in. Lloyd is originally from Niles, and I from Hayward. So we were neighbors way back when. Lloyd also invited me to the club meeting. Lloyd and XYL Karen, NS6G, do motorcycling and sports car racing. Both attend motorcycle events and participate in long distance trips. One such trip was to Montana. "How do you take care of a flat tire on the road?" I asked. "Easy," said Lloyd. "We all carry a spare tube and tools, and CO2 cartridges. Most of us have tubeless tires and plugs, so we can manage a flat." Lloyd works for PacBell and brought extra phone lines for ARES and County Emergency uses during the earthquake of '89 (remember that?).



Trade or Sell Table

Bring your surplus radio gear to sell or trade. The table will be set up before the club meeting. Put a price on your goodie and have fun trading or selling: mics, connectors, handhelds and related equipment, receivers, transmitters, etc. Let's have fun!

—Dan AA6GD

Hi, I have for sale or trade the following:

- 71' Crank Up tower, Tri-Ex Model H-471
- Four section, galvanized, super clean and excellent.
- On the ground and ready to travel. Free delivery in SC county.
- Comes with mounting base plate and building support fixture.

If your interested give me a call and let's talk.
George, K6TAM 722-2060 or k6tam@aol.com

Sept. Speaker Continued

page, <http://www.pdarrl.org> follows:

ARRL Experience:

Life Member. Vice Director since Jan. 1, 1994. Served as Board Liaison to the RF Safety Committee, 1994 to present. Ad Hoc Committee of Advisory Committee Procedures, 1995-1996, Volunteer Resources Committee 1996, DXCC-2000 Committee 1996 to present. Chairman, Contest Advisory Committee, 1970-72. Section Communications Manager, Santa Clara Valley Section, 1974-78. Assistant Director, Pacific Division, 1974-1988. Member, DX Advisory Committee, 1988-1994.

Operating Experience:

Licensed 1947 as W6CUF. Currently active on 80M through 70cm, phone, CW, packet, doing DXing, contesting, rag-chewing. DXCC Honor Roll #1, 5BDXCC. Member Santa Cruz, Loma Prieta, and Los Gatos ARES. Clubs: Santa Clara County RA, Santa Cruz County RC, Lockheed-Martin RC, West Valley RC, San Lorenzo Valley RC, Loma Prieta RC, No. Calif. DX Club, No. Calif. Contest Club, Mother Lode DX & Contest Club, SVECS, QCWA Chapter 191, Radio Club of America, Radio Society of Great Britain, Radio Amateurs of Canada, No. Calif. DX Foundation, European DX Foundation, Antique Wireless Assn., Calif. Historical Radio Society.

Professional Experience:

PhD Stanford (Aero Engineering/Biomechanics). Retired from Lockheed Missiles & Space Co. as a Technical Consultant in 1992. Currently a Systems Engineer for Scitor Corp., Sunnyvale. In years past also worked as a shipboard radio operator and in electronics manufacturing.

Married to Trudy, KC6NAX, with two grown children.

— Cap Pennell

Livermore Swap Meet

1st Sunday of each month at Las Positas College in Livermore, 7:00 AM to noon, all year. e-mail: larkswap@hotmail.com.

Foothill Flea Market

2nd Saturday of each month from March to October at Foothill College, Los Altos Hills, CA.

SCCARC Mailing List

The brand new SCCARC mailing list is now working for 112 club members! A email message sent to a special email address will be immediately forwarded to all the members at once. This can be a good tool for passing news or asking questions or finding something or lending advice or just letting the other members know how you feel about some subject. If you're not on the list yet, let Cap KE6AFE@arrl.net know you'd like to be added. You do not need to be a current paid club member to be on the list, you only need to be interested in SCCARC related stuff. Many thanks to Ray Rischpater KF6GPE@arrl.net for providing the email server and all the setup effort!

At present, those posting to the email list do not receive a copy of the message they've sent. This is a quirk in Ray's software. You'll know your message got through to all the other list members if you don't get a Returned Mail message, and also hopefully by the replies from the other list members.

Try it!

JIM MAXWELL NEW ARRL PACIFIC DIV. DIRECTOR

Congratulations to our own Jim Maxwell W6CF! Jim's term as ARRL Pacific Division Director begins the new millennium.

From The ARRL Letter, September 3, 1999

Members in seven ARRL divisions have nominated candidates for Director and Vice Director for terms beginning at noon January 1, 2000. The ARRL Election Committee has declared all of the candidates to be eligible. Retirements will ensure some new faces on the Board next year. Incumbent Directors Tod Olson, K0TO (Dakota), Lew Gordon, K4VX (Midwest), and Brad Wyatt, K6WR (Pacific), announced earlier that they would not seek reelection.

In the Pacific Division: Unopposed for a two-year term as Director is James A. Maxwell, W6CF, the current Vice Director. Running for Vice Director are Jettie Hill, W6RFF; John Ronan, III, K3ZJJ; and Robert Vallio, W6RGG.



For the recent breakfast meeting at the Whales Tail we were invited to bring an item to generate some conversation. Don KF6KGO won first prize in the curiosity section with what appeared at first glance to be an antique Morse key. Here is Don in operating position and here is a close-up. Can you guess the primary purpose of the device? Answer on Page 7.

HAMS ACTIVE AS CALIFORNIA WILDFIRES BLAZE

Hams are helping to provide much-needed communication as hundreds of fires raged in 16 Northern California counties. Sacramento Valley SEC Jerry Boyd, K6BZ, reports that amateurs are assisting the California Division of Forestry/Fire Protection with a variety of communication in the affected counties.

Chief fire officers are being “shadowed” by hams to insure they have communications capabilities. Fire emergency command and control centers are using amateurs, as are evacuation centers in several jurisdictions.

As of earlier this week, Boyd said major activity was concentrated on two fires—the High Fire north of Shasta Lake and the Mammoth Fire west of Shasta Lake. More than 2200 state, local, and federal firefighters were deployed. In addition to assisting CDF, hams also are assisting the US Forest Service, since some of the fires are in National Forest territory.

Northern California experienced a series of wildland fires in early July, and residents there had hoped that would be it for the season. “Unfortunately, that was not to be the case,” Boyd said. In late August, a series of thunderstorms passed through Northern California from just north of Sacramento to the Oregon border. The thunderstorms produced lots of “dry lightning” with numerous ground strikes and no rain to stop the fires the lightning started. Southern California and other western states have experienced similar problems.—thanks to Jerry Boyd, K6BZ

LEROY - W6MPF

A long time member of our radio club ..Leroy Vernon [W6MPF], now living in Branson, Missouri made a request this morning, [Monday Sept 6th] for contacts with club members. He will be on at 1600z [9.A.M. local] on 14.300 Mhz. every week day. Give him a call

I know Leroy would appreciate chatting with the club members !!

— de Ralph W6ENE

The Antenna and the Solar Flare

by Jeff Grudin AC6KW

The other day Ron, K6EXT, and I were putting up a new antenna at his QTH. We had it all figured out. We had studied the situation and figured out that based on the dimensions of his lot, his XYL restrictions, and the desire for a multi-band antenna, a good antenna would be an end fed Zepp. We had gotten the approximate dimensions from the ARRL handbook. We would feed it with window line and it would be low loss.

After a few hours of construction and launching, we were ready to try it out. We fired up Ron’s trusty Kenwood, tuned the transmatch to a good match, and (insert a drum roll here) - nothing, nada, zip. There were only a few weak signals on the air and these had very strong QSB. We had listened to the band earlier in the day and all was fine. We went out to check the connections and found all intact and correct. So what could be wrong?

It turns out that while we were constructing and launching the antenna, a large X-class (X1) flare had occurred on the sun in a direct line with the earth. What we had witnessed was an SID (Sudden Ionospheric Disturbance). During periods of X-class flares the sun emits very strong ionizing radiation. The stream of radiation from a large flare consists of 2 types, the x-ray radiation, and the particle radiation (CME or coronal mass ejection).

The waves of x-ray radiation travel at the speed of light and hit the earth in a matter of minutes after the flare event creating a SID. This intense ionization effectively wipes out all HF communications. For skip propagation at HF we depend on having the F layers and E layer ionized. When our HF radio waves hit these layers, they are bent back down to earth. During the day, the sun’s normal radiation ionizes these layers and provides good skip propagation for 20 meters and above. During the daytime the sun also ionizes the D layer to some extent. The D layer absorbs radio waves at longer wavelengths. Thus the 40, 80, and 160 meter bands are not usually very good for skip propagation during the day. At night, the D layer loses its ionization. These bands then open as the waves are now able to reach the F layer and are reflected back to earth.

During an SID, the ionizing radiation is so intense that the D layer becomes highly ionized and will absorb the radiation of all HF bands. Once the flare is over, the x-rays stop, and it can take several hours for the electrons stripped away to recombine and form a normal D-layer again. Thus a large flare can cause a very sudden HF black out, and it will take several hours to restore to normal conditions. With no signals returning to earth, the bands appear dead. This will happen in a matter of minutes and is what Ron and I observed as we tried to make our first contacts on the new antenna.

The second stage of the event, the Geomagnetic Storm, is slower to arrive. This is when the particles of the CME hit the atmosphere approximately 55 hours after the flare event. In this case, the particles were ejected below the plane of the ecliptic and didn’t impact the earth directly.

What we had witnessed was a fairly rare event. It was a very energetic physical alteration of our ionosphere that had an impressive impact on HF propagation. When we returned later to try out the antenna, we found it functioning well. It was only later that I found out what had actually happened.

Easy Operation Overseas Now a Reality for US Hams

Operating overseas and in certain South American countries just got much easier for US hams. The FCC has implemented the European Conference of Postal and Telecommunications Administrations (CEPT) Recommendation T/R 61-01 that eliminates the need to obtain a special license or permit for US hams wishing to operate for brief visits to most European countries. In addition, the ARRL has begun issuing International Amateur Radio Permits to simplify operation by US hams in certain South American countries.

Earlier this year, the US rendered paperless operation by hams from countries that have a reciprocal operating agreement with this country. Alien operators no longer need to file an FCC Form 610A to operate here. Alien visitors to the US holding an amateur license issued by their home country may operate in the US without submitting any FCC paperwork—provided that a reciprocal operating agreement is in effect between the two countries. The only documentation required is proof of citizenship and an Amateur Radio license issued by the country of citizenship. These arrangements are similar to longstanding arrangements between the US and Canada.

The US State Department applied for US participation in CEPT Recommendation T/R 61-01 in 1997, and the request was approved in principle in early 1998. On June 7, 1999 the FCC put the final pieces of the CEPT arrangement into place by issuing a Public Notice in English, German, and French that spells out the basic information about Amateur Radio operation in CEPT countries. To operate in a CEPT country, US hams only need a copy of the Notice, their original Amateur Radio document, and proof of US citizenship (a US-issued passport or a birth certificate should suffice). The documents must be shown to authorities that ask to see them.

US hams holding any license class but Novice are eligible to operate in CEPT countries. A US citizen with a Technician ticket may be authorized privileges equivalent to a CEPT Class 2 (i.e., VHF-only) license, while a US citizen holding a higher class license may be authorized CEPT Class 1 (i.e., all amateur and amateur-satellite) privileges.

The authorization is for use of a portable or mobile station only, including stations set up at hotels or a camping site. Authorization

is also granted for US hams to operate the stations of permanent licensees in host countries. The use of Amateur Radio aboard an aircraft is not allowed, however.

To identify while overseas, US stations will use their assigned call signs preceded by the CEPT call sign prefix for the country or territory visited. Stations that are mobile or portable must so indicate following the call sign by declaring “portable” or “mobile” on phone or by signing “/P” or “/M” on CW. For example, if W1AW were operating portable in France, it would identify as “F stroke W1AW portable” on phone or as “F/W1AW/P” on CW.

US licensees operating under this agreement overseas cannot request protection against harmful interference. Operators must abide by the provisions of the ITU Radio Regulations as well as CEPT Recommendation T/R 61-01 and the regulations in force in the host country. This means that US operators planning to operate in other countries must become familiar with that country’s regulations and frequency allocations, paying special attention to regional differences. For example, the 40-meter band in Europe and the UK only runs from 7.0 to 7.1 MHz.

Participating CEPT countries as of June 7, 1999, include Austria, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France (including Corsica, Guadeloupe, Guiana, Martinique, St Bartholomew, St Pierre et Miquelon, St Martin, and Reunion/Dependencies), Germany, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, Netherlands, Norway, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, and the United Kingdom (including Great Britain, Northern Ireland, the Channel Islands, and the Isle of Man). For updates, visit the ERO Web site, <http://www.ero.dk> and click on “Implementation,” then “Decision/Recommendation,” then “T/R-61-01”.

The ARRL has begun issuing the International Amateur Radio Permit (IARP) that allows US amateurs to operate from Argentina, Brazil, Peru, Uruguay, and Venezuela without having to obtain a special license (the US and Canada also are CITELE signatories). The IARP is valid in any country that is a signatory to the CITELE Amateur Convention.

Similar to the CEPT license, there are two classes of IARP. The Class 1 IARP—available to Tech Plus and higher class licensees—requires knowledge of Morse code and carries

all operating privileges. The Class 2 IARP—equivalent to the US Technician ticket—does not require knowledge of Morse code and carries all privileges above 30 MHz. An IARP is not a license, but it certifies the existence of a license. There’s a \$10 application fee to obtain an IARP from the ARRL.

Complete information on CEPT and IARP operation, including an IARP application form and a copy of the FCC Public Notice on CEPT, is available from the International Operating page on ARRLWeb, <http://www.arrl.org/field/regulations/io/>.

The new procedures affect operation only in participating CEPT (European) and CITELE (Central and South American) countries. They do not change the procedures for US hams wishing to operate overseas in countries that are not CEPT participants or CITELE Amateur Convention signatories. Information on operation from these countries also is available on the pages of ARRLWeb at <http://www.arrl.org/field/regulations/io/recip-country.html>.

Thanks, ARRLWeb site at <http://www.arrl.org>.

A personal note - I was on a trip in France from mid June until early July. I was able to use my US HT (with „whistle up% access to work the French repeaters using the new CEPT privileges with some degree of success. An HT with 1750 Hz tone burst would have been better. If you are traveling to CEPT countries, consider taking along your HT.

ARES Training Pays Off Continued

area. During our QSO, I found that I made it into the repeater with full quieting at 1-watt. Roy complimented me on my skills as a communicator, saying he got the impression that I had done this before. I told him that the SCCARC had a very active ARES contingent with many training events (airshow, parade, fireworks, etc.) held each year. From the sound of his voice, I could tell that Roy was a W.W.II-era Ham who was happy to pass the traffic and excited that young whippersnappers are still involved in the hobby.

Once the excitement was over, fishing began. We didn’t catch anything, hooked a few, but you should have seen the big one that got away.

— 73 Howard Whitney, KE6SEQ

The HF Beacon System

With the HF bands coming alive again we can expect some exciting (but as always, unreliable) communications ahead. What if we could tell, in a matter of minutes, the condition the bands are in and in what direction propagation is possible? A world-wide system of beacon transmitters enables us to do just that.

The Northern California DX Foundation, in cooperation with the International Amateur Radio Union, constructed and operates a network of 18 high-frequency radio beacons that transmit on 14.100, 18.110, 21.150, 24.930, and 28.200 megaHertz. Each transmission in each band starts with the call sign of the beacon, transmitted by Morse code at 22 wpm with a power of 100 Watts. This is followed by four short bursts of tone at 100Watt, 10 Watt, 1.0Watt and 0.1Watt. Since the beacons are using only simple vertical antennas, even a weak beacon signal may indicate a path with excellent propagation for stations using higher power and beams.

Our nearest beacon is W6WX in Palo Alto, its very strong signal here is easy to detect. One does not need to read code at 22 wpm to figure out which beacon is transmitting, simply refer to the following Beacon Transmission Schedule.

Northern California DX Foundation HF Beacons

Slot	Country	Call	20 M	17 M	15 M	12 M	10 M
			BANDS/FREQUENCIES				
SLOT MINUTES/SECONDS							
1	United Nations	4U1UN	0.00	0.10	0.20	0.30	0.40
2	Canada	VE8AT	0.10	0.20	0.30	0.40	0.50
3	U.S.	W6WX	0.20	0.30	0.40	0.50	1.00
4	Hawaii	KH6WO	0.30	0.40	0.50	1.00	1.10
5	New Zealand	ZL6B	0.40	0.50	1.00	1.10	1.20
6	Australia	VK6RBP	0.50	1.00	1.10	1.20	1.30
7	Japan	JA2IGY	1.00	1.10	1.20	1.30	1.40
8	Russia	RR9O	1.10	1.20	1.30	1.40	1.50
9	China	VR2B	1.20	1.30	1.40	1.50	2.00
10	Sri Lanka	4S7B	1.30	1.40	1.50	2.00	2.10
11	South Africa	ZS6DN	1.40	1.50	2.00	2.10	2.20
12	Kenya	5Z4B	1.50	2.00	2.10	2.20	2.30
13	Israel	4X6TU	2.00	2.10	2.20	2.30	2.40
14	Finland	OH2B	2.10	2.20	2.30	2.40	2.50
15	Madeira	CS3B	2.20	2.30	2.40	2.50	0.00
16	Argentina	LU4AA	2.30	2.40	2.50	0.00	0.10
17	Peru	OA4B	2.40	2.50	0.00	0.10	0.20
18	Venezuela	YV5B	2.50	0.00	0.10	0.20	0.30
POWER LEVELS			CALL SIGN	Burst 1	Burst 2	Burst 3	Burst 4
			100 W	100 W	10 W	1 W	0.1 W

ARES IN OTHER LANDS

Ham Radio Providing Post-Earthquake Communication Links (from the ACS Newsletter, 9/4/99) Within the first hour of the devastating earthquake August 17 in Turkey, members of the Amateur Radio Emergency Service organized by TRAC, the Turkish Amateur Radio Society, began providing emergency communication. "The first three days following the quake all communication needs were met by radio amateurs," TRAC Secretary Yuksel Hak, TA1BY, reported this week. Hak said telephone and other communication networks had collapsed, either due to power failures or from too much traffic.

The quake in Western Turkey lasted 48 seconds and measured 7.4 on the Richter scale. The death toll to date is 13,000, but it's expected to rise much higher. The earthquake also affected a very large area involving several provinces and towns.

Turkish Prime Minister Bulent Ecevit told CNN that rescue and recovery efforts were hampered by lost communications and limited transportation. "Telecommunications were completely cut off for at least two days in the three provinces which are badly hit," the prime minister said.

Hak said local ARES branches in provinces in the disaster area used both HF and VHF to provide or assist with continuous communication between local crisis desks and the capital city of Ankara. TRAC's Hakan Guner, TA2LJ, said Hams used HF mobiles during the initial response, then established local communication by setting up a few VHF repeaters. Guner also cited an urgent need for additional equipment, especially VHF and UHF hand-helds and mobile gear.

Hak said the common frequencies used by ham radio also helped to tie together the incompatible radio systems used by various governmental organizations. "TV networks, daily newspapers and magazines all appreciated the support given by the hams," he said. "This proved the important role of Amateur Radio service in case of disasters."

SCCARC Officers - 1999

President	Bruce Wade	W 6FKD	423-0575
Vice President	Cap Pennell	KE6AFE	429-1290
Secretary	Don Hennese	KF6KGO	437-1486
Treasurer	Allen Fugelseth	W B6RW U	475-8846
Board	George Badger	W 3AB	476-5363
	Bruce Hawkins	AC6DN	
	Gene Bokmeier	KD6DSB	688-6703
	Tom Ginsberg	K6TG	479-1471
	Lauren Hardy	KC6TPW	462-0247
K6BJTrustee	Royce Krilanovich	AC6Z	475-4798

MONTEREY BAY ACTIVITY

K6BJ / KI6EH (Linked) • SCCARC Net Monday 7:30 PM 146.79- /147.945-
146.79- /147.945- • SC ARES Net Monday 8:30 PM 146.835-
(PL 94.8) • Watsonville ARES Net Thursday 8:30 PM 147.945-

K6BJ/ UHF
440.925 (PL 123)

K6LY (Monterey) • Monterey ARES Net Wednesday 7:30 PM
146.97- (PL 94.8) • NPSARC Net Wednesday 8:00 PM
444.700+ (PL 123) • Monterey Bay Traffic Net Nightly 9:00 PM
(Linked) • Monterey Bay Swap Net Wednesday 8:15 PM
• Newsline (Ham News) Broadcast Wednesday 8:30 PM

WR6AOK (Felton) • SLVRC Net Thursday 7:30 PM
147.12+ (PL 94.8) • SLV ARES Net Monday 7:30 PM
N6IYA • Newsline (Ham News) Broadcast Sunday 9:00 PM

440.850+ (PL 94.8) (Linked)
6 Meter Local Net 52.8 MHz (PL-114.8) Sunday 8:00 PM
SCCARC 10 Meter Net 28.308 MHz USB Monday 7:00 PM
Mont. Bay Chapter 191 QCW A :Tuesday, 7:30PM, AA6T repeater, 146.700-(NO PL).

SCCARC CALENDAR OF EVENTS

Santa Cruz ARES	Tuesday	Sep. 14
SCCARC Board Meeting 6:30	Friday	Sep. 17
SCCARC Meeting	Friday	Sep. 17
Short Skip Deadline	Friday	Oct. 1
Santa Cruz ARES	Tuesday	Oct. 12
SCCARC Meeting	Friday	Oct. 15

Visit the SCCARC Website at

- www.fireclay.com/k6bj

NEW! – CLUB E-MAIL: k6bj@arrl.net MONTHLY MEETINGS

The SCCARC Meets at 7:30 PM, on the THIRD FRIDAY of the each month (except December). Meeting are in the Education Building, Dominican Hospital, 1515 Soquel Drive, Santa Cruz.

NET CONTROL SCHEDULE (Subject to Change)

9/13	Allen W B6RW U
9/20	Phil KE6UW H
9/27	Jeff KF6BKG
10/4	Tom K6TG
10/11	Allen W B6RW U



SHORT SKIP

SANTA CRUZ COUNTY AMATEUR RADIO CLUB
P.O. BOX 238
SANTA CRUZ, CA 95061-0238

Forwarding and Address Correction Requested

Next Meeting Sep. 17

FIRST CLASS