

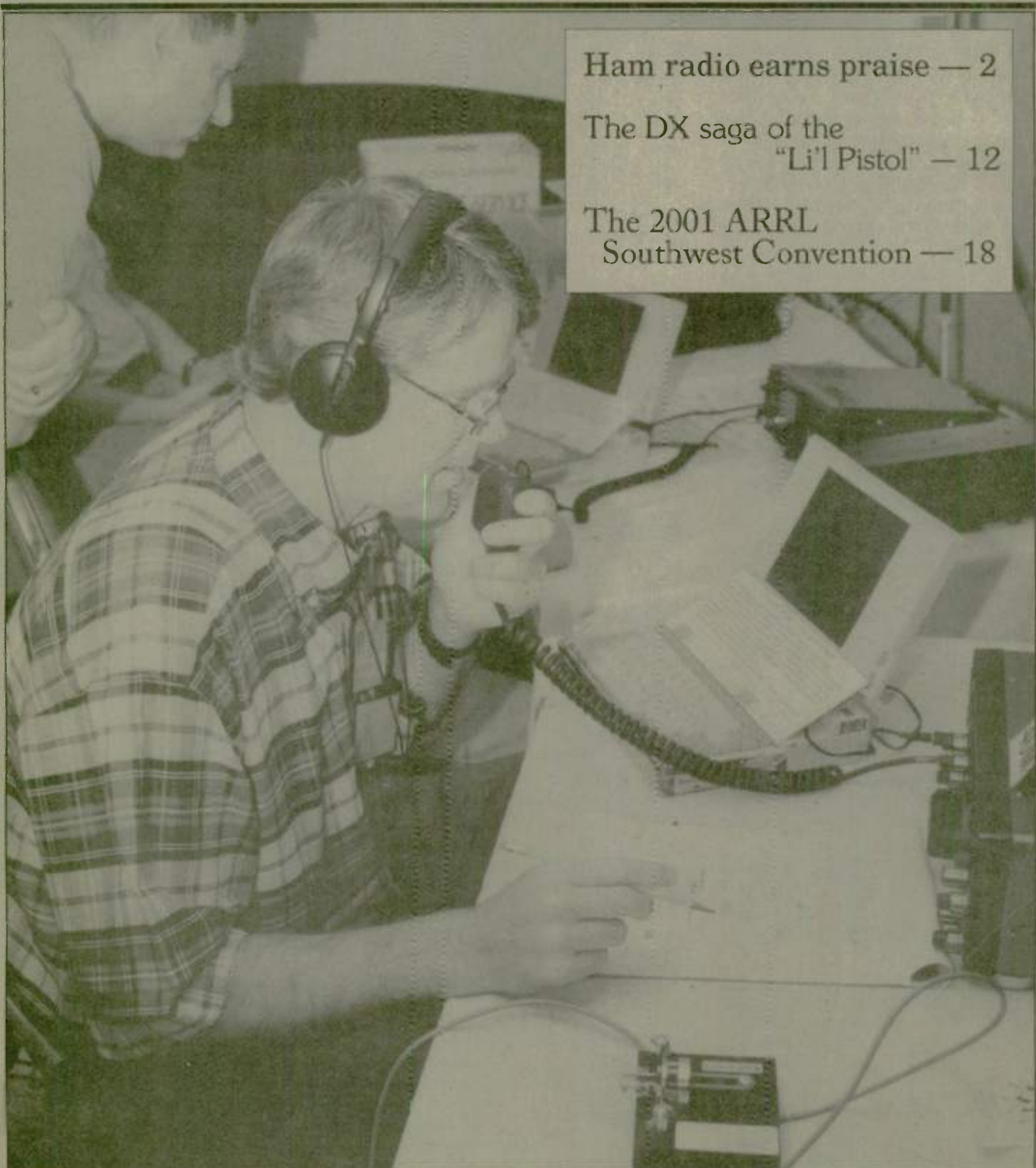
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WORLD RADIO

Year 31, Issue 5

www.wr6wr.com

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Ham radio earns praise — 2

The DX saga of the
“Li'l Pistol” — 12

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Attorney General Ashcroft praises Amateur Radio

U.S. Attorney General John Ashcroft had nothing but praise for Amateur Radio operators who participated in a recent anti-terrorism drill in the Midwest. Ashcroft was in Dayton, Ohio, when the city conducted a Weapons of Mass Destruction Preparedness Test 17 August. According to District Emergency Coordinator Ron Moorefield, W8ILC, the Attorney General liked what he saw.

The exercise, also known also as an Nuclear, Biological, Chemical Drill was held at the University of Dayton Arena. The American Red Cross first asked the Amateur Radio community for communications assistance. Ten operators took part and another twenty were on stand-by alert. Moorefield said it was a very well planned exercise: "Everything fell into place. There were about 53 different departments involved. There was also enough time conducted for the drill so that each agency could set up what they had to set up."

The radio amateurs were used to shadow important officials, communicate with local hospitals and talk to shelters set up by the Red Cross. Communications took place over the Dayton Amateur Radio Association's 146.94 MHz repeater and the Kettering Medical Center repeater on 145.11 MHz. Ron Moorefield, W8ILC, says that the Hams in Dayton seem prepared for any eventuality: "We are living in an age now with terrorism and weapons of mass destruction that makes this something we must all be concerned about, and the Amateurs are well aware

of it. And I think that they will be prepared. We would not barge in on something like this but we would wait until we were called and given a place."

As a result of the exercise success, the state of Ohio has now been granted about two million dollars to aid local officials to fight possible terrorism through training and procurement of badly needed equipment. Moorefield says that even Hams will be trained: "The federal government has offered us some preliminary training on how to deal with coming in to such a [disaster] scene. I am starting to set some classes toward the end of the year and get a number of amateurs involved."

Moorefield says that the classes will be open to all interested radio amateurs living in the area. Attorney General Ashcroft, there to oversee the Weapons of Mass Destruction exercise, declared it a complete success. — *Newsline*

ITU adopts recommendation on amateur qualifications

The International Telecommunication Union has adopted a recommendation that outlines basic qualifications for Amateur Radio operators worldwide.

Recommendation ITU-R M.1544, Minimum qualifications of radio amateurs, states that minimal operational and technical qualifications are necessary for proper operation of an amateur or amateur-satellite station. It recommends that any person seeking an amateur license at least be able to demonstrate specific theoretical knowledge of radio regulations, radiocommunication methods, radio systems, radio emission safety, electromagnetic

compatibility, and RF interference avoidance and resolution.

"The international Radio Regulations have long required that administrations take such measures as they judge necessary to verify the operational and technical qualifications of any person wishing to operate an amateur station," observed International Amateur Radio Union Secretary David Sumner, K1ZZ. "In anticipation of changes that are likely to be made in the amateur and amateur-satellite service regulations at the next World Radiocommunication Conference, the new recommendation provides additional definition to these qualifications without reducing the prerogative of an administration to set its own standards."

Recommendation M.1544 came about as part of the IARU's multi-year effort to prepare for the 2003 World Radiocommunication Conference, where delegates will consider possible revision of Article S25 of the international Radio Regulations.

IARU President Larry E. Price, W4RA, said that establishing uniform minimum qualifications for Amateur Radio operators should help in the area of mutual recognition of amateur licenses for international roaming "and particularly for cross-border movement of amateur operators for disaster communications." Having the recommendation in place, he explained, makes it possible to maintain an ITU document on Amateur Radio operator qualifications within oversight of the ITU-R Study Group and avoids the cumbersome process of modifying Article S25 of the Radio Regulations.

ITU Recommendations are available from the ITU electronic bookshop at: <http://ecs.itu.ch/cgi-bin/ebookshop>. — *LARU, ARRL Letter*

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WORLD RADIO

On the cover: Bob Grimmick, N6OX, takes his turn as a guest operator on 40 Meters at the ARRL Southwest Division Convention special event station — W1AW/6. Read all about the convention on page 18.

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Editor's Log

I usually take this space to announce the latest lifetime subscribers to Worldradio. However, I will put that on hold until next month to make room for my thoughts on what happened the morning of 11 September 2001.

Things have started to settle down after the terrorist attack on New York City and Washington, DC. One thing this incident has shown us, as Amateur Radio operators, is that our services are in demand when all else fails. As an example, communications in New York City completely bogged down due to overload. In a grave and desperate situation, the tendency is to pick up the phone and called loved ones immediately. When several thousand do this at the same time, the system quickly overloads and fails.

The same is true for cellular telephones. When hundreds or thousands of cell phones are being used at the same time in a small area, the system cannot handle it, and users will get what's known as a "quick busy" signal and can't get through. That's where we come in. We literally have thousands of frequencies available for both local and long range communications. It's our job to assist with communications in disaster situations — but only if we are asked to do so by the powers in command.

It's extremely important for the future of this hobby to make sure we are available for emergency situations. But the powers that be need a gentle reminder every once in a while that we are here to help with a corps of trained and responsible individuals who know what they are doing.

Everyone involved in this hobby has a responsibility to be the best they can be. That means getting the training necessary to be an asset to your local community and the nation. You really can't expect a local authority to welcome you with open arms when you show up at the scene of an event and offer your services. The first thing that will happen is the local officials will say,

"Who are you?" Second thing will be, "Why are you here?" Unless you have established a rapport with the agency, your presence will probably be most unwelcome. They literally don't have the time to sit down and teach you what their system of command is, and how their stuff works. That's why training is so important.

An excellent source of training is the on-line disaster communications courses being offered by the ARRL. What can you do as an emergency operator? You can supplement your local emergency agency, or you can do anything requested of you — but, you can't do it on your own without prior authorization. If you do, you endanger any good relationship already established by those before you.

I urge you to get involved with your local group and become trained in disaster services. A disaster can happen anywhere, anytime.

I spent two days serving the residents of Sacramento County in the County Emergency Operations Center and at the Sacramento International Airport as a communicator on the Amateur Radio bands and on the Sheriff's Department system. I have taken the time to become a trained volunteer and I gladly volunteer any time I can for the citizens of this county. I realize some of you may not have an employer like I have, and may find it difficult to get some time off. The publisher of *Worldradio*, Armond Noble, N6WR, is very understanding of the need for volunteer help during a crisis.

As this is being written, continuing coverage is on television by all of the major networks. The mayor of New York just said there are still over 5,000 people missing from the World Trade Center. As time goes on, we'll be updated on the number of victims of this ruthless attack on America.

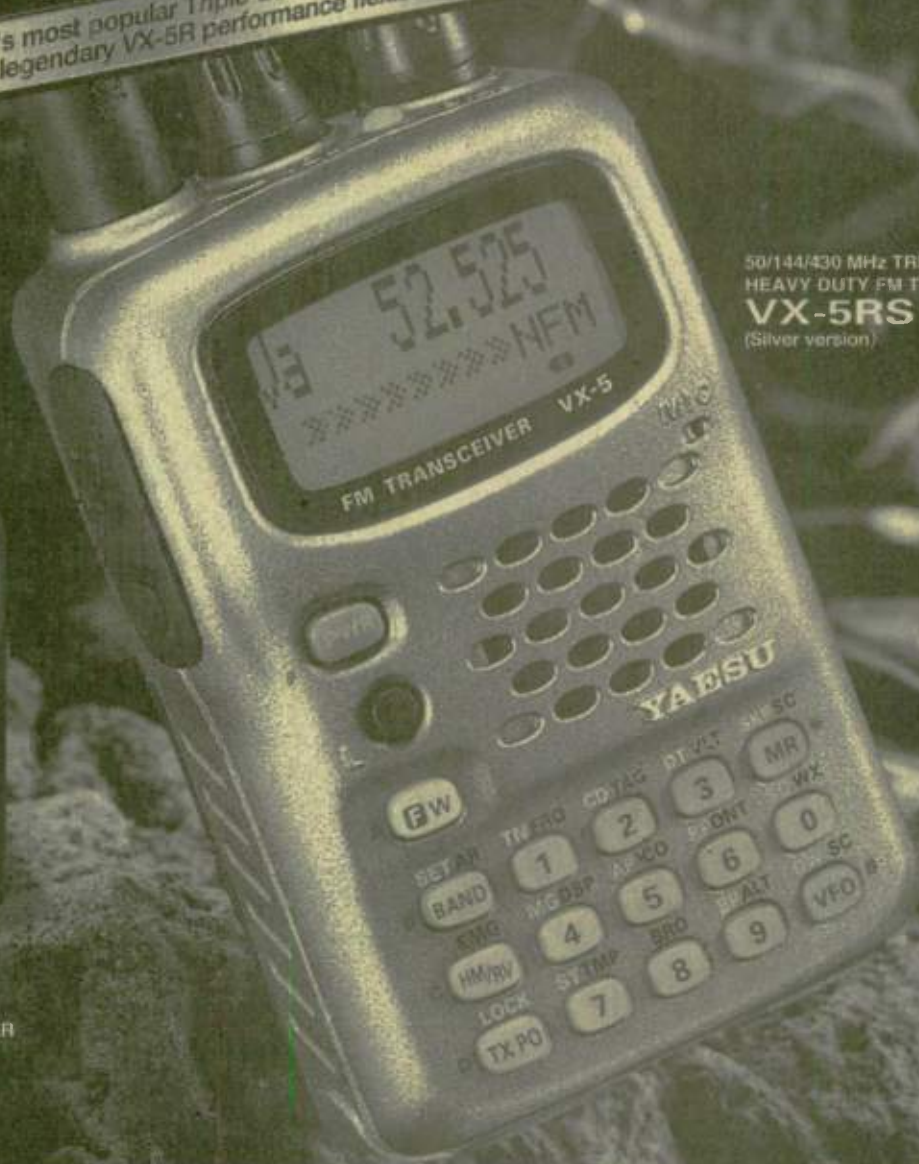
There are also the victims aboard the doomed aircraft hijacked from various airports on the East Coast. There's certain to be some Amateur Radio operators among the missing and the dead. Our thoughts and prayers go out to all of the victims and their families of this disaster. — *WF6O*

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A sloper for 160 Meters

Vernon Gibbs, W4JTL

The 160-meter CW contest was coming up. I had never been on 160, I didn't have an antenna that would load up on 160, so I decided to come up with one. I have had some success with half slopers so I decided that was the antenna to build. The half-sloper is 66' overall with a center-loaded coil. The antenna is fed with 50-ohm coax and at a height of 40' on my Rohn tower. The normal setup is used, the center conductor of the coax connected to the end of the wire and the shield of the coax is connected to the tower. The antenna slopes at about 45 degrees.

The half-sloper worked well on 160 Meters and I made contacts at the rate of better than one per minute. Everyone I called came back to me. However, remember this was a contest. The antenna was resonant at 1825 kHz and was 1.5:1 at 1800, and 1.5:1 at

1850. After the contest, I decided to try to use the antenna on other bands. I am using a TenTec ATU. The antenna loaded up well on the following bands: 3.5, 7, 14, 18, 21, 24, and 28 Mc. For some reason it would not work on 10 MHz. I got good reports on each of the bands, in fact on 7 MHz, I was told by several W5s that I was the loudest on the band. I made contacts in the Europe and Asia without difficulty. By the way I use a Ten-Tec Omni VI Plus and run 100 watts.

For the Amateur wanting to operate 160 Meters, this antenna is very good. It apparently has a low angle of radiation compared to a dipole. This is evident from the stations worked during the 160-meter contest back in December of last year. I worked stations in West Virginia, Arizona, Wyoming, Ontario, Iowa, Vermont, and many others with no difficulty at all, and I was using only 100 watts!

The quarter-wave sloper is a "vertical" with the feed point at the top rather than at the bottom. With the feed point at the top of the antenna, the current lobe, which is responsible for the radiation efficiency, is clear of all ground clutter and therefore works better.

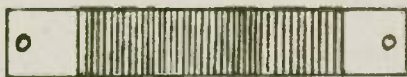
A true quarter-wave for 160 is approximately 130 ft. I didn't have that

Resonant @ 1800 kHz
Bandwidth λ 50KC



much room so I used a center-loaded quarter-wave. An air-wound coil would have better efficiency but I didn't have one at the time. I used an overall length of 66' with a center-loaded coil of 114 close-wound turns of #16 enamel wire on a 8" piece of PVC pipe. This is approximately a quarter-wave at 1900 kHz.

The sloper uses the tower as one-half of the antenna. Connect the coax shield directly to the tower. Make sure this is a good electrical connection. The center conductor of the coax connects to the quarter-wave wire that slopes



114 turns of #16 enamel close wound on 1" OD PVC pipe



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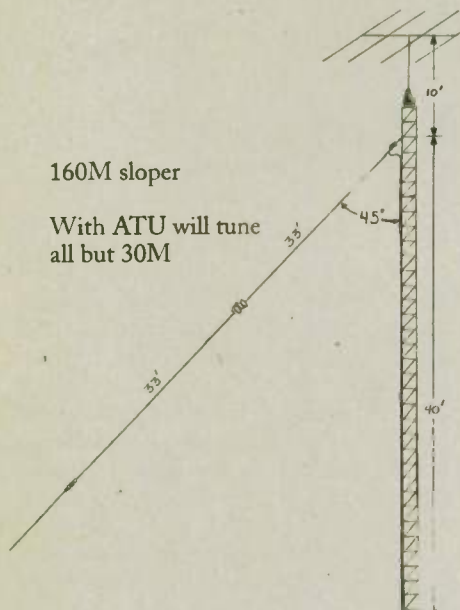
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toward the ground. The angle of the sloper in relation to ground seems to work best if it is at least 45 degrees.

If you have a problem getting the VSWR low on the sloper, change the angle and see if that will help. Most people who have problems with the sloper have the feedpoint too close to the Yagi, and the interaction between the two is the culprit. To minimize interaction between the sloper and your Yagi, a distance equal to half the length of the Yagi boom should be between the Yagi and sloper.

It is also a good practice to make the coax long enough so that you can wind a coil of 10 turns at the point of entry into your radio room. This will remove any RF that is on the outside of the coax shield.

For the sloper to work, it must have radials above the feedpoint. These radials also perform the function of a "capacity hat." These radials are

provided by your Yagi on top of your tower. The bigger the Yagi, the better your results will be. No, you can't use a Quad. I tried it and it just wouldn't work at all.

The Sloper mimics a Discone antenna in some respects. The horizontal disc on top of a Discone is the radials for that antenna, while the vertical cone of the Discone is comparable to the sloping wire on the sloper.

Take a look at some of the verticals on the market today — for example the Cushcraft R7. The four wires at the bottom of that antenna are the radials. The Cushcraft R7, and similar antennas, are in effect a sloper turned upside down.

You will need at least one 8' ground rod at the base of the tower. Three are better. With an ATU, you can use the sloper on all bands except 30 Meters. However, the ATU doesn't change the VSWR on the coax so you will still have very high VSWR on all bands except 160 Meters.

One of these days I am going to feed a sloper with 450-ohm ladder line and see what effect it has. You would need to use the ATU on all bands and the VSWR and losses in the ladder line are very low.

I have read in the various radio magazines that the half-sloper is more or less omnidirectional with a very low vertical angle of radiation. Some indicate that the sloper has slight gain over a dipole.

I have put up several slopers over the

years and have found that the sloper input impedance and the length of the sloping wire required for resonance and the antenna pattern all depend on the height of the tower, the angle between the sloper and the tower, the type of Yagi on the tower and, believe it or not, the direction the Yagi is pointing.

Although this antenna is simple, it has brought very good results. I found it to be a hot antenna on 160 — hard to believe, but it works for me!

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WRC-2003 and 40 Meters

When I wrote in the September "Rules & Regs" column "there are probably a lot hotter topics in Amateur Radio than the behind-the-scenes maneuverings leading up to the next World Radio Communication Conference (9 June-4 July 2003)," I did not expect much reaction from readers on this rather mundane subject. To my surprise and delight, I have been receiving a steady stream of mail from Hams who have plenty of thoughts and ideas about the upcoming battle between amateur and broadcast services for the bandwidth in the vicinity of 7 MHz — the 40-meter band.

The current U.S. position, as articulated by Paul Rinaldo, W4RI, the ARRL's Technical Relations Manager, is "the U.S. supports the allocation of the band 6900-7200 kHz on a worldwide primary basis to the amateur service, and allocating a band starting at 7200 kHz to the broadcasting service." One of the first e-mails I received pointed out one obvious problem with this approach. Joe Bushel, W2DWR, the District Emergency Coordinator of the Suwannee District, and ARRL Northern Florida Assistant Section Manager, said, "Good article on the upcoming problems with 40 Meters. I only have one comment which may or may not be a point of consideration in the decision.

"Modern HF rigs are sold in two primary designs, Ham band only and general coverage. Most of the Ham band rigs will not extend below the 40-meter band by 200. General coverage rigs will, of course, receive in this range but are locked out of transmit without modification below the current band edge. Almost all of the thousands of modern rigs would, at a minimum, require some modification. My recommendation would be to allocate the 6800-7000 kHz band area to commercial broadcasters and leave the Hams in the 7000-7300 kHz area. This would require some commercial broadcasters to re-frequency their transmitters but should have no effect on the reception since the radios used to listen to these broadcasts are, for the most part, general coverage."

Well, you can bet that the broadcast-

ers are going to fight long and hard to keep their current frequencies. I imagine they would also have to make some pretty major changes to their antenna systems as well. I am not sure how difficult it would be to modify modern Amateur Radio rigs to expand the 40-meter transceiver functions, but maybe readers with some technical expertise on rig modifications could enlighten me (and all of us). I would surely like to hear from some of you who know your way around the inside of today's "Gear That Does Not Glow."

K5CK's insights

John O'Malley, K5CK, of Fredericksburg, Texas, writes, "I have read your interesting article in the current issue of *Worldradio* and offer the following comments.

"First, the notion of developing

Amateur Radio Call Signs

The following shows the last call sign in each group to be assigned for each VE Region under the sequential call system as of 17 September 2001.

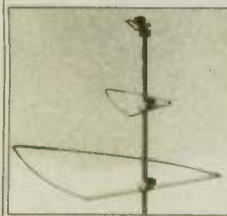
For more information about the sequential call sign system, see Fact Sheet PR5000 #206-S dated August 1996 or contact the Federal Communications Commission, Consumer Assistance Branch, 1270 Fairfield Road, Gettysburg, PA 17325-7245, toll free 888/225-5322

District	Group C Technician	Group B General	Group A Am Extra
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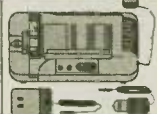
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Rules & Regs

a carefully prepared position for WRC-2003 without delay cannot be overemphasized. It is of critical importance that ARRL members who have a serious interest in HF radio, and particularly the 40-meter band, understand that if the worst case scenario develops at the conference, and those of us in Region II end up squeezed into the same 100 kHz with amateurs in regions I and III (to quote from your Rules & Regs column), we might as well write off 40 Meters. I operate on the band every day and consider it to be an ideal band to meet my requirements. However, 40 Meters is so congested now, with only Region II amateurs using 300 kHz of spectrum, that conditions would become impossible if the band width were cut by 2/3 and then opened to amateurs in Regions I and III as well."

"Getting a clear 300 kHz allocated to the Amateur Service by moving the amateur band down only 100 kHz to 6900 kHz is not a good practical solution, because many of us cannot transmit below 7000 kHz. We would, therefore, have to go to the considerable expense of modifying or replacing our transmitters. Even if that should prove cost effective, it would probably be several years before a sufficient number of amateurs would be able to do the same for their equipment, so the transition period would be difficult, to say the least. It would seem more efficient to allocate 300 kHz from 6700 kHz to 7000 kHz to broadcasting and reallocate 7000 to 7300 kHz exclusively to the Amateur Service in all three regions.

"There is the threshold question of the justification, if any, that broadcasters may have to support their requirement for an additional 300 kHz of space in the 40-meter band. As you have noted in your history of 40-meter allocations going back to the Cairo Conference of 1938, the world has completely changed since 1938 when HF radio was the only practical means for intercontinental telecommunications. With the steady improvement, at decreasing cost, in broadband telecommunications by both cable and satellite since the end of WWII, it would seem difficult to show the cost effectiveness of constructing new HF high-powered broadcasting

transmitters to serve a decreasing number of receivers, particularly with the steady worldwide rise in the cost of electrical energy. An unsubstantiated broadcasters' requirement for any additional spectrum space at the expense of the Amateur service is not entitled to serious consideration.

"The recent rain disaster in Houston, Texas, caused by Tropical Storm Allison demonstrated the unique value of the Amateur Service in local emergencies. When all other telecommunication services were put out of commission by the deluge, it was the Amateur Service alone which was left to provide essential emergency public safety communications services in the Houston area.

"With my facilities here in Texas, I can generally provide a very good signal on 40 Meters within a radius of at least 1,000 miles of my QTH. To emasculate the 40-meter band would create an enormous gap between the 80-meter and 20-meter bands which would not only compress amateur activities in those already crowded bands, but also seriously degrade the ability of my station to provide reliable emergency services to a wide area of the United States in the event of a local disaster. The U.S. position at the WRC-2003 ought to be that the Region II allocation of 300 kHz to the Amateur Service ought to be retained, and consideration given to extending it to Regions I and III. The broadcasters ought to be required to make a diligent effort to satisfy their requirements by other means than reallocation of the 40-meter Amateur band."

NTIA non-support

The NTIA recommendation is very politic, without taking much of a position. They want the U.S. position to be: "To accommodate the desire to have the same spectrum allocation in all three regions for the amateur/amateur satellite services in the frequency spectrum range around 7 MHz, the U.S. believes careful consideration will have to be given to the needs of the fixed service and the broadcasting service in this part of the frequency spectrum."

Bill, K4LRX, says, "I enjoy your commentary in *Worldradio*. I was first licensed in '56 just after the demise of the old "Class A" ticket. Quite frankly,

it did not take me long to realize 40 Meters was a challenge to work even back in those days. Daytime operation provided contacts up to 700 miles, but during the night the band became virtually useless due to foreign broadcast stations every five kHz, or less. For many years I neglected the band in favor of 20-15-10 Meters for the simple reason the interference level was much less on these bands. About 10 years ago my interest focused back on 40 in an effort to obtain five-band DXCC, so I endured the annoying broadcast stations and crammed myself in the bottom 10 kHz of the CW band slugging it out with the big boys on the band.

"A long overdue and much needed improvement presents itself with the idea of shifting the band downward from its present allocation to 6.9 MHz to 7.2 MHz. I am a strong proponent of this proposal believing it would eliminate the broadcast station interference problem and encourage amateurs

to work the band during the evening hours when the strong broadcast station interference exists. The move downward does not promise to eliminate the entire problem, but the majority of the band promises to be much clearer in the 7.1 to 7.2 MHz region."

Voice digital

Eric R. Wolfe, WB3IHQ, of Lebanon, Pennsylvania, weighs in with a whole different approach. "I am a firm believer in expanding the 40-meter phone subband from 7.050-7.150MHz. I get tired of split frequency to work DX and fighting heterodyne above 7.150. All radios are going digital mode, as should Ham radio. If they want to argue that we need to get into the future, then let's go digital. Back to the future! Bring on voice digital. In short, we do not need a new 40-meter band or a new 60-meter band. Just give us 7.000-7.050 as digital and 7.050-7.150 as J3E."

For this month's finale, I want to share some thoughtful comments from Jay, N3DQU; "Personally, I don't see a problem with 40 Meters being kept the way it is and think that trying to standardize the band worldwide may be more trouble than it's worth. Just about everybody has an A/B button these days if they want to work the DX phone stations, and the way the receivers have evolved in the past 10 years or so, dodging the broadcast heterodynes is not that big a feat if you have a yen to work the novice sub-band. To tell you the truth, I kind of like 40 Meters the way it is now. What other band do we have that allows you to tune in Radio Moscow while waiting for a come-back to your CQ?"

— David Splitt KE3VV, our intrepid rule-interpreting columnist, can be reached by sending snail mail to: 6111 Utah Avenue, N.W., Washington, DC 20015; or by e-mail sent to: davidsplitt@erols.com

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The DX saga of the "Li'l Pistol"

Ed Whitman, K2MFY

My involvement in Amateur Radio began in my early teen-age years. Like many of us, my initial interest was in short wave listening. I got my first taste of this using a Hallicrafter's S-38C receiver, which my parents gave me for my 15th birthday. I took the bait like a hungry fresh-water fish. After collecting loads of SWL cards from "Radio Moscow," "The Voice of the Andes" (HCJB) in Ecuador, etc., I began to wonder what those dots and dashes I heard were cryptically spelling out. So within a short time I learned the Morse code and decided to get a Ham license. My cousin, who had a license, gave me the code test, my dad proctored the written test, and shortly I received my Novice

ticket — KN2MFY.

I quickly proceeded to build my first rig, a *Johnson Viking Adventurer* transmitter which generated a 50-watt output into a sort of 80-meter dipole. I say "sort-of" because the wire ran zigzag through the TV antennas on the roof of my six-story apartment house in Brooklyn, NY. This antenna worked quite well on 80 and 40 Meters. One afternoon after school, I was experimenting with my rig, and noticed that I could load up on the relatively new 15-meter Novice band (my frequency was exactly 21.150 MHz — Novices were crystal-controlled back then). I listened around this frequency, called a slow CQ and listened — nothing but noise. Over the next few afternoons I actually worked a few stations, but all local contacts. The following weekend I called CQ and listened patiently. Out of the noise I heard a slow methodical

(— — — • • — — — —
• • — • —)

He repeated his call sign to me about a dozen times. I was panicked — I never copied a station that did not start with a K or W. I composed myself, acknowledged his call, exchanged some information, and he faded away. I looked at my station notebook and saw I copied the call OE1FT, name Franz, and QTH in Vienna — in AUSTRIA!

Within a few days I worked a station in FA8 (French Algeria then), ON4, PAØ, G3, EA1, and others. I was hooked on DX! In fact, when my ticket was up, I almost became the first Novice to work all continents (never got a QSL card from Israel, for an Asian confirmation, in time).

Over the next few years my Ham activities slowed down as I studied for my B.E.E. degree, found out what YLs were all about, and got my first real paying job as an electrical engineer. I subsequently settled down and got married, went ahead in the evenings and got my M.S.E.E. Like any serious-minded Ham, I wrote my Master's thesis on a topic I could relate to; namely, "The Effect of Feed Point Upon a Dipole Antenna." Along the way I upgraded my equipment to the Heathkit line (for you youngsters, that was the SB-301 receiver and SB-401 transceiver), and set up a Mosely TA-33jr three-element beam on a 35-foot two-section tower adjacent my house. Now I was really hot with my 100 watts and a decent antenna! For the first time in the thirteen years that I was licensed, I was able to go on phone. The "li'l pistol" was really smoking!

In between working in engineering, teaching, being an editor for *Popular Electronics*, and all sorts of other jobs (and of course helping the XYL to raise three daughters), I slowly moved up the ranks of the DXCC. I went "big time"

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in the early part of the 1990s when I retired my Heathkit line and purchased a Ten-Tec Omni V. A little bit later I replaced my venerable TA-33jr and put up a Force 12 C-3 seven-element beam. I am still running 100 watts, but now I have the added punch of a terrific antenna. A few years ago, my youngest daughter wanted to show me that she also had some of the "Ham genes," and passed her Tech-Plus license (N2YJH) with only a few weeks of study. But I don't have to worry about her taking over the rig — she is just starting out to raise her own family!

I am currently only two countries shy of "working them all" (missing P5 and BS7). My present DXCC totals are 351/332 (old timers DO have a lot of deleted countries)! So this just shows, if you have the perseverance (and of course MUCH patience) you can almost work em' all with low power...of course the KW would help when the pileups begin!

In case you were wondering what the "li'l pistol" station looks like, take a look! On the bottom shelf (left to right) is a Heathkit antenna tuner alongside the Ten-Tec Omni V transceiver. On top of the Omni you can see a Datong audio filter. Moving up on the next shelf is an Astron DC Power Supply, Omni power supply/speaker and an AEA MBX232 TNC. Sitting on the TNC is an outboard SWR/wattmeter. Up in the right-hand corner is mounted an Icom two-meter rig (for packet use). The box on top of the Astron is the Icom speaker. Finally, getting to the top shelf, we find a Yaesu antenna control unit rotor, a home-built CW memory box with a Vibroplex keyer, another microphone, and in the top corner is a Kenwood two-meter handi-talkie (used mostly for the Long Island DX Association net, where I am Secretary), with a RF Concepts 30-watt outboard amplifier.



Of course you can see my state-of-the-art Apple IIe computer on the desk, which is the computer I currently use for packet. Now that I recently purchased the DX4WIN program, I expect to be replacing this system with a PC.

A Force 12 model C3 is mounted on my tower adjacent to the house. Below the beam is a W9INN inverted-vee antenna, which gets me out on 80-40 meters and the WARC bands.

See you in the pileups (all you KWs — be gentle!).

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Ham radio helps reading and speech

John E. Gercken, AA9UF

This is a true story about a 13-year-old boy named Charles "Joseph" Cole. It all began on 18 August 2000. Out of the blue that evening, I got a call from Joseph's mom, Pat, inquiring as to my interest in helping Joseph study for his Amateur Radio license. She told me that she had been listening to a Christian radio station, WGNN, and heard the announcer read a letter over the air that I had sent a couple of weeks earlier. I sent the letter along with a contribution. In that letter, I happened to casually mention that I am a Amateur Radio operator. Pat called the station to get my phone number so she could contact me.

So, you can imagine my excitement at hearing of this opportunity! At my earliest opportunity, I met with Joseph and his parents and explained how we could go about getting him prepared to

take his test. Pat told me that Joseph needed a goal to achieve that would require that he read and study. His reading skills were rather poor, and he was struggling with spelling as well. I

"Once I got him going on 2 Meters and he became familiar with the repeaters in the area, he started talking up a storm!"

was also told that Joseph's speech was poor, in that he tended to mumble and chew his words.


Well, Amateur Radio came to the rescue! Joseph was so intrigued by what he read in the "Now You're Talking" textbook that he could hardly put it down! If he ran across words he was not

familiar with, he would ask his parents about them, and go on from there. His reading skills shot through the roof because he was reading something that he was genuinely interested in. He also faithfully practiced his Morse code daily.

I set him up with an old shortwave receiver, a Realistic DX-160, and an inverted L antenna so he could listen to amateurs on the air and hear "live" CW on the air. I also set him up with a code key and oscillator for practicing his sending. On his computer, I set up a couple of good CW tutoring programs that he could use, and I found some CW teaching audio tapes for him to use.

From time to time he would call me on the phone or I would go to his house and see if there was anything he needed help on. Then on 15 March 2001, I took Joseph and his father, Brad, to Champaign for the test. Joseph passed the written exam with flying colors, but failed the code test. He was somewhat disappointed, but I told him that he was probably too nervous, and that hampered his concentration. It is a common occurrence among prospective Hams.

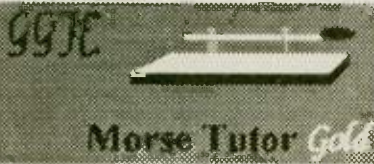
Soon after he got his license, I set him up with an old Kenwood 2-meter rig that I had lying around collecting dust. Since the rig only put out 30



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watts, I installed an amplifier in the line. Joseph and I only live two miles from each other and we are 30 miles from any repeater in any direction. We put up an 18-ft. mast made out of galvanized EMT conduit, and I installed an L bracket with quarter-wave radials on it, which I made on top of the mast. The antenna consisted of a 5/8-wave mag-mount antenna set on the L bracket. The antenna system is located right outside Joseph's bedroom window.

Now comes the good part! Once I got him going on 2 Meters and he became familiar with the repeaters in the area, he started talking up a storm! Not a shy bone in this boy's body! He was making Ham friends all over the place! There were times when I would get on a repeater and mention that I was Joseph's Elmer, and the fellow at the other end would already know all about him! One thing Joseph learned quickly was that he was forced to enunciate his words in order to be clearly understood on the radio. His parents noticed quite an improvement in his speech soon after he got on the air. The phrase "necessity is the mother of invention" comes to mind. When you need to, you find a way.

Needless to say, his parents were ecstatic over Joseph's improvement in

reading and speech. Another thing that his mother noticed is that Joseph is no longer shy about talking with people as he had been. He is much more outgoing and eager to strike up a conversation. I am sure you know how all of this makes me feel. There are times when I get a big lump in my throat just thinking about how much Amateur Radio has helped him.

There are some other neat things about Joseph that should be mentioned here. He is one of ten kids in his family, eight of whom are still at home. He has three brothers and six sisters. Joseph and all his siblings are home schooled, and all were born at home — not in a hospital. His father works as a Safety Coordinator for a local seed company, and tunes pianos on the side while his mother is a full-time mother, homemaker, and teaches her children.

Joseph and his older sister, Jenessa, have paper routes in Bellflower, IL, and together they have about 55 customers. Joseph earns about \$100 per month, and tries very hard to save his money for Ham equipment. He only has a little more to save and he will have enough for an HF rig.

He will be going to take a code test later in the Fall, then, once he passes that test, he will order his rig. He

wants to start studying for his General license soon and eventually go all the way to Extra. All I can say is, "Go get 'em, Joseph!"

(Ed. When I first read this story, I knew this was a special situation so I sat and thought about what I could do for Joseph. And then it hit me! How about all of us doing something special for Joseph? He sounds like just the kind of young man our hobby needs to attract — and Amateur Radio is helping him with his problems. I've asked John Gercken, AA9UF, to act as a "banker" for Joseph, and he has agreed to do so. I am sending a check for \$10 to John for deposit in Joseph's HF rig fund. It's not much, but if I can encourage other readers to do the same, Joseph will have a new HF rig and an antenna system to go along with it. What do you say, readers? Let's play "Santa Claus" for Joseph. Let's get him that HF rig he wants for Christmas! If you want to contribute, send your check to: John Gercken, AA9UF, 35998 E. 400 N. Rd., Bellflower, IL 61724-9710.)

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MFJ's automatic notch filter searches for and eliminates multiple heterodynes.

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Narrow band signals like CW and RTTY jump out of QRM when you switch in MFJ's exclusive *tunable* FIR bandpass filters.

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The 2001 ARRL Southwest Division Convention

Rick McCusker, WF6O

A splendid time was had by two *Worldradio* staffers attending the 2001 ARRL Southwest Convention held at Riverside, California 7-9 September 2001. Rick McCusker, WF6O, Editor and Glen Rudesill, W6RWR, Associate Publisher were the volunteers to attend this convention.

Road trip!

Leaving Sacramento at 4 a.m. on Friday morning, the journey was pretty uneventful. Why leave at 4 a.m.? Have you ever seen traffic in the Los

Angeles basin after 1 p.m. on a Friday afternoon? It's not a pretty sight.

The FT-100 was on, but there weren't a lot of signals heard on the HF bands. There were some on 20 Meters, but certainly not very many.

Surprisingly, traffic was very light for a late Friday morning transiting the L.A. basin. We arrived, after a short detour to visit my childhood home in the Anaheim Hills, at 1 p.m.

After setting up the award-



San Bernardino County's Emergency Communications vehicle staffed by Hams was on display.

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Element Length...11 Ft. | Wind Loading.....1.5 Sq. Ft.
Boom Length...4.5 Ft. | Weight.....15 lbs.
Turning Radius...6 Ft. 2 in. | Power Rating...1200 Watts PE P.
Input Impedance-Single 50 ohm

MQ-2 Six-Band Antenna.....\$369.95
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winning *Worldradio* booth, we had a couple of hours to kill before the doors opened on Friday evening. The two-hour period was just right for a quick nap.

The fun begins

Friday night's crowd was trickling in at the opening bell, but picked up in volume as the evening wore on

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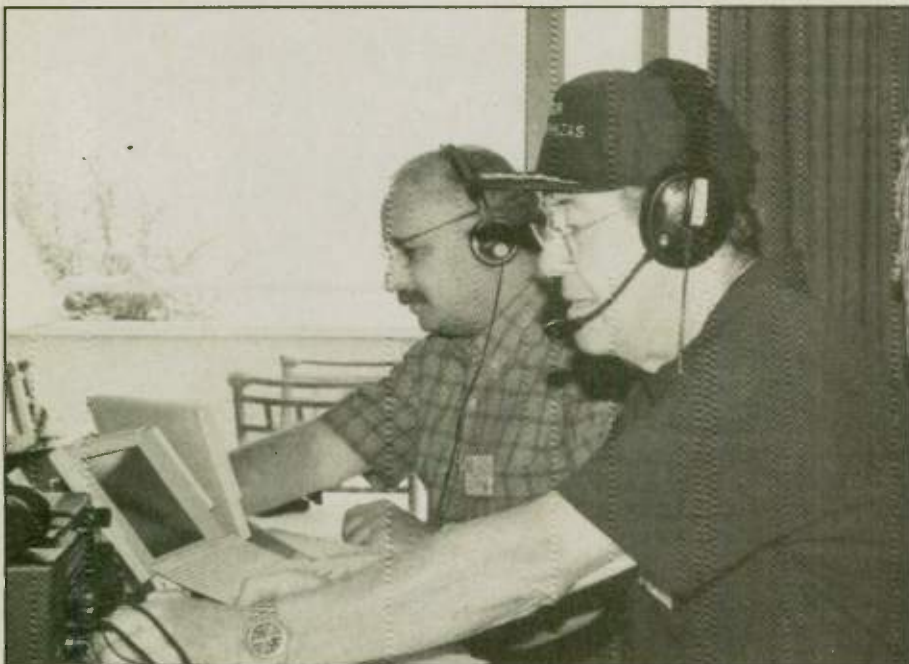
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The convention featured an impressive station set-up on the top floor of the Holiday Inn. Guest operators included Marc Robins, AD6MI (left), and Joe Terrazas, KN6PR.

and road weary travelers arrived after suffering through the evening traffic jams. Several of the exhibitors were seen roaming the aisles, checking out what competitors had to offer. Since we were the only magazine with a booth, we could just kick back and relax with our captive crowd.

Just before closing time, arrangements were made for our dinner excursion. We went a total of three blocks to a popular Italian restaurant and were treated to a half-hour wait before a table became available. The food was good and plentiful, the drinks were tasty, and a good time was had by all.

Saturday

The crowd was light at the 9 a.m. opening, but soon the exhibit hall was pretty well packed. There were bargains to be had, and we all know how hard it is for a Ham to resist a good deal!

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Forums

With 10 rooms available for forums, there was something for everyone. The forums actually started on Friday afternoon with mostly public service forums. Late Friday afternoon featured a keynote address by Jim Haynie, W5JBP, ARRL President. Others included a five-hour marathon on Amateur Radio satellite operations, Amateur Auxiliary and Public Service.

The Saturday forum schedule was chock full of interesting subjects – most running at the same time.

One very interesting forum I visited featured Jim Duffey, KK6MC/5, demonstrating how to build simple baluns that work. He used a variety of meth-

ods, constructing baluns using everything from a broomstick to a roll of toilet paper! Talk about creative... you can have an antenna that works and be prepared for the trip to the... well, you get the idea.

Other forums covered DX, Antennas and Feedlines, Mobile HF threaded whip antennas, Roving and VHF/UHF contesting and an excellent presentation on getting kids involved in Amateur Radio. Unfortunately, all of these took place between 8:30 and 9:20 a.m. There were three I wanted to see, but you can't be in three places at once.

The next round of forums featured subjects ranging from choosing the right system for charging your batteries and how to care for them once they're charged, to ATV. Again, several good subjects — but all at the same time!

All together, there were 41 different forums on Saturday alone, and that doesn't count the non-Amateur Radio forums offered for family members of Amateur Radio operators.

Due to the extremely busy forum schedule, it's impossible to focus on one or two, so I have invited forum speakers to submit their forum in the form of an article to share with our readers.

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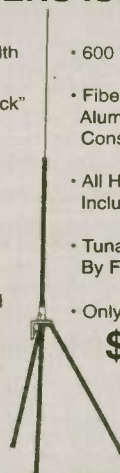
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Sunday

Sunday was getaway day, and it was reflected in the crowd. The doors opened again at 9 a.m., but very few browsers were evident. The vendors vastly outnumbered the buyers by a large margin.

Shortly after 11 a.m., the crowd was gathering at the table where the prize drawings were taking place, and the sound of duct tape being pulled off the roll echoed throughout the hall. Some vendors who came from the eastern part of the country had early flights to catch and vacated their booths by 11 a.m. The die-hard vendors, like us, stuck it out until the noon closing time.

Once again, there was a busy forum schedule, starting with the DX breakfast. A total of 11 forums kept most away from the exhibit area of the convention.

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Ron Nott, K5YNR, explains the operation and features of the Nott BB-3 screwdriver antenna.

again, I opted for a northbound journey through part of the Mojave desert to bypass the L.A. basin. The desert scenery sure beats traveling through the concrete jungle — anytime.

What made the drive home very, very exciting was the fact that 10 Meters was wide open! I started playing around on 10 Meters and decided to check on the status of 6 Meters.

Within seconds of dialing up 50.125, stations were heard calling CQ. Now this is something that is very rare in California. While there are some 6-meter repeaters around, hearing someone calling on the calling fre-

quency is not an everyday occurrence in this part of the country. It took about one minute to realize it was the ARRL VHF contest!

I made several contacts with stations in the Los Angeles and Central Valley areas on 6 and 2 Meters and 440! With all of the contest stations contacted, I went back down to 10 Meters to have some more fun. Lots of contacts were made on SSB, and then, just for laughs, I tried a couple of 10-meter repeaters. I dialed up 29.620 MHz and managed to "kerchunk" three different repeaters at the same time. I had a quick QSO with "Jimmie" in North Carolina, but

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Jim Pike, KB6WHT, was busy all weekend building custom J-pole antennas for customers stopping by the James Pole booth.

couldn't get his call sign correct. I did manage to hear that he was on a 440 MHz HT, linked to a local 10-meter repeater located in North Carolina.


Just up the band, another QSO was in progress on another repeater. This one was two amateurs in Redondo Beach (Los Angeles area), and a Ham coming home from a weekend stay in the Pocono mountains in New York. The repeater being used was located in New York City. The amateurs in Redondo Beach were kind enough to let me make contact with the New York amateur just before he arrived at home. I then made contact with the two in Redondo Beach, using the repeater in New York. Talk about fun!

Also heard were some Japanese ama-

teurs calling CQ on 29.600 MHz — FM! But alas, my 100 watts into my vertical antenna were not enough to pull off a contact. Maybe next time.

Analysis

A really nice facility, but there were way too many interesting forums going on at the same time. There is no way an amateur who has an interest in several of the subjects offered is going to get to see more than five of the forums offered. Unfortunately, there were 10 rooms available for forums and the organizers decided to use every one of them.

It will be interesting to see how Pacifcon will stack up to the ARRL Southwestern Convention. 

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See *Worldradio*, Oct. 1994 Issue.

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2. The countries contacted must be on *Worldradio's* list of nations. No, you can't send in a list of DXCC countries. There are some similar countries, but believe us, our list is different than the League's list.

3. Send us a list of your contacts, by call sign, date and time, and band. If you

want to send some commentary along, we just might put it in the magazine. We trust our esteemed readers, so we aren't asking for verification from other amateurs, your letter carrier, the local CIA office or the IRS. Just send your list. That's it! We don't even want your hard-to-get QSL cards.

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In commemoration of *Worldradio's* 25th Anniversary in 1996, we first offered the "Contact All Time Zones" (CATZ) award.

• Rules

The start date for valid contacts is 01 July 1996 at 0000Z.

The world is divided into 24 time zones. Each time zone is 15 degrees

wide. For the sake of this award, half-hourly zones and out-of-zone artificial time changes will be ignored.

This award is based on the true 15 degrees each, world map 24 time zones.

The applying station must have one (two-way) contact on Amateur Radio allocated frequencies with a station in each of the world's 24 time zones. Contact with one's own nation does not count.

The operator applying for the award must have made all 24 contacts from a location within the same country.

The award may be endorsed as the applicant wishes in regard to band and/or modes.

• Application

The applying radio operator must be in possession of 24 QSL cards, one from each of the time zones.

A list shall be made showing each contact's call sign, date, band, mode and the time zone starting with the prime meridian (0°) and moving eastward.

There is a fee of \$5 to cover the cost and mailing of the 8x10 certificate (mailed unfolded).

It is not necessary to mail your QSL cards to *Worldradio*. Send a statement signed by two other licensed radio amateurs (General Class or above) that they have inspected and verified the required QSL cards.

Address applications to CATZ Award, *Worldradio*, 2120 28th St., Sacramento, CA 95818.

Recipients of the CATZ award will be announced in the *Worldradio* DX column.

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Silent Keys

Merle B. Parten, K6DC

Prominent West Coast DXer Merle Parten, K6DC, of Santa Barbara, California, died 2 August. An ARRL and DXCC Honor Roll member with 383 entities, Parten once was an amplifier design engineer at Eimac. He won a *QST* Cover Plaque Award for his article "Custom Design and Construction Techniques for Linear Amplifiers," which appeared in the September 1971 issue of *QST*. He also was a member of the A-1 Operator Club. — *ARRL Letter*

Bill Jennings, K1WJ

Former ARRL Headquarters staff member Ernest W. "Bill" Jennings, K1WJ, of Franklin, Connecticut, died 26 August. An amateur beekeeper, Jennings succumbed after being attacked and repeatedly stung by a swarm of his own bees.

Jennings came to ARRL Headquarters in 1976 as a communications Assistant, shortly after getting his Extra ticket, and went to work in the Contest Branch. He was assistant communications manager when he left in 1984. "He was one of the kindest and funniest people I have ever met," said *QST* Publisher Mark Wilson, K1RO, who worked with Jennings in the early 1980s.

Others who knew Jennings from his days at ARRL Headquarters remarked on his irrepressible sense of humor. ARRL Field and Educational Services Manager Rosalie White, K1STO, recalled Jennings as "a super guy" who always tried to keep his fellow staff members in high spirits and smiling.

During his ARRL days, friends and colleagues recalled, a rubber chicken

became Jennings' trademark gag. Those who knew him said Jennings frequently would wave the toy out his car window to acknowledge acquaintances he'd pass on the highway.

A lifelong Connecticut resident, Jennings was first licensed as WN1AHI in 1963 and was an ARRL Life Member. He graduated from Northeastern University in 1972 with a bachelor's degree in electrical engineering. Jennings was a DXCC Honor Roll and A1 Operator Club member.

Jennings authored the chapter "Basic Operating" that appeared in several editions of *The ARRL Operating Manual*. He also penned many of the contest writeups that appeared in *QST* during his ARRL Headquarters tenure. Most recently, Jennings was an engineer for Computer Science Corp.

According to *The Hartford Courant*, Jennings was working with one of the three beehives he kept on his property when he was attacked. Jennings reportedly was wearing protective gear and was armed with a "smoker" to calm the insects, which apparently got underneath his clothing and headgear. Investigators have been trying to determine why the bees were so ferociously aggressive — a trait uncommon in typical European honeybees kept in New England. — *ARRL Letter*

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Letters to the Editor

QSLs...

It has been my pleasure to receive your magazine for a few years now. It is read from cover to cover when it arrives with repeats until the next one comes. It was with interest that I have been following the stories and comments about QSL returns.

Since I started back into Amateur Radio about eight years ago, it has been one of my greatest efforts to send timely, and complete cards to each new contact or special event or contest station. You, I believe, will particularly enjoy hearing about one special card that I received.

While tuning around I made contact with what appeared to be a new Ham. Remembering how I felt when I was new I took the time to talk for some time about whatever the young man said. A QSL card was sent as soon as I could look up his address.

By the way except for DX, because I use the bureau, I always send an SASE. It was not long after that I received a return envelope from the new station. It was a note of thanks for the card. He told me he was sorry that he didn't have cards yet and hoped the enclosed card would be okay. The young man had taken the time to sit at his breakfast table and cut out the side of the cereal box and hand make me a card from his station. He even took the time to color in part of it. I have many DX and U.S. cards in my radio room, but as you can imagine this one is quite special and on display. It helps me remember what a QSL card can mean to another Ham whether they are new or not. My wish is for all Hams to someday get a card like this.

George R. Young Jr., N9VOK
Woodbridge, IL



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I have a problem with the eQSL movement. I do empathize with DXpeditions that make 30,000 QSOs, and with big-time DX contesters who make hundreds or thousands of QSOs during a contest. Certainly the ARRL's logbook of the world is going to be of great assistance to them.

However, your recent decision to accept eQSLs for *Worldradio* awards raises a concern that the average operator, like myself, could lose the opportunity to obtain traditional pasteboard QSL cards. I feel that a great deal would be lost to the Amateur Radio community if such traditional cards were to become an item of the past. I am all in favor of using the best technology available to make our lives better, both within and without the Amateur Radio Service. But sometimes going digital because it is there isn't always the smart thing to do. Simply put, some things are just plain better in analog format.

Who among us would prefer viewing a great work of art on a computer screen instead of in front of the real McCoy? Who wants to curl up by the fire on a cold night and read a book from a computer screen? None, I'd guess. Some things can be digitized to great advantage — but other things lose their essence through such a process. I believe QSL cards fall into this category. Here are some of the things we will lose if the eQSL movement succeeds in diminish-

ing the use of traditional QSL cards.

(1) Electronic QSLs are not now accepted for any of the major ARRL, CQ, IOTA, or other awards. How frustrating it will be to bag that rare island, prefix, or DXCC entity, and then be denied credit toward your sought after IOTA, WPX, or DXCC award/endorsement.

(2) You won't be able to show your collection off to friends and neighbors, to the grandkids, or perhaps, most importantly, to individuals you are encouraging to join the ranks of Amateur Radio. Even if digital imaging is available, who wants to look at a bunch of images on a computer screen instead of spreading dozens of cards out on the table and handling them, exchanging them, flipping them over, explaining nuances of particular cards, and so forth?

(3) You will lose the amazing cards most DXpeditions mail out. Have you seen the 3B6RF cards just out this month? Wow!

(4) You will lose the pleasure of simply going through your cards from time to time, whether searching for some specific item, or just for the pure enjoyment of viewing old QSO confirmations — good fun for a winter evening. The touch and feel in this situation is simply irreplaceable.

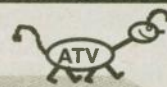
(5) The technology is not inclusive. Everyone has access to the postal service, while there are many without access to the internet or e-mail. Worse, if the tekkies go unrestrained, the system could

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Tom (W6ORG) & Mary Ann (WB6YSS)

become sufficiently complex — perhaps even requiring special software, as to make it unavailable to many operators. Some folks could thus lose the QSL experience completely.

(6) Most of all, though, and inherent in much of what I've been saying, is the esthetic pleasure of the physical QSL card and its historic relationship to Amateur Radio. Each day's trip to the mail box brings me at least one card, sometimes a half dozen or more. Many bear exotic stamps from foreign countries which go into my collection. Opening each envelope is a ritual I'd sorely miss. Reading the handwritten notes from fellow Hams around the nation and the world is a pleasure not easily forgone. Checking out the sometimes quite unusual additional enclosures can be great fun. Calling the XYL in to look at a particularly interesting card would be a thing of the past. And then logging and filing the new cards with care is, again, part of a ritual that is the essence of Ham radio.

Given today's printing technology, the savings in cost cannot be an issue. You can personalize a mass-produced card to make it virtually unique, and still pay just pennies per card (I recently bought, for 12 cents each, two-sided cards with a digital photo image on one side, and my personally designed information text on the other). There is the postage, but anyone who can afford one of today's rigs and all the attendant gear required for on-air operation surely can afford to buy a few stamps.

So my message to my fellow Hams is this — even if you start using eQSL cards, please, please, also keep enough traditional cards on hand to reply to those who send you pasteboards. This is not much to ask, I don't believe, for the preservation and continued enjoyment of one of the most valued aspects of the Amateur Radio tradition.

**Gary Knight, A15T
Austin, TX**

(Ed. We decided to accept eQSLs for one reason, and one reason only — money! The cost of sending out a direct QSL is getting prohibitive. Let's use your example of the cost of a QSL card as an example. You spent 12 cents for the card. Now add to that the cost of the envelope. Sure, they're very inexpensive, but let's figure 2 cents for both envelopes (You do send a self-addressed envelope, don't you?). Add in the 80 cents it costs to send it via the U.S. Postal Service to that overseas destination. Because you realize not all DX opera-

tors can afford to respond to hundreds of QSL requests, you enclose a couple of IRCs or a couple of "green stamps." So now the total is up to around \$3. You don't get a reply, so you figure it was lost in the mail system somewhere, and this is one you really need, so you repeat the process.

I have received tales of woe from amateurs who have tried up to five times to get a card from a DX station, to no avail. Now let's multiply this times the number of DX QSL cards you really, really need. Let's say for example, my case where I need three more to qualify for DXCC. If I need three cards, and I have to send out multiple requests, it's going to add up to a hefty chunk of change, wouldn't you say? One statement made in the above letter was, "... anyone who can afford one of today's rigs, and all the attendant gear required for on-air operation, surely can afford to buy a few stamps." What about the Ham just starting out with a kit to build a QRP rig? Did he buy the kit because he loves QRP, or is it all that he can afford at the moment? If it's all he can afford, can he also afford the cost of the postage for the DX direct-only QSL requests? Sure, he can send it via the bureau, but that can take years before a return card arrives. What about the Ham on a fixed income who has saved his nickels and dimes for a couple of years to buy that used rig at the flea market? Can he afford to spend up to \$4 a card?

This can be frustrating and expensive, to say the least.

Have you tried an eQSL? One point made in the letter from Mr. Knight is that you can't hold the QSL in your hand, and admire it. Wrong! I print out my eQSLs on 100lb card stock using my printer. They print out just fine! And did you know that you can design your own card at eQSL?

One other view I gather is that Mr. Knight is under the impression that we have decided to accept eQSLs only. Not true, we will accept either traditional QSLs or electronic versions from the eQSL service.

As far as the electronic cards not being accepted for the major awards, that's true. But sooner or later the organizations awarding these certificates will begin to accept them. Why not get used to using the new technology? True, there will be DX stations who have no access to the Internet or a computer, and for them traditional QSLing will continue.

One thing I do agree with, please keep a stock of traditional cards on hand, and do send them out to operators who would rather have the traditional form of QSL through the mail rather than electronically. I have about 800 cards on hand, and I'm not about to throw them away.)

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New subscriber...

We had a Hamfest this weekend and I picked up a bundle of back issues of *Worldradio* for \$3.00. I had heard about Kurt N. Sterba's articles and wanted a good read. Well, what can I say? I have longed for a magazine of such caliber. The Search and Rescue articles are superb as are Station Appearance, Aerials, HF Mobile, Traffic, Propagation..... You get the idea! Well done.

I never subscribe to any Ham magazines. Even buying off the news stand, it seems like I am paying for one or two articles and a whole lot of advertisements.

Not *Worldradio*, however. Lots of meat to chew on. My subscription is on its way. Trace Klassen, VE7RZ
Victoria, BC, Canada

Product review...

I was surprised to read several negative letters to the editor about the ClearSpeech speaker. I use a ClearSpeech speaker (in the car) and my ClearSpeech base (in the shack) on CW as well as SSB. It is one of the best products to come along in years. I've used four or five different audio DSPs. While they all will make listening more pleasant, the CS is the ONLY one I've found that is capable of reducing noise sufficiently to turn an uncopyable signal into a relatively easily-copyable one.

The CS will, indeed, virtually eliminate CONTINUOUS single tones. However, as you can verify by simply listening to the CW bands, it does NOT eliminate CW signals. (If it does, they must be somewhere below one wpm.)

What I believe is happening is this... Even on SSB, every time you release the mic button, there is a "blast" of noise before the CS takes hold and substantially reduces it. If you operate full break-in CW, that "blast" occurs between each dit and dah, making the side tone almost impossible to hear. It is NOT eliminating the tone.

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When operating mobile CW, there is enough motor noise in my vehicle that the "blasts" are very loud — almost completely taking out the side tone. Two possible solutions...

1. When it's your time to transmit, if your radio has an attenuator and or an "intercept point" switch, engage one or both. This works like a charm for me. (It might also be possible to help out by reducing the RF gain somewhat when you transmit.)

2. If available, use VOX control with some delay between dits and dahs rather than full break-in.

I don't know if CS could add some kind of initial "return-to-receive" reduction of the audio output for a few microseconds. That would be a very welcome modification whether you're using CW or SSB. It's just possible that the return-to-receive pumping is an artifact of allowing CW to come through the single-tone notch.

Ed Juge, W5EJ
Ruidoso, NM

Welcoming new Hams...

I want to say that I agree with 8JY when he says Hams do a lousy job welcoming new amateurs to the world of Amateur Radio. If we want to continue to have our hobby we need to get involved and help new amateurs and welcome them with open arms. Hams need to Elmer and teach new Hams that Amateur Radio is a great hobby!! I, myself, like to meet new operators and like to chat on the radio. I remember when I became a Ham back in 1991 — it was great to have more experienced amateurs around to help me out. They were like opening a book and were a wealth of information. I, like W8JY, feel it is too easy to sit back and complain about things and never do anything about it. We need to get up and get off our lazy duffs and get involved! So the next time someone wants or needs something done or a new amateur gets on the air, WELCOME THEM — don't ignore them.

Sherri Hyde, N5UXI
Silosam Springs, AR

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Inside Amateur Radio

The following story has been excerpted from Inside Amateur Radio, by the late Lenore Jensen, W6NAZ. The book can be purchased from Worldradio Books, P.O. Box 189490, Sacramento, CA 95818. Price is \$9.00 plus \$2.00 shipping and handling. CA residents please add 68¢ sales tax.

The rest of the story

It was the fall of 1920 in Polo, Illinois, that now Dr. John Tavenner was an eager young Amateur Radio operator, licensed the year before. It was election year with Cox and Harding leading the two major parties. Excitement was running very high despite there being no broadcast stations as yet.

"Tav" remembers: "I heard that a non-Ham station near Washington, D.C. would be sending the returns via code; I think the call letters were NSF. I rushed home from high school and went right to my 'shack' and sure enough, there was the station sending 'QST' as it waited to transmit the returns as they came in.

"Well, I stuck to my guns and around 6 p.m. local time they began sending at a good clip around 25 words a minute. (I was glad I'd practiced so much.)

"Well, I began to write it all down. Soon I heard a knock at my door; it turned out to be my uncle, Bert Tavenner, who ran a farm machine/automobile agency a block down the street at the C and I Garage.

"He said, 'Kid, are you getting anything?' I gave him the copy and he went back to the garage office where my father and some of the retired men used to loaf and chew the fat. I thought they would enjoy the returns.

"Regularly, for the next several hours someone came to the shack and I handed out the sheets not even looking up as I was pretty busy copying at 25 words a minute.

"Around 9 p.m., I copied the congratulatory message from Cox to Harding for his landslide victory. I took off my headphones, turned off the receiver and thought I'd run down with the final sheets.

"When I reached a stone's throw from the garage, I noticed the whole street was filled with people concentrated on getting these returns as they were being called out from the office. As I climbed the steps to the office, I noticed the place was full of blackboards, typewriters

and local lawyers giving out my copy. Instantly there was a big 'Hurray, Kid!'

When I reached the office, Lawyer Typer gave me a check for three dollars, which they insisted I take although I knew it was against the rules for Amateur Radio operators to receive money for services. But this wasn't exactly Ham radio.

"But now, the 'rest of the story' to quote Paul Harvey. Unbeknownst to me, the

editor of the local paper had prepared a stage show at the local opera house, with election returns via telegraph at 8 p.m., admission 75 cents. It turned out that my dad and uncle, knowing 'their kid' was copying the returns on his wireless set, went out on the street much earlier, calling all to come to the C and I Garage, So, unknowingly, I had ruined the opera house evening, since only a few people showed up!"

Special Events

USS Kidd

The USS *Kidd* Amateur Radio Club will be on the air as special event station W5KID 11 November (Veteran's Day) 9 a.m. - 5 p.m. (Central Time). The USS *Kidd* is a Fletcher class destroyer that served in WWII, and is now permanently docked in Baton Rouge,

LA as a floating museum. Operating frequencies are on the 10, 15, 17 and 20-meter band inside the General Class band and above the RTTY sub-band. CW frequencies will be the QRP sub-bands. QSLs are available by sending your card to: W5KID, c/o USS Kidd, 305 river Road, Baton Rouge, LA 70802.

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Station Appearance

Joe Goebel, KE4WWY

My station is located in our spare bedroom. I converted a built-in desk area to be used for my station. I became interested in Amateur Radio after being discharged from the U.S. Navy in 1961, but due to my job, I did not have the time to learn the code.

After having to retire early at the age of 50 due to being stricken with MS, I needed something to keep me busy. So after 34 years I received my Tech Plus license in March, 1995. I upgraded to General in August, 1995 and to Advanced in January, 1996. I am now working to pass my Extra Class code test.



My station consists of:

Top Shelf (L to R): Astron power supply; Radio Shack HTX 212 2-meter transceiver.

Second Shelf: Clock with UTC time; MFJ Power/SWR meter; Clock with local time and a Radio Shack scanner.

Third shelf: Radio Shack Pro 40 headphones; Kenwood TS-820S; headphones for scanner and 2-meter radios.

Bottom shelf: speaker for 2-meter rig; MFJ tuner; Radio Shack speaker for Kenwood TS-830S.

On the desk is a Kenwood MC-50 desk microphone.

I also use a Heil headset with an H5 element.

My antennas consist of a Cushcraft R-7 vertical and a G5RV inverted "V." On 2 Meters I use a Butternut "Trombone" antenna.

Amateur Radio has been a great help in my retirement.

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46. Ray L. Johnson, AD6KQ

It would be appreciated if applicants would include the geographical location and/or longitude of each of the 24 zones for this award. It makes my job easier.

East Timor (4W)

The Daily DX reports Carlos Poinho, CU3FT, will be the next East Timor (OC-148) station on the air. Carlos is an active DXer from the Azores and is a telecom tech for the Portuguese Air Force. With a tour of duty coming up with UNTAET in Dili, he will sign with 4W/CU3FT and received his license from the United Nations in New York. He will be active as much as possible and will give special attention to the WARC bands and 6 Meters.

Ghana (9G)

The Daily DX says that Arliss Thompson, W7XU; Ed Gray, WØSD; and Richard Henson, K5AND, will operate from Elmina, Ghana, from 26 October through 4 November. Elmina is located some 100 km southwest of the Accra, the capital city, Accra, located on the Atlantic, and has an excellent beach location.

United Arab Emirates (A6)

Don Greenbaum, N1DG, tells *The Daily DX* that he is heading back to Dubai in the United Arab Emirates to operate in the CQ World Wide SSB DX Contest. He will operate from the station of either Jamal Almak-toum, A61AO, or Saeed Almak-toum, A61AD, from 24 to 30 October. Don says this is a business trip so it will be a limited operation outside the contest except for 6 Meters and satellite. QSL requests for this operation should be sent directly to Don.

Eritrea (E3)

Chris Sauvageot, DL5NAM, and Dieter Dippel, DF4RD will return to Eritrea again according to *The Daily DX*. After a very successful trip last year as E3ØTA they will go again this year as E3ØNA to Eritrea. This year's DXpedition will also include Wolf Klier, OE2VEL, and Falk Weinhold, DK7YY. The planned period of operation will be 17 October thru 3 November.

The exact location has not been determined at the time of writing, but they will try to go to an IOTA island (AF-038). The problem is the power situation on the island and the high cost for shipping to the island. The only site on the island is under construction and should be finished by the end of September. There is no ferry service, so they will have to charter a boat and will need a truck for transport from airport to the port (5-hour trip). If they can't go to the island they will stay in the capital.

The cost of licenses there is \$500 each. They are asking the DX community for financial support. Anyone who can help support this operation is asked to please contact team leader Chris, DL5NAM, by e-mail to: dl5nam@qsl.net. The emphasis this year will be for more North America, Asia, and the low bands. Refer to their web site at: www.qsl.net/e30na.

Greenland (OX)

Look for the special call of XP1AB during the CQ Worldwide DX Contest this October. According to the *Ohio/Penn DX Bulletin* a large group of Danish DXers will activate this call for

the first time since the 1960s and they will be operating from Sondrestrom on the west coast of Greenland (NA-018). The QSL manager for this operation will be OZ1ACB.

If I remember correctly the XP prefix had been used by Americans assigned there at military bases. And, before that, they were using the KG1 prefix. But, that is a long time ago.

Trindade (PYØT)

Alert DXers were on the bands for the August DXpedition to Trindade Island (SA-010) by Ricardo Carvalho, PY1VOY, and Jose Fernandes, PY1LVF.

The following is a summary of the events from *The Daily DX*:

The ship arrived at the island on schedule on 7 August at 1900 UTC. The two operators, (Ricardo and Jose), and the military personnel were unable to disembark because of strong winds and heavy rain. All spent the night aboard the ship. On 8 August at 1000 UTC they took a five-minute helicopter ride to the island. The equipment was flown in next.

Ricardo started up as PY1VOY/PYØT with the first contact at 1401 UTC. The first day was tough with wind, cold and rain most of the day. The next day there were some improvements in the weather, however the winds continued. The PTØT call was authorized by ANATEL after the operators were already active and on the island. Ricardo adds, "We did not want to lose time while waiting for the special call sign authorization." Once the team got word of the PTØT call they quickly switched over around 1900 UTC.

The two operators made some 4,000 contacts in 80 countries.

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Jose will be handling the QSL task and it will take about two to three weeks to have the cards printed. He expects to start mailing out QSLs in mid-September. Ricardo said QSL cards via the bureau will be accepted, however the PY1 bureau is very slow. The two operators realize that many DXers were not able to work the Trindade DXpedition, as they were only able to operate for two days. They hope to keep this door open with the Brazilian Navy so they and other groups can make more two-day trips and give the opportunity to those who still need this semi-rare DXCC country.

Marshall Islands (V7)

The Ohio/Penn DX Bulletin notes that Jeff Parker, KA1GJ, has headed to Kwajalein Atoll (OC-028) in the Marshall Islands for a three-year assignment and will be active as V73GJ. All QSL requests should be sent direct via P.O. Box 1050, APO AP 96555.

South Georgia Islands (VP8)

Mike Gloistein, GMØHCQ, plans to be back in the South Atlantic later this year and early next year. *The Daily DX* says he plans to be at King Edward Point, Cumberland Bay West, in the South Georgia Islands (AN-007) signing with VP8SGK during the following dates: 24 November 2001, 10-11 January 2002, and 4-6 March 2002.

He also expects to be at Factory Cove, Borge Bay, Signy Island, South Orkney Islands (AN-008) signing with VP8SIG during the following times: 17-22 November 2001, 5-8 January 2002, 28-30 January 2002, and 27 February-2 March 2002. If you have internet access refer to: <http://www.qsl.net/gm0hqc/vp8sgk.htm>.

IOTA

Roger Balister, G3KMA, RSGB IOTA Manager, reports on the following acceptable IOTA island groups as of 1 August 2001:

- AS-083 UAØQMU/Ø Vil'kitskogo Island (resident)
- AS-159 TAØ/TT9YRE Kefken Island (Jul 2001)
- AS-159 TAØ/IZ7ATN Kefken Island (Jul 2001)

- AS-159 YMØKI Kefken Island (Jun 2001)
- EU-063 JWØPK Prins Karls Forland (Jun 2001)
- EU-113 SVØ/G4EDG Kythira Island (May 2001)
- NA-220 OX3LG Simiutaq Island (Apr 2001)
- OC-091 DU1KGJ/1 Polillo Islands (Feb 2001)
- OC-091 VE7DP/DU1 Polillo Islands (Feb 2001)
- OC-093 4H2B Batan Islands (Feb 2001)
- OC-126 4I1P Lubang Islands (Feb 2001)
- OC-244 4I1P Marinduque Island (Feb 2001)
- OC-247 YB8HZ/P Sabalana Island (Jun 2001)

August 2001 was another good month of IOTA activity. Here is a sampling of some of what has been on and has been limited to only one call for each island group. With the winter months coming this activity will begin to relax.

- AF-019 IG9/IK3AWP Lampedusa Island 13-26 Aug
- AN-006 EM1KCC Galindez Island 17-30 Aug
- AS-008 J2YAF North Izu Islands 17 Aug
- AS-012 JH4VKZ/6 Kyushu Coastal Islands 25 Aug
- AS-015 9M2/J11ETU Penang Island 10-28 Aug
- AS-017 JR6EA Okinawa Island 07-10 Aug
- AS-023 JA6DJD Amami Oshima Island 12-31 Aug
- AS-028 UAØQBA Kotelney Island 24 Aug
- AS-036 JA6EYE Iki Island 30 Aug
- AS-041 JQ1SUO/4 Oki Islands 11-13 Aug
- AS-043 JI2KLU/1 South Izu Islands 10 Aug
- AS-045 HL5FUA/5 Dokdo Island 26-27 Aug
- AS-049 JI3DST/6 Daito Islands 01-04 Aug
- AS-053 HSØ/IK4MRH Phuket Island 10 Aug
- AS-059 UAØIAS/Ø Zavyalova Island 19 Aug
- AS-066 UAØLCZ/P Popova Island 31 Aug
- AS-105 HLØY/2 Jawol Island 09-12 Aug
- AS-115 TA/IZØCKJ Kekova Island 23 Aug
- AS-117 JH4TEW/4 Honshu Coastal Islands 12-31 Aug
- AS-120 5B/IZ8CCW Agios Georges Island 25-26 Aug
- AS-122 HL2SIS/2 Backryung Island 03-05 Aug
- AS-123 TAØ/IZ7ATN Bogsak Island 20-21 Aug
- AS-131 BI7D Dong-Ao Island 17-18 Aug
- AS-147 JL2LRO/8 Okujiri Island 15-19 Aug
- AS-148 6NØYO/4 Wi Island 17-19 Aug
- EU-008 MMØBGQ/P Inner Hebrides 13-14 Aug
- EU-009 GB5RO Orkney Islands 17-19 Aug
- EU-010 GM3PPG/P Outer Hebrides 02-12 Aug
- EU-012 MMØ/DJ6AU Shetland Islands 01-13 Aug
- EU-016 9A5LO/P Solta Island 12-21 Aug
- EU-017 ID9/11SNW Lipari Islands 21-24 Aug
- EU-028 IA5/IKØYUJ Isola del Giglio 26-27 Aug
- EU-029 OZ/DH8SAM Lolland Island 08 Aug
- EU-030 OZ/DJ7RJ Bornholm Island 01-10 Aug
- EU-031 IC8/N5KME Ischia Island 10-30 Aug
- EU-032 F5NBX/P Aix Island 14-17 Aug

- EU-033 LA8RU Andoy Island 08 Aug
- EU-034 ES1QD/Ø Mahu Island 04-06 Aug
- EU-036 LA8LA Hitra Island 13-23 Aug
- EU-037 SM7/DL6JZ/P Oland Island 11-24 Aug
- EU-038 PA6VLD Vlieland Island 18 Aug
- EU-042 DL5CW/P Hallig Hooge 01-03 Aug
- EU-047 DL1BBR Norderney Island 12-30 Aug
- EU-049 SV8DCY Lesvos Island 05-09 Aug
- EU-050 I7/IZØBTV San Domino Island 18-19 Aug
- EU-052 SV8/DL4VCK/P Korfu Island 14-24 Aug
- EU-054 IF9/IT9PPG Egadi Islands 01-21 Aug
- EU-057 DLØRUG Hiddensee Island 18-19 Aug
- EU-060 SV2DGH/8 Skyros Island 24-30 Aug
- EU-064 F/DJ9RR Noirmoutier Island 17-29 Aug
- EU-066 RK3DZJ/1 Solovetskiye Island 23-24 Aug
- EU-067 SV8/IK2XYN Naxos Island 26 Aug
- EU-072 SVØJD/SV8 Skiathos Island 14-28 Aug
- EU-075 SV1TP/8 Poros Island 01 Aug
- EU-084 SKØHS/5 Vassaro Island 11-18 Aug
- EU-088 OZ/DL2SWW Kattegat Group 26-31 Aug
- EU-091 IK7VJX/P Isolotto Chianca d'Abramo 24 Aug
- EU-092 GB5SI Summer Isles 01-05 Aug
- EU-093 EA5/DK5IM/P Tabarca Island 25-31 Aug
- EU-095 F5RBB/P Ile de Jarre 23-24 Aug
- EU-096 OH1SR Korpo Island 29-30 Aug
- EU-097 OI6AY Russaroe Island 18 Aug
- EU-098 DL1HSR/P Poel Island 01-10 Aug
- EU-104 TK8T Sanguinaires islands 28 Aug
- EU-105 F/HB9BMY/P Ile de Batz 01-09 Aug
- EU-107 F6HKA/P Les Sept Iles 26 Aug
- EU-110 9A1ØHRM Briuni Islands 01-06 Aug
- EU-118 GM3PJV Flannan Islands 24 Aug
- EU-120 G4RZQ Isle of Wight 10-23 Aug
- EU-122 GBØREL Rathlin Island 19 Aug
- EU-123 GMØVIV/P Inchcolm Island 29 Aug
- EU-124 GWØNWR/P Bardsey Island 03-13 Aug
- EU-125 OZ/ØRØMO Romo Island 13-17 Aug
- EU-128 DL8GV/M Fehmarn Island 02 Aug
- EU-130 IV3NCC/P Orbi Island 19 Aug
- EU-131 IK3VIG/P Palestrina Island 05 Aug
- EU-133 RK1A/P Kubenskiy Island 05-07 Aug
- EU-136 9A6AA Losinj Island 02-31 Aug
- EU-142 ED1CLA Isla Mouro 11-12 Aug
- EU-147 RK3DZJ/1 Tiunets Island 19-20 Aug
- EU-153 UE4NMM/1 Kij Island 23-26 Aug
- EU-155 I4/IK2XDE Scanno di Goro 25 Aug
- EU-159 F6HDH/P Cordouan Island 18-19 Aug
- EU-162 UA1TBK/1 Glov Island 08-11 Aug
- EU-164 IMØ/TK4HPU Isola Tavolara 19 Aug
- EU-165 IMØR Ratti Island 03-05 Aug
- EU-169 ZA/IZ7DAS Sazan Island 16-18 Aug
- EU-170 9A4A Pag Island 01-28 Aug
- EU-171 OZØBB Mors Island 09-20 Aug
- EU-172 OZ/DL1BWU/P Fyn Island 26-31 Aug
- EU-179 UR5FEL/P Berezan Island 24 Aug
- EU-181 LZ1NG/1 Sveta Anastasya Island 11-16 Aug
- EU-188 UE1RCV/1 Sengeyskiy Island 01-02 Aug
- NA-001 DJ9HX/C6A Long Island 16-17 Aug
- NA-010 AB7GR/VE1 Cape Breton Island 12-16 Aug
- NA-014 VE9MY/P Penpleton Island 05 Aug
- NA-026 W3GSB Fire Island 18-19 Aug
- NA-034 KM4RX Anna Maria Island 08-22 Aug
- NA-036 VE7DXF Vancouver Island 16 Aug
- NA-038 XM2CWI La Madeleine Islands 01 Aug
- NA-047 VYØAAA Baffin Island 03 Aug
- NA-051 XM7SR Queen Charlotte Islands 02 Aug
- NA-053 KL7AK/P Trinity Islands 09-14 Aug
- NA-055 N1OKL/1 Islesboro Island 07-10 Aug
- NA-059 NO7F/KL7 Unalaska Island 05-13 Aug
- NA-065 N6HR/7 Whidbey Island 25 Aug
- NA-067 K4AVC/P Okracoke Island 18 Aug
- NA-068 XM2DX/9 Miscou Island 03 Aug
- NA-072 HP1XVH Contadora Island 26 Aug
- NA-077 WB8YTZ/VE2 Anticosti Island 29 Aug

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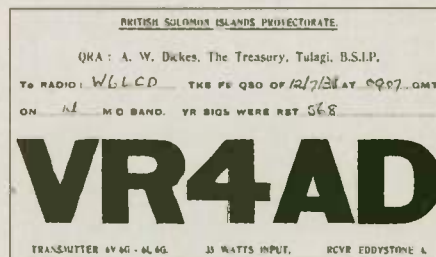
E-Mail: the599rpt@aol.com

<http://members.aol.com/the599rpt/dx.htm>

NA-084 WB8YTZ/VE2	Harrington Island	31 Aug
NA-087 KL6/KD6WW	Shumagin Islands	18-20 Aug
NA-110 AA4V	Isle of Palms	03-26 Aug
NA-111 N2MR	Long Beach Island	05 Aug
NA-113 DJ9HX/C6A	Crooked Island	17-21 Aug
NA-116 TE8AT	Chira Island	02-05 Aug
NA-127 VE1/DH8IAT	Long Island	26-30 Aug
NA-143 AB5EB	Galveston Island	04-11 Aug
NA-173 W2NTJ/VYØ	Long Island	22-31 Aug
NA-176 VE2OV/P	Perroquets Island	18-19 Aug
OC-010 V63KA	Phonpei Island	31 Aug
OC-012 V63LJ	Yap Island	10-14 Aug
OC-033 FK8HZ	Lifou Island	03-30 Aug
OC-059 V63EK/P	Kosrae Island	16 Aug
OC-066 FOØCLA	Rangihoa Island	17-31 Aug
OC-067 FO5QS	Huahine Island	09-16 Aug
OC-083 ZK1AHB	Aitutaki Atoll	12-15 Aug
OC-100 H4ØDX	Nendo Island	19-24 Aug
OC-129 K9AW/DU6	Negros Island	16 Aug
OC-130 4F8BOF	Mindanao Island	10-28 Aug
OC-137 VK4AWX	Russell Island	18-26 Aug
OC-144 YC4FIJ	Balitung Island	02-28 Aug
OC-159 ZK1AHB	Mangaia Island	10 Aug
OC-195 VK7KPB/P	Flinders Island	15-28 Aug
OC-209 YC8UFF/P	Salibabu Island	03-06 Aug
OC-210 YC8RRK	Sangihe Island	07-30 Aug
SA-008 LU1XS	Terra del Fuego	26 Aug
SA-026 PP5OW	Santa Catarina Island	13 Aug
SA-068 8R1AK/P	Wakenaam Island	04-08 Aug

Notice that Bunny was using a Zepp for an antenna. Perhaps ole' Kurt will write about one of these antennas in his column. Naw, too simple of an antenna; he'll give it to Lil' Paddle.

Now off to the Pacific we have VR4AD in the Solomon Islands, then a British colony. Or is it a protectorate?



DX dinner

Floyd Gerald, N5FG, of the Magnolia DX Association, says that they have reserved the Latimer Community Center for the December DX Dinner. Activities begin Saturday evening, 1 December, at 1800 with a steak dinner and all the trimmings. If interested contact Floyd or visit the MDXA website at <http://www.mdxa.org>.

Antique QSL department

This month I found some older cards deep down in my files. The first two were submitted by Don Gumpertz, K6OF, way back in 1987. These were contacts Don made in 1938, then signing with W6LCD when he was residing in Oxnard, California.

G5SS was the call assigned to A. "Bunny" Summers of Birmingham.



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The holder of this call was an A.W. Dickes.

Our third card is rather unusual and was submitted by Bob Goldman, K6BD, in 1993. The year was 1953, the year that Bob wandered into the marble halls in Los Angeles to take and pass his Extra Class exam. Anyone familiar with the requirements of that ticket in those days will know it was quite an accomplishment to pass it, and there were no special operating privileges then.

Bob was signing with W6OYS then and worked VQ4NZK in Kenya. Notice that the card was designed to be used for two other call areas: VQ3, now Tanzania (5H); and VQ5, now Uganda (5X). The operator was listed as George P. Breakston, W6NZK, of Burbank, California.

The whereabouts of the above three DX operators it is not known. George Breakston is no longer listed and his stateside call has been reissued.

QSL information

Joe Arcure, W3HNC, says he now has the logs for TI9CF on Cocos Island for the period 1994 through 1997. If you still need a card for this period contact Joe with the usual QSL card and SASE.

Don Field, G3XTT, Publicity Officer for the recent D68C DXpedition, says that Phil, G3SWH, is working hard on the QSL chores and says that the QSL

DX Prediction — November 2001

Maximum usable frequency from West Coast, Central U.S. and East Coast (courtesy of Engineering Systems Inc., Box 1934, Middleburg, VA 20118). The numbers listed in each section are the average maximum usable frequencies (MUF) in MHz for contacting five major areas of the world centered on Africa—Kenya/Nairobi, Asia—Japan/Tokyo, Oceania—Australia/Melbourne, Europe—Germany/Frankfurt, and South America—Brazil/Rio de Janeiro. Smoothed sunspot number = 104. Chance of contact as determined by path loss is indicated as bold *MUF for good, plain MUF for fair, and in (parentheses) for poor. UTC in hours.

CENTRAL U.S.A.						EAST COAST					
UTC	AFRI	ASIA	OCEA	EURO	SO AM	UTC	AFRI	ASIA	OCEA	EURO	SO AM
8	(13)	11	*17	*11	*17	7	16	*11	(17)	*11	*18
10	(13)	11	*17	(11)	*17	9	16	11	*17	11	*17
12	24	11	*16	19	*32	11	*31	11	*16	*19	*29
14	29	11	*27	*22	*36	13	*37	12	*30	*23	*35
16	31	(11)	23	*20	*39	15	*39	(11)	25	*22	*38
18	*31	(11)	(21)	17	*41	17	*40	(11)	(20)	*20	*40
20	*29	19	29	13	*41	19	*33	(11)	26	14	*41
22	*24	23	*34	*12	*35	21	*28	19	32	*13	*36
24	*17	19	*34	*11	*26	23	*21	19	33	*12	*28
2	*15	14	22	*11	*22	1	*19	13	22	*11	*24
4	*14	12	20	*11	*20	3	*18	12	20	*11	*21
6	(14)	*12	18	11	*18	5	*17	(12)	18	*11	*19

WEST COAST					
UTC	AFRI	ASIA	OCEA	EURO	SO AM
10	(13)	*11	*18	(11)	*17
12	(13)	11	*17	(11)	16
14	22	11	*17	18	*33
16	27	*14	*23	17	*38
18	*29	13	(20)	(13)	*40
20	*29	*25	28	(12)	*41
22	25	*26	*33	(11)	*40
24	*21	*24	*37	11	*35
2	*16	*20	*35	11	*24
4	*15	*14	*25	11	*21
6	(14)	*13	22	11	*19
8	(13)	*12	*20	*11	*18

requests are being processed in the order in which they are received. Direct requests are being dealt with first; after that bureau and e-mail requests will be answered.

As of mid-August Phil has confirmed 10,000 contacts. Please remember that the D68C team made 168,000 contacts with over 45,000 unique calls. Please do not send duplicate requests or e-mail chasers as this just slows down the whole process. You can check if your contacts are in the log by accessing the D68C log server at: www.dxbands.com/comoros.

Thanks go to the following contributors for this month's column: G3KMA,

G3XTT, W3HNC, K3ZO, N5FG, K6OF, K6BD, Northern Arizona DX Association (W7ST), WebCluster (OH2AQ), 425 DX News (I1JQJ), The OPDX Bulletin (KB8NW), DX-News (NJDXA), The Low Band Monitor (KØCS), The Daily DX (W3UR), and QRZ DX (N4AA).

We are now into the two months of DX contesting thanks to CQ, which sponsors the Worldwide DX Contests. The SSB portion is the last full weekend in October, followed by the CW portion at the end of November. New and deserving DXers will find these events an excellent chance to work some new ones and a much better satisfaction than that of the usual lazy "that's a good contact" or "when last heard" method one hears tuning across the bands. And, if that isn't bad enough, it's that "over, over" that has replaced the simple "over."

— John F.W. Minke III, N6JM, can be reached by sending snail mail to: 6230 Rio Bonito Dr., Carmichael, CA 95608, or by e-mail to: n6jm@pacbell.net.

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3D2AW	DL2AWG	ED1VDC	EA1EG	J8PA	PA5ET	PB6KW/L	PA3HDX	IZØCKJ	V63EC	JK1FNN
3D2HY	JAØSC	ED7MFD	EA7AHK	JH1AEF/4	JH1AEF	P14COM	PA3CAL	TAØ/IZØEGB	V63EK	JK1FNN
3D2XU	PA3AXU	ED8MCC	EA8AKN	JT1FBX	JG5PJJ	P14HQ	PA3CAL	IZØCKJ	V63KA	JH8BKL
3DAØWPX	ZS6WPX	EI9KLH	EI9HQ	JT1FDF/5	JA5BRQ	PJ2/AE9B	AE9B	TE8AA	V63LJ	JH8DEH
3V8MED	DL1BDF	EK17ØØA	DK6CW	JT1FYT	K4YT	PJ2/NWØL	NWØL	TF6/ON4BAM/P	V63MC	JH8BKL
3W2B	XW2A	EK17ØØS	EK6GB	JW2PA	LA2PA	PJ2/WØCG	WØCG	ON4BAM	V63OO	JA3AJ
3ZØPW	SP5JTF	EK6TA	DJØMCZ	JW7QI	LA7QI	PJ2M	KD4D	TG/DB2TR	V63YB	JH8MYB
4L1FX	DJ1CW	EM1HO	I2PJA	JW7VK	LA7VK	PJ2T	KN7Y	TK/IK1QBT	V73CW	AC4G
4N7M	YU7KMN	EN1MKN	UX7MA	JY8IL	JG1ILF	PTØT	PY1LVF	TK8T	V73MJ	JF1NZW
4W1XW	pirate	EN1ØP	UR4PWL	JY8TE	JH7FQK	PY1LVF/PYØT	PY1LVF	TL8DV	V8AAP	N2OO
4Z8GZ	DH2GZ	EO1ØB	UX5UO	K2L	WB2YQH	PY1VOY/PYØT	PY1LVF	TM5FDH	V8IAN	VE6VK
5A24PA	PA1AW	EO1ØF	URØFO	K4T	AF4MI	RA1OZ/A	RA1OZ	TM5MA	VE1/WV2B	WV2B
5A32	5A1A	EO1ØG	UR7GG	KA11/NH2	JH7BZR	RA3AUM/6	RA3AUM	TR8IG	VE2/F5TBA/P	F5TBA
5B4/HAØHW/P	HAØHW	EO1ØH	UY1HT	KC4USV	K1IED	R16LAP	UA6MF	TR8XX	VI3ØRC	VK4RC
5N4BFD	DJ9FH	EO1ØI	UR7IA	KG4DX	W4WX	RI9K	UA4RC	TRØA	V18LH	VK6NE
5N6NPD	IK5JAN	EO1ØJ	KG6AR	KH2VL	JM1LJS	RT9W	RZ9WWH	TT8DX	VK4AWX	KC6AWX
5R8EE	FR5EL	EO1ØK	UR4KWA	KH8/N5OLS	N5JA	RZ1AK/P	RZ1AK	TT8FC	VK4BRK	N5HHS
5R8ET	K1WY	EO1ØL	UR4LWA	KHØ/JA3MVI	J3MVI	S21B	KX7YT	TT8JE	VK7TS/4	VK7TS
5R8HC	F6BUM	EO1ØM	UX7MA	KL6/KD6WW	KD6WW	S21YH	7M4PTE	TY22DX	VK9CQ	PA3GIO
5U7AH	I6NLJ	EO1ØN	UX5UO	KL7AK/P	N6AWD	SNØLH	SP2QCR	TY68F	VK9XV	PA3GIO
5U7JK	I2YSB	EO1ØØZOO	UYØZG	L8ØAA/D	LU4AA	SV5/SM8C	SMØCMH	UA1CIO/P	VKØKMT	VK4KMT
5Z4TT	SP5TT	EO1ØY	UYØYA	LW9DAH	AC7DX	SV9/OE2GEN	OE2GEN	UA9ZZ/P	VP2E	N5AU
6D2X	AC7DX	EO1ØZ	UYØZG	LX/ON6CK	ON6IJ	SVØLR	HB9LDR	UAØAZ	VP5VAC	WA4JTK
6D8Z	AC7DX	EP3SP	W3HC	LXØZL	LX1KQ	SW1XV	SV1XV	UE1ZPQ	VP8LGT	VP8ON
6DØZ	AC7DX	ER1ØMD	ER1BF	LZ/IZØCKJ	IZØCKJ	SW8LH	SV1ENG	UE3DDJ	VQ9PO	W3PO
6GØV	AC7DX	EX1ØA	EX2A	N11BM/P	N11BM	SY7LH	SV7CLI	UE3DDX/P	VY2CDX	W1VE
6NØYO/4	6NØYO	EX8ØB	IK2QPR	OG3GZ	OH3GZ	T22SC	JAØSC	UE3FCW	W2T	N2OO
7L2ICS/JD1	7L2ICS	EY1ØS	DJ1MM	OHØ/SMØIEA	SM5HJZ	T32Z	N7YL	UE3FFF	W8L	K8PT
7X5JF	DJ8QP	EZ8AQ	DJ1MM	OHØEA	OH2KMG	T3ØXU	PA3AXU	UE4NMM/1	XE2GV	AC7DX
8P9JL	KØCOP	FM5GU	KU9C	OZ/ORØMO	ON4AFU	T88LL	F4TVY	UEØLLH	XE2XA	AC7DX
8P9JM	K2ZD	FM5WD	W3HKN	P29AM	NU5O	T88MO	7K1SGX	UM8AR	XEØZ	AC7DX
8R1JC	WE2K	FOØFLA	AH6HY	P29VB	N5HHS	T88D	KZ5RO	UM8CK	XEØDX	AC7DX
9A/DF9MV	DEØMST	FR/4ALU/P	I4ALU	P29WS	W4HUT	TAØ/IZ7ATN	IZØCKJ	UM8LA	XL3NJ	VA3NJ
9A/DL9CHR	DEØMST	GB2ELH	MM5PSL	PA6HQ	PA3CAL			UM8L	XM2CWI	VE2CWI
9A/NØMX	DJ2MX	GB2NBL	G3UZU					UM9AA	XM6JO	VE6JO
9A/S57GM/P	S57GM	GB5BL	G14FUE					UN5J	XM9DX	VE9DX
9A3OY	9A1CCY	GB5FI	GWØANA					UN7QX	XT2HB	F5RLE
9A5LO	OK1LO	GB5RO	GM4DZX					UPØACS	XWØX	XW2A
9A9R/P	DJ2MX	GM/W5ZE	W5ZE							
9E1S	IV3TRK	GN4GTY/P	G14GTY							
9K9O	KU9C	H44RD	EA4DX							
9M2JI	JK1AJX	H4ØDX	EA4DX							
9M6A	N2OO	HC2FN	W3HC							
9N7RB	W4FOA	HG3UHU	HA3MQ							
A45WD	YO9HP	HG8SDS	HA8PH							
A52KR	S53R	HI3HN	OE7NHT							
A52UL	I7JFQ	HKØØEP	NØJT							
A61AO	N1DG	HS4BPQ	E21EIC							
AP2ARS	ON5NT	HS6NDK	HS1CKC							
BI7D	BD7NI	HS6PAU	HS1CKC							
BV7/DL7IO	DL7VRO	HS9EQY	E21EIC							
BWØRS	BV4VE	HSØ/OZ1HET								
CE2LZR	EA5KB	OZ1ACB								
CO7KR	DL5DCA	HSØAC	G3NOM							
CO8EJ	EA5KB	HSØZCW	K4VUD							
CT1GFK/P	CT1GFK	ID9/I1SNW	I1SNW							
CT1HZE	DL8HCZ	ID9/IT9SSI	IZ8CCW							
CT3/OK2BOB	OK2BOB	IQ3V	IV3LNQ							
CW1D	CX1UU	J28VS	F4DBF							
CX2AQ	EA5KB	J3/PA3EWP	PA5ET							
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D2BF	EA8EE	J3/PA7FM	PA5ET							
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DAØBHV	DL5EBE	J38PA	PA5ET							
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 IK1QBT Antonio Gallo, Via Capo Santo Spirito 1/16, 17020 Borghetto Santo Spirito - SV, Italy

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 IV3LNQ Luigi Lenardon, P.O. Box 3959, 34148 Trieste - TS, Italy
 IZ2EER Dario Milan, Via Roma 52, 21033 Cittiglio - VA, Italy
 IZ7DOO Antonello Mastrolillo, P.O. Box 94, 70038 Terlizzi - BA, Italy
 IZ8CCW P.O. Box 360, 87100 Cosenza - CS, Italy
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Packet problems in orbit

An ARNewsline™ Interview With Frank Bauer, KA3HDO

There appears to be a growing problem involving terrestrial Packet operators who are trying to snag a contact with the automatic system on board the International Space Station. The situation involves a growing number of operators who, in their zeal to obtain a confirmation, are putting their stations into unattended 'beacon' mode and walking away. Sometimes these stations are left on for only a few hours. At other times they continue to operate – probably until the station owner remembers to check to see if a confirmed connect to the ISS has taken place.

If this were happening on some relatively uninhabited band up in the microwave region, there probably would be little said. Not that unattended

beacon operation is a good idea at any time, but when it's taking place in the heavily loaded 2-meter satellite/space subband, it causes total havoc to other inhabitants of the Amateur Radio spectrum. The problem has become an ongoing topic of conversation on numerous remailers dedicated to space operations and packet radio operations. Opinions run the gamut from "...I can't be home manning my station 24 hours a day just to contact the ISS – but I want that QSL card" to "...if Packet operators are that discourteous the Packet station on the ISS should be shut off."

In reality, there are two questions to be answered. The first is the actual level of the problem. The second is finding a solution.

One of the people best versed in this area is Frank Bauer, KA3HDO, of Silver Spring, Maryland. Bauer is the Chairman of ARISS (Amateur Radio International Space Station) Working Group and developed band

plans for spectrum utilization for Amateur Radio space operations. By profession, KA3HDO is the Chief of the Guidance, Navigation and Control Center at NASA Goddard Space Flight Center. Obviously he understands space exploration, space communications and the overall topic of Amateur Radio in space. As this problem surfaced, I called him and we talked with a recorder running. What follows is an abbreviated version of that conversation:

ARNewsline: Can you explain the problem involving automatic Packet radio operation [beaconing] to the ISS and its effect on other Ham satellites?

Bauer: The issue that has come up is there are a few Amateur Radio satellites that receive about 15 kilohertz from the 145.990 MHz frequency that is being used for Packet uplink [to ISS]. At times individuals on the ground, especially the high power stations, are actually uplinking into some of our AMSAT satellites.

ARNewsline: Which satellites are affected?

Bauer: UO-14, I believe, is one of them. Also one of the Fuji-OSCARs [is affected].

ARNewsline: How extensive is the problem?

Bauer: When AMSAT worked with me on frequencies for the space station there was a direct intent to keep the Packet uplink frequency away from the voice uplink frequency. The selection of 145.990 MHz was discussed, and one of the concerns was that this would cause interference with other satellites. For the most part, the ISS and the satellites are not over the same part of the Earth at the same time. There are times when that will happen, but it's usually not the case.

What has exacerbated the problem significantly is that individuals are leaving their Packet stations unattended and transmitting, in some cases, many times a minute to work the ISS. This

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should not be standard practice because it is introducing transmissions into the band that are not necessary.

This is a real issue and unfortunately people around the world are doing this and it causes a problem to [Amateur Radio] satellites.

ARNewsline: What's the solution?

Bauer: The most important thing is education. Individuals do not realize that when they transmit they are used to operating in a terrestrial mode. What that means in distance is between 15 to 30 miles is the maximum distance of communications. When the space station is overhead it covers almost the entire United States at the same time at one certain point. Its flight path is significant as are Ham satellites and people need to recognize that unattended operations are really discouraged for [contacts] with the International Space Station.

It is important that we encourage people to use techniques like APRS, but only in an attended mode; i.e.: they (the operators) are there to turn off their stations after a pass is over.

ARNewsline: Obviously you are looking for voluntary compliance.

Bauer: As with any aspect of Amateur Radio, the first step in anything is voluntary compliance. Also, recognizing that there are a lot of people who have never worked the satellites or contacted the space station and this is all new to them. They need to understand that unattended operation for ISS or space station is really not encouraged.

ARNewsline: This is a worldwide problem. What if you cannot get total voluntary compliance?

Bauer: It is important for people to realize that there could be consequences associated with not complying. And when I say consequences, I mainly mean that it is [negatively] impacting our Ham satellites. Because of this transmitting [unattended beaconing] the batteries on our satellites are being drained significantly and that's going to impact (i.e.: shorten) the life of those satellites.

ARNewsline: You speak of education. Where can the average Ham go to

get the knowledge that they need?

Bauer: I think the best place is on-line through the SAREX Reflector operated by AMSAT. (Information on subscribing can be found at www.amsat.org.)

Reset your TNC

One simple solution to the mounting problem of unattended ongoing beaconing is to simply stop doing it. But if you are one of those who simply must run in beacon mode, here is the proper way to do it as explained by AMSAT-NA Awards Manager Bruce Paige, KK5DO, on the ARRL Audio News "Satellite Update."

"It is imperative that those who are running their packet stations 24 hours a day on 145.990 MHz FM uplink change their TNC parameters to either beacon every 0 and after 1. This turns off the continuous beacon and turns on the beacon 1 minute after hearing a signal. You might have to consult your TNC manual if you do not have this command. This way you are only transmitting when your receiver hears something when the ISS is within view of your station."

Some year-end thoughts

As this will be the last column of the year 2001, I want to reflect for a moment. Not just at the past twelve months, rather to the 59 years that I have lived and that many of you have shared with me.

As you know, it was on 11 September that our nation was attacked by what I believe to be a bunch of cowardly and very demented Middle Eastern zealots. A group of hate-filled fanatics who apparently have decided that this world will not exist unless it exists in their vision. They are psychotics who are willing to kill, injure and maim in the name of some warped belief that destroying those who do not believe as they do will assure them a spot in whatever 'heaven' they may believe in.

What these cowards never expected was that out of the ashes of New York City's World Trade Center and the Pentagon in Washington, D.C. would

rise a group of heroes. The heroes I am talking about are the NYC Police Officers and Firefighters who lost their lives in the line of duty while doing all they could to save the innocent victims of this heinous attack on America. I'm also talking about the heroes who are clearing the rubble by hand as this is written the evening of 15 September 2001 — only six days after that attack — working against time in the hope that someone may still be alive amid the ruins.

There are some who say you do not find American heroes anymore. Not necessarily "Ham radio heroes," just the people we have looked up to and admired over the years we have been a part of this mortal coil. Well before the attacks on New York City and Washington, D.C., this subject was

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brought to mind for me by a posting to one of the "hometown Internet bulletin boards" that many of us frequent. In this case it was a board known as "da Brooklyn Stoop" wherein the following was posted by a longtime Ham radio friend named Mort Cohen, WA2ARS:

"Sixty years ago this summer (summer of '41) Millions of Americans were caught up in Joe DiMaggio's 56-game hitting streak.

Paul Simon captured the nostalgia for DiMaggio in the lyric: "Where have you gone, Joe DiMaggio? A nation turns its lonely eyes to you"

The question remains: Why are there no heroes today with DiMaggio's grandeur? Why are there no more DiMaggios?"

As I read Mort's posting, the first heroes that came to mind were two TV reporters named Aaron Fitzgerald and Larry Welk (the grandson of bandleader Lawrence Welk). They were up in a helicopter over the Los Angeles Palladium along with a number of other media choppers when the one operated by KTTV developed a problem. It headed back to Van Nuys Airport. Welk and Fitzgerald broke off their news coverage and followed the Channel 11 chopper. When the latter crash-landed just inside the airport, it was Fitzgerald who risked his own life to pull the Channel 11 cameraman and pilot to safety. In my book, these guys

are heroes of the very best kind.

But my thoughts did not stop there. I began to think about all of those whom I have/had admired in my 59 years. There were many — ranging from the super-heroes in comic books to my early television heroes like Captain Video. And, sadly, as I grew older there was the loss of a number of friends who gave their lives for our nation in the Viet-Nam War. Then I thought of my friends Larry Levy, WA2INM and John Peterson the former WA2FMF who, as teenagers, volunteered to provide communications after two planes collided over New York City with one crashing into Brooklyn. They risked their lives for their community and they were really only kids themselves. Heroes all in my eyes.

It took a few days to come up with a response. Mine was one of the last posted. As 2001 comes to a close, please permit me to share it with you. I think it is very apropos:

"What's that you say Mrs. Robinson; Jolt'in Joe has left and gone away..."

Yes, he has gone away. So have many others we idolized as youth. So has John "The Duke" Wayne. And Tom Mix. And Gene Autry. And Roy Rogers. And Captain Video (Al Hodge). And oh, so many others that we as youngsters of the 1950s came to idolize.

If I can borrow a phrase from the opening of the Superman radio and TV show — all of these people and so

many more stood for "truth, justice and the American way."

And how many young, red blooded, boys of the 1950s fell in love with a dark-haired angel named "Annette" that they saw dance across their TV screen on the original Mickey Mouse Club? And I am sure there was a male counterpart that all the "girls of the '50s" loved on that show as well. But we came to revere kids like Annette Funicello not only because they were talented and had "made it onto the small screen." We idolized them because the paradigm we grew up under told us we could do the same — even if we could not sing a note and had two left feet.

As a result, we tried very hard. Some made their version of the limelight. Most of us did not. No matter, we at least tried — guided at least in part by the likes of "Joltin Joe" and, yes, "The Mouseketeers."

So what is it we all are really looking for? Maybe these lines from the song "And That's How I Remember Yesterday" explain it:

"We looked up to cops and down on crooks. We fished with last years fishing hooks. I never feared the darkness when I woke up in the night. Because the rumble of a subway train would put me back to sleep again. And that's how I remember yesterday. A little was a lot to us and people seemed to have more trust. And that's how I remember yesterday."

Maybe what we really want is to once again be able to trust in others today as we did when we were kids growing up in a galaxy not so far away. Because the people we could trust were the biggest and most important heroes of all back then. And I will add that the people who are now taking us to war to protect America will be even greater than any we have known in the past.

To a better 2002, de Bill Pasternak WA6ITF.

— Bill Pasternak, WA6ITF, can be reached by sending snail mail to: 28197 Robin Lane, Saugus CA, 91350; or by sending e-mail to: newsline@arnewsline.org.

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CALIFORNIA

Amador County ARC. P.O. Box 1094, Pine Grove, CA 95665. Meets 1st Thurs./monthly, 7:30 p.m., Jackson Sr. Cntr., 229 New York Ranch Rd., Jackson, CA 95642. Info: 146.835. 9/02

Contra Costa Communications Club, Inc., WD6EZR/R. P.O. Box 20661, El Sobrante, CA 94820-0661. Meets 2nd Sun./monthly (except May & Dec.), 08:00, Denny's, El Cerrito, CA. 145.110 PL 82.5 Info: S. Clark, KB6SEI, (510) 724-0158. 7/02

Downey Amateur Radio Club Inc., W6TOI. Meets 1st Thurs./monthly, 7:30 p.m., So. Middle Sch. cafeteria, 12500 S. Birchdale, Downey, CA. VHF net W6GNS rpt. 146.175(+) Thurs., 7:30 p.m. http://www.downeyarc.org. Info L. Vaughn, kd6nzw at kd6nzw@downeyarc.org 8/02

El Dorado County Amateur Radio Club. P.O. Box 451, Placerville, CA 95667. Meets 4th Thurs./monthly, 7:15 p.m., Federated Church, 1031 Thompson Way, Placerville. Web: http://edcarc.tripod.com. Net: Thurs., 7:30 p.m. 147.825(-) PL 82.5 9/02

Fresno Amateur Radio Club. Meets 2nd Fri./monthly, 7:30 p.m., Ernie Pyle School, 4140 N. Augusta, Fresno, CA. 146.94(-) 223.94(-) 1/02

Garlic Valley ARC (GVARC). Meets last Sat./monthly, 8 a.m., The Little House Restaurant. Exit 101 at Monterey Rd., Gilroy. Info: Tony Armendariz, AD6ID@arrl.net. Talk-in: 147.825/-600KHz K6THR/R 7/02

Golden Empire Amateur Radio Society, (VEC). P.O. Box 508, Chico, CA 95927. Club call W6RHC, rpt. 146.85(-). Meets: 3rd Fri./monthly, 7:30 p.m. at 346 Cherry St. (Library Rm.), Chico. 7/02

Golden Triangle Amateur Radio Club. P.O. Box 1335, Wildomar, CA 92595. Meets 4th Mon./monthly, 7:30 p.m., Rancho Water Dist., 42135 Winchester Rd., Temecula, CA. Rptr: W6GTR 146.805 (-) PL 100. Info: H. Wijma, AC6VN, (909) 693-2383. E-mail: ac6vn@cs.com. Web: http://www.qsl.net/gtarc 10/02

Livermore Amateur Radio Klub, (LARK). Meets 3rd Sat./monthly, 9:30 a.m., City Council Chamber, 3575 Pacific Ave., Livermore, CA. Net Mon. 1900 on 147.12(+). Info: LARK Sec., P.O. Box 3190, Livermore, CA 94551-3190.(925)373-1386. 2/02

Marin Amateur Radio Club. Box 6423, San Rafael, CA 94903. Meets 1st Fri./monthly, 7:30 p.m., also every Sun., 8 a.m. to 11 a.m. at Alto Clubhouse, 27 Shell Rd., Mill Valley, CA. Website: W6SG.Net 7/02

Mount Diablo Amateur Radio Club. P.O. Box 23222, Pleasant Hill, CA 94523. Meets 3rd Fri./monthly, 7:30 p.m., Our Savior's Lutheran Ch., 1035 Carol Ln, Lafayette, CA. Net Thurs. 7:30 p.m. on 147.06(+) PL 100Hz. Info: (925) 932-6125. 10/02

Nevada County ARC. Meets 2nd Mon./monthly, 7 p.m., Salvation Army Bldg., 10725 Alta St., Grass Valley, CA. Net Tues. 7 p.m. 147.015. Info: George, KQ6SA, (503) 447-2295, www.NCARC.org 4/02

North Hills Radio Club. Meets 3rd Tue./monthly, 7:30 p.m., Arden Lib., Watt & Northrup, Sacramento, CA. Nets 8 p.m. Tue., (except 3rd Tue.) & Thur., 145.19- PL 162.2, 224.40-. Info: (916) 944-1464. nhrc@k6is.org, http://www.k6is.org 4/02

Orange County ARC. Meets 3rd Fri./monthly, 7:30 p.m., Orange County Red Cross, 601 N. Golden Circle, Santa Ana, CA. Talk-in 146.550 (S). Contact Bob Buss, KD6BWH, (714) 534-2995, www.w6ze.org 4/02

Poinsettia ARC. Meets 1st Thurs./monthly, 7:30 p.m., First Christian Ch., Telegraph Rd. & Teloma Dr., Ventura, CA. Info: Geo. Myers, (805) 644-1131. 9/02

River City A.R.C.S. Meets 1st Tues./monthly, 7:30 p.m., Sacramento Society for the Blind, 2750 24th St., Sacramento, CA. License classes offered. Info: (916) 492-6115. 10/02

Sacramento ARC. Meets 2nd Wed./monthly, 7 p.m. Sac. Blood Ctr., 32nd St. & Stockton Blvd., Sacramento, CA. Info net, noon on rpt. W6AK/R 146.91(-). T. Preston, KQ6EO, (916) 722-9358 or L. Ballinger, WA6EQQ, (916) 393-4775. http://k6ekb.net/sarc/ 9/02

Sierra Foothills ARC. P.O. Box 1005, Newcastle, CA 95658. Meets 2nd Fri./monthly, 7:30 p.m., Auburn Library (Beecher Rm.), 350 Nevada St. Thurs. nets 7:30 p.m. 145.430(-) PL 162.2. Info: M. Diridoni, mdiridoni@rsvl.net 8/02

Sonoma County Radio Amateur, Inc. W6LFJ, P.O. Box 116, Santa Rosa, CA 95402. (707) 579-9608. Meets 1st Wed./monthly, 7:30 p.m., Agilent Tech., 1400 Fountain Grove Pkwy, Santa Rosa. Net each Tues. 7 p.m., W6SON. Rptr. 146.73(-) PL 88.5. www.cds1.net/scra 2/02

South Bay ARC. P.O. Box 536, Torrance, CA 90508. Meets 3rd Thurs./monthly, 7:30 p.m., Torrance Memorial Hosp., 3330 Lomita Blvd., Torrance, CA. Talk-in on WB6MYD rpt. 244.38(-). Info: (310) 328-0817. 10/02

Stanislaus Amateur Radio Assoc., Inc. (SARA). P.O. Box 4601, Modesto, CA 95352. Meets 3rd Tues./monthly, 7:30 p.m., Modesto Police N/E area Substation, 3705 Oakdale Rd. Modesto. Net 1.2+4 Tues. 7:30 p.m. 145.390(-)PL136.5 2/02

Tehachapi-Southern Sierra ARS. Meets 2nd Thurs./monthly, 7 p.m., except July, 125 East F St., Tehachapi, CA (Veteran's Hall). Info: KD6KMN, (661) 822-5995. www.ssars.net, 147.06(+), 224.42(-) PL 156.7. Pkt 145.090(S) connect to W6PVG-7. ARES nets 7 p.m. 147.51(S) Mon. 1/02

Tri-County Amateur Radio Assoc. P.O. Box 75, Claremont, CA 91711-0075. Meets: 2nd Mon./monthly, 7:30 p.m., Brackett Airport, Pilot's Lounge in Adm. Bldg., La Verne, CA. Info: Alvin, W6EKZ at w6ekz@arrl.net or (909) 622-9930. 2/02

Trinity County ARC. P.O. Box 2283, Weaverville, CA 96093. Meets 2nd Wed./monthly, County School. Adm. Building, Weaverville, 7:30 p.m. Rptrs: WA6BXN 146.73(-) PL 85.4, W6HOR 146.925(-) PL 85.4. http://www.tcoe.trinity.k12.ca.us/~tcarc 2/02

Vaca Valley Radio Club (VVRC). Meets 2nd Wed./monthly, 7:30 p.m. (Board mtg., 7 p.m.) Vaca Fire Dist. Stn., Vine St., Vacaville, CA. Rptr. WD6BUS 145.47(-) PL 127.3. Net Tues. 7 p.m. Info: C. Hood (707) 451-8996. 10/02

West Coast Amateur Radio Club, (WCARC). P.O. Box 2617, Costa Mesa, CA 92628. Meets 3rd Thurs./monthly, 7 p.m., Fountain Valley Sch. Dist. Office, 17210 Oak St., Fountain Valley, CA. Info: Jane, KD6ODV, (714) 531-6707 4/02

Westside Amateur Radio Club - Los Angeles. P.O. Box 11092, Marina del Rey, CA 90295. Meets 4th Tues./monthly, 7:30 p.m., ARC Bldg., 11355 Ohio Ave., W. L.A., CA (VA Cntr. grounds). Net Tues., 8 p.m. 147.195+, PL100, except mtg. night. Website: http://www.qsl.net/wa6rc Messages: (310) 848-1354 11/01

Willits Amateur Radio Society, (WARS). P.O. Box 73, Willits, CA 95490. Meets 4th Mon./monthly, 7 p.m., Brooktrails Fire Dept. 2 NW Willits. http://www.saber.net/wars. Talk-in: 145.13(-), PL 103.5. 12/02

COLORADO

Boulder Amateur Radio Club (BARC) Meets 3rd Tues./monthly, 7:00 p.m., NIST room 1107, 325 So. Broadway, Boulder, CO. Talk-in: 146.70(-). Information: (303) 380-6540, e-mail: BARC50@arrl.net or www.thisistrue.com/barc.html 10/02

FLORIDA

Gulf Coast ARC. P.O. Box 595, New Port Richey, FL 34656. Meets 4th Mon./monthly, 7:30 p.m., Marchman Tech. Ed. Cntr., 7825 Campus Dr., Bldg. C, Rm C122, New Port Richey. WA4GDN rpters. 146.67 (-) & 145.33(-), serving all of Pasco County. 1/02

Highlands County ARC, Inc. Meets 3rd Mon./monthly 7 p.m., Agri Civic Cntr, (HWY 27 So.) Sebring, FL. Rptrs: KK4LI 147.045 & KE4WU 442.350. Club Net: every Wed. on 147.045, 8 p.m. ARES Net: every Wed., 147.27 at 7:30. Web page: www.strato.net/~hamradio 7/02

Okeechobee ARC. Meets 1st Mon./monthly (except holidays), 7 p.m., Village Square Restaurant, 301 W. South Park St., Okeechobee, FL. Talk-in: 147.195(+), PL100. 9/02

Port St. Lucie ARA. P.O. Box 7461, Port St. Lucie, FL 34985. Meets 2nd Fri./monthly, St. Andrews Lutheran Church, 295 Prima Vista Blvd. Contact: Roy Cox, (561) 340-4319. www.qsl.net/pslara or 146.955-. 2/02

GEORGIA

Cherokee Capital ARS. Meets 3rd Thurs./monthly, 7 p.m., Trinity Baptist Church, 1170 Rome Road, SW (GA Hwy 53) Calhoun, GA. 146.745(-). Info: Felton Floyd, AF4DN, (706) 629-0369. www.qsl.net/k4woc 1/02

Gwinnett Amateur Radio Society, (GARS). P.O. Box 88, Lilburn, GA 30048. Meets 3rd Thurs./monthly, 7:30 p.m., Gwinnett Central Baptist Church on Gwinnett Drive, Lawrenceville, GA. 147.075+ PL 82.5. Contact: Carol Gann, (770) 962-7897, carolgann@mindspring.com, www.gars.org. 10/02

HAWAII

Big Island Amateur Radio Club. P.O. Box 1938, Hilo, HI 96721. Meets 2nd Sat./monthly, 2 p.m., Keau Community Ctr., behind Fire Station on Old Volcano Rd., Keau. Talk-in on 146.88 (-). Lunch, 11 a.m. Fridays, Hilo Hawaiian Hotel - Queen's Court Rest. 11/01

Hawaii QRP Club. Meets daily at World Headquarters, 8-10 a.m., Jack In The Box Restaurant, mile 2, Volcano Highway, Hilo. Contact: via e-mail: kh6b@juno.com for info. 3/02

Koolau Amateur Radio Club, (KARC). 45-145 Mikihilina St., Kaneohe, HI 96744. Meets 2nd Sat./monthly, 9:30 a.m., Hoomaluhia Botanical Garden., Kaneohe, Hawaii. Information: (808) 235-3042. http://www.chem.hawaii.edu/karc/ 10/02

ILLINOIS

Dupage Amateur Radio Club. (DARC). P.O. Box 71, Clarendon Hills, IL 60514. Meets 4th Mon./monthly, 7:30 p.m., Fire Stn. #3, 6015 S. Cass Ave, Westmont, IL. Net Sun., 9 p.m. on 145.25. W9DUP rpters., 145.25(-) 107.2PL, 442.55(+), 114.8PL, 224.68 (-). www.w9dup.org 11/01

Fox River Radio League. P.O. Box 673, Batavia, IL 60510-0673. Meets 2nd Tue./monthly, 7:30 p.m., Old Bank Bldg., 900 No. Lake St., lower level, Northgate Shopping Ctr. & Rt. 31, Aurora, IL. 10/02

Peoria Area Amateur Radio Club, (PAARC). P.O. Box 3508, Peoria, IL 61612. Meets 2nd Fri./monthly, Red Cross Chapter House, 311 W. John Gwynn Jr. Ave., Peoria, IL. Voice mail: (309) 692-3378. Rptrs: 147.075(+) & 146.85(-). 10/02

Schaumburg ARC. P.O. Box 68251, Schaumburg, IL. Meets 3rd Thurs./monthly, 7 p.m., Rec. Center, Bode and Springinguth Roads. (847) 798-5248. <http://members.aol.com/sarcadio> 11/01

LOUISIANA

Baton Rouge ARC. Meets last Tue./monthly, 7 p.m., Catholic High School, 855 Hearstone Dr., Baton Rouge, LA. Net: 146.79MHz, 8:30 p.m. Sun. www.brac.org. E-mail: W5GIX@aol.com. 2/02

W5GAD Jefferson ARC Inc. P.O. Box 73665, Metairie, LA 70033. Gen. mgt. 4th Thurs.; Board, 2nd Thurs.; Open House 1st, 3rd, 5th, (all) 7:30 p.m., Clubhouse, Metairie Play-ground, 1521 Palm St., Metairie. (504) 831-1613. Net Tue. 9 p.m. 145.37 (PL 114.8). 7/02

MARYLAND

Maryland Mobileers ARC (MMARC). P.O. Box 935, Severn, MD 21144. Meets 1st Fri./monthly, 7:30 p.m., Baldwin Hall, Generals HWY, Millersville. Info net ea. Mon. 8:30 p.m. on 146.805(-), tone 107.2 Hz. <http://www.qth.com/mobileers> 8/02

MASSACHUSETTS

Quannapowitt Radio Assoc., (QRA) Meets 3rd Thur./monthly, 7:00-9:00 p.m. at Wakefield MA Public Library, 345 Main St., Wakefield, MA, Sept. to June. Info: Jeffrey S. Hollis, W1CKH, (781) 944-6218. 3/02

MICHIGAN

Chelsea Amateur Radio Club, Inc., WD8IEL Meets 4th Tues./monthly, 7 p.m., Key Bank, 1478 Old Chelsea-Manchester Rd., Chelsea. Info: Bill Altenberndt, WB8HSN, (734) 475-7938 Rpt: 145.450(-). 5/02

Genesee County Radio Club, Inc. Meets 3rd Tues./monthly, 7:30 p.m., Genesee Area Skill Center, G-5081 Torrey Rd., Flint, MI. Info on 147.340. 10/02

Hlwatha Amateur Radio Assoc. of Marquette Co. P.O. Box 1183, Marquette, MI 49855. Meets 1st Thurs./monthly, 7:30 p.m., 108 Stratofort, K.I. Sawyer AFB, MI. For info contact: Richard Schwenke, N8GBA, (906) 249-3837. www.qsl.net/k8lod 11/02

MINNESOTA

St. Cloud Amateur Radio Club. Meets 3rd Thurs./monthly, 7 p.m., Radio Club Bldg., 401 4th St. N., Waite Park, MN 56387. Info: (320) 255-1410, 146.94 or 147.015 or www.w0sv.org 2/02

MISSOURI

Macon County ARC. P.O. Box 13, Macon, MO 63552. Meets last Thurs./monthly, 7 p.m., Macon R-I High Sch., rm.167. Net every Wed., 8:30 p.m. 146.805. E-mail: nopr@arrl.net 3/02

NEVADA

Carson Valley Radio Club (CVRC). Meets: 3rd Sat./monthly, 10 a.m. (Feb., Apr., Jun., Aug., & Oct.), Hill-top Com. Church, 3616 No. Sunridge Drive, Carson City, NV. Rptr.: 147.270(+). <http://www.cvrc.net>. For information: Dick Flanagan, W6OLD, (775) 267-4900, or w6old@arrl.net 4/02

Frontier Amateur Radio Society, (FARS). Meets: 2nd Sat./monthly, bkfst. mtg. 9 a.m., Country Inn, 1990 West Sunset, corner of Valle Verde, Henderson, NV. Info: J. Frye, NW7O, (702) 456-5396 or B. Scanborough, WA6ASI, (702) 269-9551 10/02

Sierra Intermountain Emergency Radio Assoc., (SIERA). Meets 2nd Thurs./monthly, 7:30 p.m., Minden Med. Cntr, Hwy 395 & Ironwood Dr., Minden, NV. Info: George Uebele, WW7E, (775) 265-4278, ww7e@arrl.net, Rpt. 147.330 MHz. 1/02

NEW HAMPSHIRE

Port City ARC, (PCARC), W1WQM. P.O. Box 1587, Portsmouth, NH 03802. Meets 1st Wed./monthly (Sept.-June), The Edgewood Ctr., 928 So. St., Portsmouth. Rptr. 146.805(-) PL 127.3, 110.9, 88.5. 2/02

NEW JERSEY

Bergen Amateur Radio Association, (BARA). P.O. Box 304, Hackensack, NJ 07601. Meets 1st Sun./monthly, New Milford Elks Lodge, Patrolman Ray Woods Dr., New Milford, NJ 07646. Nets: 28.350 Mon. 9 p.m., 146.79(-) 9 p.m. Wed. 8/02

Jersey Coast DX Assoc. (JCDXA). P.O. Box 357, Bradley Beach, NJ 07720. Meets 4th Wed./monthly, 7:30 p.m., MARS Station on Ft. Monmouth, Rt. 35 & Tinton Ave., Eatontown, NJ. Info: Mike, KC2Q (732) 774-1095 kc2q@arrl.net 3/02

The Garden State Amateur Radio Assoc., (GSARA). Meets 1st & 3rd Wed./monthly, 8 p.m., MARS Bldg., Fort Monmouth, NJ. Info: B. Buus, W2OD, (732) 946-8615. 2/02

South Jersey Radio Assoc., (SJRA), K2AA. Meets Jan.-Oct., 4th Wed./monthly, 7:30 p.m. (Nov.-Dec. 3rd Wed), Bloomfield Fire Hall, Pennsauken, NJ. Talk-in: 145.29(-) rptr. 10/02

NEW YORK

Amateur Radio Association of the Tonawandas, (ARATS). P.O. Box 430, No. Tonawanda, NY 14120. Meets 3rd Tues./monthly (except July & Aug.), 7:30 p.m., Sweeney Hose Co., 499 Zimmerman St., No. Tonawanda, NY. Talk-in: 146.955(-) rptr. W2SEX. 2/02

Genesee Radio Amateurs, (GRAM). P.O. Box 572, Batavia, NY 14021-0572. Meets 3rd Thurs./monthly, 7:30 p.m. (except Jul Aug Dec), Salvation Army Com. Cntr, 529 East Main St., Batavia, NY. URL: <http://hamgate.sunyerie.edu/~gram> 9/02

Hall of Science ARC. P.O. Box 150131, Kew Gardens, NY 11415. Meets 2nd Tue./monthly, Hall of Science Bldg., 47-01 111 St., Flushing Meadow Park, 7:30 p.m. Info: Voice mail (718) 760-2022. 3/02

PROS, Pioneer Radio Operators Society. Meets 1st Wed./monthly, 7 p.m., Sardinia Town Hall, Savage Rd., Sardinia, NY. K. Moon, N2IFG, (716) 652-0923. 8/02

South Towns Amateur Radio Soc. (STARS). Meets 1st Thurs./monthly, 7 p.m., Hamburg Youth Cntr, Prospect Ave. Hamburg, NY (exc. Jul, Aug @ NIKE Base). Info: N2TEZ, 120 University Ave., Depew, NY 14043. Rpt: WB2ELW 147.090 (+) PL107.2 www.WB2ELW.com. 2/02

Suffolk County Radio Club. P.O. Box 283, Shirley, NY 11967. Meets 3rd Tues./monthly, 8 p.m., Bohemia Rec Ctr., Ruzicka Way, Bohemia, NY. Contact: Leskb2zhf@aol.com. Club info: (631) 399-4041 8/02

Westchester Emergency Comm. Assoc., (WECA). Meets 2nd Mon./monthly, 7:30 p.m., Westchester County Ctr., White Plains, NY. Contact WECA INFO LINE (914) 741-6606 for details. Talk-in WB2II/R 147.06(+) PL 114.8/2A. 11/01

Yonkers ARC, (YARC). Meets 2nd Sun./monthly, 10 a.m., 1st Pct., Yonkers Police Station, E. Grassy Sprain Rd., Yonkers, NY. Info: P.O. Box 378, Centuck Sta., Yonkers, NY 10710. (914) 963-1021. 146.865(-), 440.150(+). 2/02

NORTH CAROLINA

Randolph ARC. Meets 4th Tues./monthly, 7 p.m., Asheboro Pub. Lib, NC, Worth & Cox St., downstairs mtg. rm. Talk-in KJ4AV Rpt., 147.255+ Info: Butch, WS4H, (butch@atomic.net), or John, W4ZJN, (336) 498-1113. Net. Mon., 8 p.m. 147.255+ Rpt. 6/02

Stanly County Amateur Radio Club. Stanfield, NC. Meets 4th Thurs./monthly, 7 p.m. Talk-in 146.985(-) for location. Wed. net 9 p.m. 146.985(-). Fri. tech net 9 p.m. 147.390(+). Ph: (704) 888-4815. www.mdsmm.com/scarc/ 7/02

OHIO

Ashtabula County ARC. Ken Stenback, WBKS (964-7316). County Vo-Ed School, Jefferson, OH. Meets 3rd Tue./monthly, 7:30 p.m., County rptr., 146.715(-). 2/02

Clyde Amateur Radio Society (CARS). Meets 2nd Tue./monthly, 7:30 p.m., Municipal Bldg., Clyde, OH 43410. NF8E rptr. 145.35(-) and 442.625(+) MHz. Net Sun. 9 p.m. Info: E. Remaley, K8BCAS. 1/02

Van Wert ARC, Inc. Meets 1st & 3rd Sat./monthly, 8 p.m., Van Wert County EMA Office, 1220 Ridge Rd., Van Wert, OH 45891. Call-in: 146.25/.85. www.redrival.com/w8fy 7/02

OREGON

Central Oregon Coast ARC. P.O. Box 254, Florence, OR 97439. Meets every Wed., Bliss' Route 101 Restaurant at Hwy 101 & 12th St. Net Wed. 7 p.m., 146.80(-) 100hz tone. Info: 997-2323 or 997-4074. 9/02

Umpqua Valley Amateur Radio Club, Inc. P.O. Box 925, Roseburg, OR 97470. Meets 3rd Thurs./monthly, 7:30 p.m., Douglas County Court House, Rm. 310, Roseburg, OR. Info: K6AZW (541) 784-3621 or 146.90(-) (PL100). 10/02

PENNSYLVANIA

Mercer County ARC, W3LIF. P.O. Box 996, Sharon, PA 16146. Meets 4th Tue./monthly, 7:30 p.m., Shenango Valley Med. Ctr, Farrell, PA. Net, Thurs. 9 p.m. on 145.35(-) W3LIF, Digi. 147.585. 8/02

TEXAS

Tri-County ARC for Parker, Tarrant & Wise Counties, (WC5C). Meets 1st Sat./monthly, 6:30 p.m., El Paseo Restaurant, Stewart St. at Main, Azle, TX. Info: kb5yilg@yahoo.com or (817) 291-5816 2/02

VIRGINIA

Mt. Vernon ARC, (MVARC). Meets 2nd Thur./monthly (except Dec.), 7:30 p.m., INOVA Mount Vernon Hospital, 2nd floor, ENG Conference Cntr. Rm. Info: Bob, KT4KS, (703) 765-2313. E-mail: mvarc@juno.com. Web: www.mvarc.org/. Net: Tue., 8:30 p.m. 146.655-. 10/02

Ole Virginia Hams ARC, (OVH). Meets 3rd Mon./monthly, 8 p.m., Northern Virginia Electric Coop. Tech Cntr., 5399 Wellington Rd., Gainesville, VA. Info: Mary Lu, KB4EFP, (703) 369-2877. <http://www.qsl.net/olevahams> 3/02

Portsmouth ARC. Meets 4th Thur./monthly, 7:30 p.m., Am. Red Cross Chapter house, 700 London Blvd., Portsmouth, VA. Talk-in 146.850. Info: C.I. Clements, Pres. (757) 484-0569. <http://www.w4pox.tripod.com/PARC/> 9/02

Southern Peninsula Amateur Radio Klub, (SPARK). Meets 1st Tue./monthly, 8 p.m., Sal. Army Bldg., Big Bethel Rd, Hampton, VA. Info: Dave Jarrett, W9RCC, (757) 713-5212 or e-mail: w4qr@arrl.net. Talk-in on 444.55+ PL167.9 7/02

Virginia Beach ARC. Meets 1st Thurs./monthly, 7:30 p.m., Virginia Wesleyan College, Wesleyan Drive off North Hampton, Village 2 Commons, Graybeale Bldg., Virginia Beach, VA. 2/02

WEST VIRGINIA

Tri State Amateur Radio Association Meets 3rd Tues./monthly, 7p.m., Museum of Radio & Tech., 1640 Florence Ave., Huntington, WV 25701. (304) 525-8890. 8/02

WYOMING

University ARC. Meets 1st Tues./monthly, 7:30 p.m., Univ. of WY, Engineering Bldg., rm. 2100, Laramie, WY. 146.01/61. 12/01

For information on how to get your club listed in "Visit Your Local Radio Club," plus receive many other benefits, write to: Club Liaison, **Worldradio** 2120 28th St. • Sacramento, CA 95818

Do you respond to an emergency or wait to be called?

As many of you, I sat in stunned silence Tuesday, 11 September 2001 as terrorist acts of war were inflicted upon America. Days later, I'm still in shock and express disbelief that such events would even be contemplated by a terrorist group. As one religious leader said, these people do not believe in the same God I do. The God I believe in would never sanction such horrific acts of violence.

Several hours after the initial events, I wandered about my neighborhood and was struck by the silence. There were few cars on the streets. I saw no children playing in yards. It was surreal. The sky was blue and on such a beautiful day you would see people working in yards and children out and about. This day, however, there was only silence as residents sat in stunned silence, watching world-changing events unfold.

I also noticed a silence in my shack. Where police scanners and other radios would be alive with various traffic, it seemed as if every agency had suffered a mysterious blackout. Amateur Radio repeaters were also quiet.

The normally busy links into California and Nevada were silent. Once in a while a subdued call would be heard and then silence would follow.

One or two ARES stations inquired as to any local alert and one station contemplated contacting the Red Cross to see if they would be needing support. Most seemed too stunned to understand or contemplate what to do.

I tuned around 20 Meters and found several nets up and operating and was impressed with the discipline displayed by those who acted as net control and those stations checking in.

Several nets were operating from New York as operators attempted to handle health and welfare messages. As you might guess, telephone circuits were mostly non-functional into New York and cellular phones were unusable.

As I monitored the New York nets,

I could hear despair in the voices as they attempted to formulate some sort of response. It was quickly apparent that little could be done as the enormity of the event became clear. Frustration became the adjective of choice as groups could only watch in disbelief and stand ready for calls to action that never came.


I received e-mail from Civil Air Patrol members in various parts of the country expressing their outrage at events and frustration that they could not rush to the scene and be of service. I've always cherished one particular value shared by volunteer groups — the desire to serve others. The most difficult part of being part of a service group is being unable to respond.

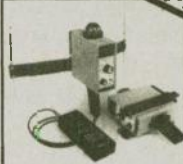
We may know in our hearts that it would be futile to be on-scene, but we still want to be there, to do anything we can to serve another and relieve suffering.

Because of this feeling of wanting to help, there were several groups around the country that prepared to leave for New York, believing they had been requested. The leader of one group realized the SAR team was caught up in the emotion of the moment and sought to get confirmation that the request for their assistance came from the incident command. As he checked, he discovered that no such request had been made. He reflected that had his SAR team responded, they would have borne their own expenses and would have found no assignment awaited them on scene.

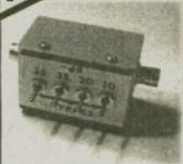
The lesson that SAR group learned was that mutual aid requests must either be pre-planned in writing, or received in writing from the agency in command of the incident. As you

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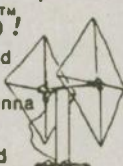


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plan local responses with agencies, it is advisable that you put the "how" and "when" into writing. Local agencies may stipulate that you auto-respond in the event of a major event, even leaving the exact definition of "major" up to your group leadership. Without such agreements in place, you may respond but find nothing to do and officials wondering why you are there. In the absence of such pre-planning, it is wise to allow your group's leadership to take the time to coordinate a response with the incident command. While you may feel a normal desire to quickly grab your equipment and head to the scene, proper coordination may prevent unneeded confusion.

In the event you are requested to travel some distance (for example, from Utah to New York) one would always be wise to obtain written authorization for the travel and obtain some way to contact the requesting agency for both confirmation and notification of your progress. One reason for the written authorization is that it usually includes some indication as to what assignment you will be responding to undertake. In major events, a group that may be geared up for communications is confused with, perhaps, a support group and you'll arrive with equipment not actually needed.

To an incident commander, the term "communications"

can be anything from messenger service, command post telephones, satellite links, to two-way radio support. Knowing what you're expected to do upon arrival allows you to take what is needed and ensure your talents are actually what the incident commander wants.

I was saddened as I was reminded that public service and search and rescue often poses significant risk. Eyewitness accounts of firefighters and police officers headed up emergency stairwells moments before the World Trade Center buildings collapsed brought anguish to my heart. These selfless men and women who gave their lives in service to others certainly have a spot reserved for them in Heaven. This brings home the reality also of loved ones who agonize every time a responder, volunteer or professional, is called to the scene of an emergency. Words are inadequate at times like this when several hundred perished

attempting to serve thousands.

Tales of heroism will certainly come to light as we learn of those aboard Flight 93 that perhaps chose to place their lives in jeopardy to prevent terrorists from striking a target. We'll hear, too, of those in the Trade Center buildings perishing because they chose to slow their evacuation as they helped others who were disabled or in need of assistance in descending emergency stairs.

It is my hope that we teach others, especially our youth, that service to another is what makes heroes. As I visited with youth in a church setting, I attempted to give them an understanding that heroism is not only action but a set of values that places others before self. Selfish people do not become heroes. People without values do not become heroes. Heroes are those whose ultimate desires are to serve others — under any circumstance, despite peril to themselves.

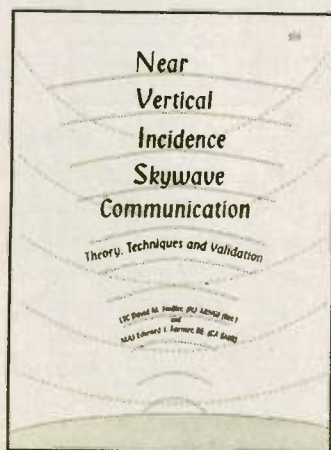
My thanks to all of you who volunteer your time and talents to others.

You are heroes! May you find peace and joy in your willingness to serve, and may God bless you!

— Jerry Wellman, W7SAR, can be reached by sending snail mail to: P.O. Box 11445, Salt Lake City, UT, 84147; or by e-mail: jw@desnews.com.

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Amateurs missing in attack

At least four Amateur Radio operators are among the many still missing in the aftermath of the 11 September attack on the World Trade Center in New York City. The attack also destroyed the major TV and radio transmitting site atop one of the twin towers.

The hams reported missing so far include: Steven A. "Steve" Jacobson, N2SJ, 53, of New York City, a transmitter engineer for WPIX TV. William V. "Bill" Steckman, WA2ACW, of W. Hempstead, New York, a transmitter engineer for WNBC TV. He was well known in the NYC area and ran a number of repeaters from the World Trade Center, most notably the 434 MHz ATV repeater.

Robert D. "Bob" Cirri Sr, KA2OTD, 39, from Nutley, New Jersey and the ARRL District Emergency Coordinator for Hudson County. A Port

Authority police officer, Cirri was on the job helping to evacuate workers from the building when it collapsed.

Michael G. Jacobs, AA1GO, 54, from Danbury, Connecticut. Jacobs worked at Fiduciary Trust Company International, which had offices in the World Trade Center.

The collapse of the World Trade Center brought down the master TV transmitting antenna that served all but one television station in New York City, as well as several radio stations and amateur repeaters. "The broadcast community is in absolute shock," said Hudson Division Vice Director Steve Mendelsohn, W2ML, who works for ABC News. "We all knew transmitter engineers, we all knew people who worked up in those towers near those big television transmitters, and they're gone."

Mendelsohn said many viewers in

the Greater New York City Area who are not on cable can only see WCBS, channel 2, which maintains its transmitter site on the Empire State Building. WCBS has offered assistance and space to help the other stations get back on the air from its site, he said.

"None of the other transmitters exist anymore. They're in the rubble along with the master antenna system, hundreds and hundreds of two-way radio system antennas, and boxes and, of course, untold thousands of people who perished."

There was cause for rejoicing in the case of another amateur who worked in the World Trade Center. Rob Nall, WVØS, reports that his friend, Herman Belderok, Jr, KBØEBB, managed to get out of the building just minutes before the structure collapsed.

—ARRL Letter

Portable operation restored

According to sources in the UK, while foot and mouth has not gone away, the outbreak appears to have reached a point at which controlled access to the countryside is acceptable. Also, most footpaths have been reopened. As a result, the Radio Society of Great Britain's High Frequency and VHF Contests Committees have announced that as of 1 September, portable contests on both HF and VHF will resume.

In order to minimize any risk of spreading foot and mouth disease, participating groups are being asked to abide by a code of practice to avoid spreading any remnants of the disease. They note that Foot in Mouth disease is still out there, so UK hams taking to portable locations have to be wary and keep within the restrictions imposed.

—RSGB, Newsline

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Oh! Oh! Ohm's Law

One of the first things a good teacher learns is that when giving a lesson on technical material, you must closely monitor the responses and attentiveness of your students. My rule of thumb is: when their eyes start rolling backwards I get off the topic and go on to something else lighter or more fun.

The 6th, 7th, and 8th grade science curriculum (which are the grades I teach) in New York City really doesn't go into Ohm's Law except in the advanced science classes. It's not hard to understand, therefore, that in an Amateur Radio class which is designed to be all great fun, I've got to be really inventive with my approach to this topic.

In the hopes that my lesson plan will be of help to some of you who will be teaching Amateur Radio to youngsters, or even to adults, I'm happy to share it with you. Please keep in mind that a lesson plan is merely a guide to suggest your goal. It should be modified to be appropriate to the age level and the abilities of the particular group.

The first thing I do is to introduce the new vocabulary by putting the words on the board.

1. Current- (I)

Current is the flow of electrons through a material. The unit of measurement is amperes.

2. Voltage- (E)

Voltage is electrical pressure or "push." Sometimes called electromotive force (EMF), its unit of measurement is volts.

3. Resistance- (R)

Resistance is the opposition to current flow. Its unit of measurement is ohms.

Your students, (and you too, perhaps) will be relieved to learn that once there

is an understanding of this law, the rest of the electronics theory necessary to master for the basic license exam will be relatively easy.

George Simon Ohm discovered that there was a predictable relationship between the resistance of current flowing and the voltage across a simple current. In simple English, what has come to be known as "Ohm's Law" states that if the voltage across a circuit is increased while the resistance remains constant, the current will increase in direct proportion to the applied voltage. The formula looks like this:

E	=	I	x	R
# of volts across the circuit		# of amps through the circuit		# of ohms of resistance in the circuit

Your advanced students will figure out that if you know voltage and resistance you can figure out the current by transposing the symbols in the equation to:

$$I = \frac{E}{R}$$

Or, if you know voltage and current, you can solve for resistance:

$$R = \frac{E}{I}$$

Now let me show you my version of the Ohm's Law formula.

As an aid to those students who need help learning the variations of the formula:

E = an Eagle



R = a Rabbit



I = an Indian



E = RI A Rabbit and an Indian on the ground where they belong.

I = $\frac{E}{R}$ The Eagle has to be above the Rabbit.

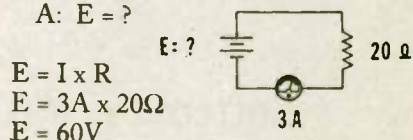
R = $\frac{E}{I}$ The Eagle has to be above the Indian.

Voila! A simple way to remember Ohm's Law!

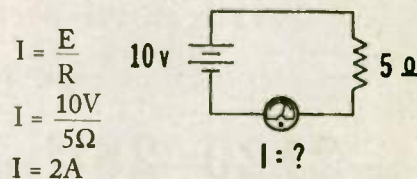
Suggested activities

Give simple examples to demonstrate the use of the formula. Remember: Ω = ohms, A = amps, V = volts.

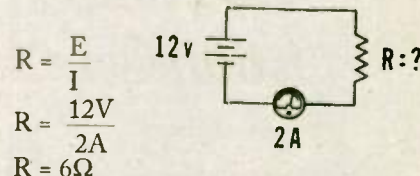
A. E = ?



B. I = ?



C. R = ?



— Carole Perry, WB2MGP, can be reached by sending mail to: P.O. Box 131646, Staten Island, NY 10313-0006, or by e-mail sent to: wb2mgp@ix.netcom.com.

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Members, customers, clients — they're all the same

I thought I had a bright idea the other day: buy myself a FAX machine for home use so that folks who wanted to send me material could do so in the evenings and on weekends. Since I had finally learned how to use the fairly new model that I have at the office, I figured it ought to be easy enough to call up my office supply guy and order an identical model sent out to ye olde domicile, using my handy-dandy credit card as a convenient way to pay for it.

Smart planning, says I, calling up Eunuchs Business Machines, Inc. When I told the lady who answered the phone with a nice, sexy voice that I wanted to order a FAX machine similar to the one I had at the office, to be delivered to my home, she asked me the name of my "account representative." That stopped me cold. What was going on over at Eunuchs, Inc. for gosh sakes?

Up to now, I had always just walked in and talked to the first salesperson at hand, and then took it from there. When I replied that I didn't have a particular "account representative" that I could call by name, the lady told me she would assign one to me, and to please hold for Mr. Blankety-Blank (who in the next few minutes I re-named Bozo the Clown). In only a few seconds, a strong male voice asked me my name and address, and then wanted to know what I was hoping to purchase. Well, almost. The actual conversation went like this:

"Hey, Bozo (Blankety-Blank), good buddy-ole-buddy. I have this here Micro FTX-380 FAX machine here at my office that I got from you guys a few weeks ago, and now I want another one just like it."

"Who is this, again?" asks Bozo.

"Pickering. Alan Pickering, over at

the Center For The Performing Social Sciences. We're located at the intersection of 22nd and Plowed Ground. I'm the guy who bought one of your FTX-380 FAX machines a few weeks ago. We buy all our office equipment from you folks: our computers, the mainframe HAL 1100 we use as our network server, and only God knows how much other stuff over the years. The Center For The Performing Social Sciences. I'm the CEO. The name ought to be in your files or in your database. O.K.?"

"Oh yeah...I think I remember. All our sales are final."

"No doubt, even though I don't believe we have ever bought anything from you when it was 'on sale.' What I am calling about is another FTX-380 FAX machine, just like the last one we purchased from you. Only I want this one delivered to my home, instead of the office. Can you do that?"

"Sure, sure, as long as you are paying cash or have the proper purchase order all authorized and signed in the right places. But I'll tell you what — since our equipment showroom is only about a half-a-mile from your place, why don't you just come on over and pick up the machine, and save us both a lot of trouble with the paperwork, the payment, and the delivery. You can come in almost anytime that it's

convenient, Mr. Prickery, since we are open from nine to nine. And while you are here, you can look over our new line of office computers and networking LANs. One of our experienced floor salesmen will be happy to show you everything we have in the way of fine office furniture as well."

"No, no, Mr. Blankety-Blank (Bozo), I am not interested at this time in your office PCs nor your office furniture. All I want to do at this time is to purchase another FTX-380 FAX machine."

"Well, you know, don't you, Mr. Frickery, that the day of integrated office equipment has arrived. No longer do executives have to clutter up their offices with several different kinds of electronic duplicating equipment. We now have a combination office FAX machine, high-speed copier, and computer all rolled into one. It's the way to go, because combining all of these important functions into one piece of equipment is much more economical in the long run, and saves all kinds of office space to boot. Now will you be paying by company check, or cash, when you come in to pick up your equipment and look over our new line of stuff?"

"I'm not planning to come in, Mr. Blankety-Blank." (I almost slipped, there, and called him "Bozo"). "What I want you to do is to have the FTX-380 that I am purchasing from you, delivered to my home in Apollo Beach. Got the picture?"

"YOU want ME to take a little old 8-pound FAX machine out to your house, Mr. Pickery? No way. You have to understand how we do business. We have all kinds of office equipment and furnishings here in our showroom for you to come in and look at, and to talk to our floor sales representatives about purchasing. If I were to leave my



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office to deliver office equipment to you, then I wouldn't get any work done, don't you see? On the other hand, if you will send me a purchase order or a cashier's check from your bank, then I could send out one of our equipment installers to set up your equipment for you. But that sure is a lot of trouble to go to when all you plan to purchase is a simple, self-contained unit that weighs only eight pounds, don't you think?"

Well, yes, I did indeed think that. Certainly far, far too much of a challenge for Bozo the Clown and his office equipment outfit, Eunuchs, Inc. So I thanked Bozo, and told him to "never mind" about the FTX-380 for now.

I was having second thoughts about purchasing something so simple. What I probably needed to do was get something much more "integrated." I called up another outfit on the other side of town that I had heard good things about, operated by a couple of immigrant Asian entrepreneurs who were living out the great American dream of free enterprise and customer service. They assured me that they could "suddenly deliver" me a FTX-380 by tomorrow at this same time, and all they wanted was a credit-card number, or a check, or a money order, or cash.

So, while sitting at my computer these days - or sending or receiving a FAX or two, I think of Bozo the Clown and how easily he ended my relationship with Eunuchs, Inc. It took only one short phone call. As for Bozo, who trained that dude, anyhow? Where did he get the idea that I actually depended on him or his company for my office needs? I seem to remember L.L. Bean saying a long time ago that it is the other way around: we need our customers, our clients (our members) much, much more than they need us. Right?

Now I know that it is somewhat unreasonable and illogical, perhaps even irrational, to judge a company on the basis of just one of their "account representatives," but I did make that judgment and I suspect that most others would have done the same.

Every employee in every company is a part of the sales force, no matter what their job description. They all have one task that applies universally. They are required to make their product or service more attractive to me than the money I have to pay for that product or service. To the extent that what they have to sell, means more to me than the money that is to be exchanged for it, then we have made a deal.

And that is exactly how Amateur Radio groups, clubs, and associations must operate as well! (You knew that I would eventually get to the point if you read far enough, didn't you?) So again, hear me out. It is only as the features and benefits (that's marketing language, folks) of our Amateur Radio clubs and associations mean more to those who are eligible to join, than the cost and the hassle of participating in them, that we survive (at the least), or grow (at the best). And believe you me, the psychological frustrations associated with affiliating with Amateur Radio groups is a part of the cost of belonging!

Just as Bozo the Clown frustrated my effort to make a purchase, likewise anything that frustrates a prospective club or association member or will inhibit that prospect from joining up - or worse, discourage the person from staying active and involved, is bad news for that club or association.

May I respectfully request that you

do a "frustration" check some day soon with the officers of your club or association or chapter? Be honest with yourselves, and talk about what facilitates attendance, participation, acceptance, fun, and responsible involvement. And ask yourselves as well what inhibits and frustrates attendance, participation, acceptance, fun, and ongoing involvement (knowing that it is five times easier to keep a member than it is to recruit a replacement for one who has dropped out). Call up someone who has not been active for several months and find out why - really why. Try to discover what would have to happen or change in order for him to return to active attendance and participation. I have come to the conclusion, sadly, that the kind of Amateur Radio clubs and chapters that we have are exactly the kind that we deserve.

Well, enough of the soapbox for this month. I do hope that you are all staying excited about this wonderful hobby of ours, and are dreaming about a better future for Amateur Radio and your own part in keeping it a hobby that is a pleasure to practice and a joy to share with others. And if you'd like to know more about the Quarter Century Wireless Association, and have access to a computer and the Internet, then may I suggest a visit to the QCWA World Wide Web Home Page <http://qcwa.org> where you will find a membership application that can be downloaded for snail-mailing to Headquarters. Or, if you haven't heard or listened to one of our many QCWA nets recently, then check us out Sundays at 2000Z on 14.347 MHz or on Wednesdays at 2000Z on 7.035 MHz.

Yes, a few of us may be "over the hill," but that only means that we are picking up speed on the way down! Until next time, 73 + 25. Be One of Us! We are the Proud, the Elite, the Many, the Innovative and the Inquisitive. We are the QCWA!

—Alan Pickering, KJ9N, can be reached by sending snail mail to his new address: 31860 Taylor Grade Rd., Duette, FL 33834-6862, or by e-mail: kj9n@arrl.net.

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2001 MARAC Awards

From time to time, mistakes creep into my column. I know — some of you thought I was perfect, but it's true, mistakes were in my last column. For those of you who noticed the errors, I apologize. For those of you who didn't notice the errors, never mind, I don't apologize.

The topic last time was the 2001 Mobile Amateur Radio Awards Club (MARAC) National Convention held in July in Hampton, VA. What my column should have said was the following: "The big awards were the mobile, net control and county hunters of the year awards. Bob, N4CD, received both the CW and SSB mobile operator of the year awards...a plaque for each hand. AAØIP was announced as the CW net control of the year while Jim, KZ2P, was announced as the SSB net control of the year. Jeff, W9MSE, was this year's CW county hunter of the year and Fred, K5CWR, was announced as the SSB county hunter of the year." Unfortunately, the part about AAØIP and KZ2P never made it into the column. AND possibly worse, because it was more obvious, the caption for the picture of Bob Voss, N4CD, said "county hunter of the year for SSB and CW." What it should have said was Bob was the "CW and SSB mobile operator of the year." My apologies to the award winners and any one else confused by the column. I really was there, despite how it may have appeared from reading my column!

MRCs

Not so much a correction to a previous column, but since writing the column a couple county hunters supplied me with some information I didn't have. A couple columns ago I wrote about the value of using Mobile Reply Cards (MRCs) to confirm county contacts with mobile operators on the county hunters nets (14.336 MHz and 14.0565 MHz). I also listed a couple sources for MRCs. What I didn't know

at the time was that Ed, N4UJK, is also a source for MRCs. For more information and prices, contact Ed Bunch at 2848 Adams Rd. Saint Augustine, FL 32092 or try sending e-mail to: n4ujk@hotmail.com.

USA-CA

For newbies, county hunters chase county contacts on the county hunter nets on 14.336 MHz and 14.0565 MHz. Of course, amateurs also chase counties off the net frequency, but using the nets is the fastest method of making county contacts. That's because mobile operators who drive through multiple counties use the nets and give out many contacts as they drive around. The whole purpose of collecting county contacts is to achieve *CQ Magazine's* USA Counties Award (USA-CA). It took me 10 years from 1978-1988 to contact and confirm 3,076 county contacts. My Dad, K2HVN, gave me my last county, King County, NY on 23 March 1988 and I received the USA-CA award #566 issued on my 25th birthday, 3 April 1988. That's when you would think I would say I'm done and move on to other amateur pursuits, right? If you haven't tried county hunting and experienced the camaraderie of the county hunters, then you wouldn't understand.

Second Time

County hunting is addictive — it kind of gets under your skin. Yes, it's true, I started collecting counties a second time in hopes of someday

qualifying for MARAC's Worked All Counties (WAC) 2nd Time award. It's amazing; roughly 28% of USA-CA holders have achieved Worked All Counties 2nd Time. Well, I kept going, too! I started making contacts two days later on 5 April 1988.

Here's the rest of my story...

1988-2000

It sure is a lot of fun when you're starting over again. There are 3,076 counties to contact again and chances are everything you hear for quite awhile will be a new county. I worked everything I heard and confirmed a little over 2,700 contacts for 2nd time by the end of 1992. According to my list, I needed 363 counties to finish 2nd time on 1 January 1993. I kept the list of 363 counties in my car for the next seven years, contacting a new county here and there, but never updating my records. In the middle of that period, I moved from California to Virginia. I continued to make county contacts using that same old list. What happened in this big gap from 1993-2000 was a move, a couple job changes, the birth of two daughters, a bunch of business travel, and limited time for contacts and no time for record keeping. It wasn't until 2000 that I decided to go through my logs and figure out how many counties I still had left for 2nd Time. Somewhere during that period, MARAC decided not to require confirmations after a county hunter had achieved USA-CA.

I decided not to confirm the last 363 counties. In the summer of 2000, I went through my logs from 1 January 1993 through summer 2000, in hopes of finding contacts with the last 363 counties. When it was all said and done, I had 170 counties left to contact for 2nd Time all mobile-mobile.

2000

My goal was to finish contacting all the counties in time to apply for the

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award and receive the 2nd Time plaque at the 2001 MARAC Convention in Virginia. This meant I needed to make 170 county contacts by 1 May 2001. My weekly goal was five counties per week and I accomplished this through the end of the year. I used the county hunter web page, <http://ecompuquest.com/cb/> to look for e-mail addresses for county hunters in the counties I needed. This netted some contacts as well as also listening to the net a lot on the weekends. Some of the contacts came from non-county hunters who I found on internet searches using "Hamcall," the Buckmaster callbook online (www.buck.com/cgi-bin/do_hamcall) I paid \$25 for a CD by mail; however, what I really wanted for the \$25 was the access to the online website that lists counties and e-mail addresses. During 2000, I sent a few e-mails and made contacts with a few non-county hunters who happened to have a mobile station.

2001

At the end of 2000, I needed 86 counties and I got much more aggressive about my "Hamcall" searches and subsequent e-mails. I looked up all 86 counties and sent e-mails to all amateurs with an e-mail listed. When the e-mails went through, I was amazed by the number of non-county hunters who offered to help. These non-county hunters offered contacts left and right. Unfortunately, many of them didn't have a mobile station so I couldn't make a contact with them. The non-county hunters that responded to my e-mails and gave me a mobile-mobile contact included AF4XZ, WA2WIM, K2JXW, N2NDV, AD4VQ, WD8BXS, NØYPA, W3IZ, KF4ZAB, N8VH, N4VMC, AE4QU, K3BYV, N2NL, and WB3AKD.

Forum and pager

I used the county hunter forum on the county hunter web page to advertise (okay, I was begging for help), which counties I still needed. I also used the county needs list on the county hunter web page. These tools are essential

when you are getting close to finishing up. I also made great use of a pager I had. Several times, I was at work or shopping on the weekends and a fellow county hunter called my pager to alert me that a county I needed was on the net.

Regrets

Unfortunately, I really messed up along the way. In mid-June, I got desperate to finish up before the convention in July. I was down to five counties and I sent e-mails and begged for contacts on the forum while I was on vacation. I had taken my rig, power cable, and antennas and was ready to throw them in my wife's mini-van if someone made a trip for me. Pete, K4QFK, made such a trip — a 10-12 hour round-trip for me. I discovered very quickly that I forgot my 20-meter resonator. Somehow, between tennis matches, I was able to make a 20-meter contact (I guess my antenna tuner tuned the 15/40-meter combo) for one of the two counties I needed. Here comes the worst part — I had over committed myself that day and wasn't available when Pete got to my last county in NC. He made the trip for me and I wasn't there for him. I will forever be grateful to Pete for what he did for me and will always regret that I, in turn, wasn't there for him. I also apologize and thank Gene, N4ANV, for his extraordinary efforts to make sure I was available to make the contacts with Pete.

Ohio County, IN

Finally on 19 August, I had #3,075 worked and I was ready to get #3,076. I had saved Bristol County, MA, for my dad to again get the last one for

me. It was a three-hour drive from his house. Unfortunately, when I got my log caught up, I could not find a contact for Ohio County, Indiana. Back to the forum and e-mail to beg for a contact over Labor Day weekend. Larry, W9SUQ, and Steve, AA8HH, offered to help immediately. Larry ended up giving me the contact on 1 September. BUT, I received an e-mail from Terry, AC4PY, on 2 September. Terry sent me a scanned page from his log — I had contacted Ohio County, Indiana on 24 February! Another lesson learned; make sure to keep good records and log every contact. Thanks to Larry, Steve, and Terry.

Last County

So I finished this column on 10 September. My dad has traveled down to MA and RI and has given me county contact #3,076 today — 13 years, 5 months, and 7 days after USA-CA. I didn't finish by the convention, but I'm now proud owner of 2nd Time #289 dated 10 September 2001. Thanks, Dad!

Thanks

I owe a big thank you to everyone who has helped me over the past 13 years—all the county hunters, mobile operators, net controls, fixed stations and all the non-county hunters who jumped at the opportunity to help. Many county hunters helped me from county contact #1 to contact #3,076 and I certainly can't thank all of them here. Although one mobile may have given me a ton of contacts early on, it's the last 100 that you remember the best. Several folks drove great distances to help me at the end; thanks to WA6OCI, WA9QNI, KØEVE, KN4Y, W3DYA, N4ANV, K4QFK, N4RS, AC4PY, W9SUQ and K2HVN. And for those I forgot to mention, I do apologize and I appreciate your efforts. Anyway, that's my 2nd Time story...and I'm sticking to it!

— Ace Jansen can be contacted by sending snail mail to: 105 Balch Springs Circle, Leesburg, VA 20175; e-mail: jansens@tidalwave.net.

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Putting the Tuna Tin-2 on 20 Meters

Achieving Worked All States (WAS) with the tiny Tuna Tin-2 transmitter thrust Steve McDonald, VE7SL, of Mayne Island, BC, Canada into the QRP spotlight a couple of months ago.

The *Worldradio* QRP column devoted to the details of his feat in the July 2001 edition seems to have inspired more than a few low power enthusiasts to get WAS on their own.

Several letter writers have wondered whether any radio amateurs have put the TT-2 on 20 meters — a band often more conducive to long distance and transcontinental communication than 40 Meters.

Indeed, in the course of describing his station and aspirations for even greater QRP goals, VE7SL mentioned he'd modified a 40-meter TT-2 for 20 Meters.

Since receiving queries about putting the TT-2 on 14 MHz, I asked Steve what specific modifications he'd made to his version.

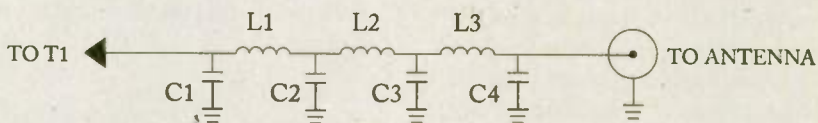
There are only a handful of changes, and I suspect the industrious builder could even make a band-switching version if so inclined.

To keep within acceptable FCC limits for spectral purity, a three-pole Chebyshev output filter for 20 Meters replaces the more modest 40-meter filter in the original version. Three T37-6 toroids and four silver mica capacitors make up the network.

Steve also said it's necessary to change C2 to 47 pF in the oscillator circuit. Of course, this little rig will only sing if fundamental crystals are used, so the quartz at 7 MHz in the original version needs to be changed to a frequency in the 20-meter CW band. The QRP calling frequency is 14.060 MHz, so that wouldn't be a bad choice for starters.

An updated version of Doug DeMaw, W1FB's, Tuna Tin-2 milliwatt transmitter can be found on the internet

TUNA TIN-2 OUTPUT FILTER MODIFICATIONS FOR 20 METERS



ALSO: In the original schematic, C2 in the oscillator section must be changed to 47 pF, and a 14 MHz fundamental crystal replaces the 7 MHz crystal.

L1 16T
L2 17T
L3 16T

C1 180pF
C2 390pF
C3 390pF
C4 180pF

All using No. 24 wire
on T37-6 toroidal cores

All capacitors
silver mica

A schematic for the Tuna Tin-2 can be found on the NorCal QRP Club web site at:
<http://www.fix.net/~jparker/norcal/tunatin2/tunatin.htm>

at NorCal QRP Club's site as part of its Back to the Future project at:
www.fix.net/~jparker/norcal/tunatin2/tunatin.htm.

And, if you'd like to get a 40-meter version of the TT-2 in kit form for either use on 7 MHz, or for modification to 20 Meters, they're available from the Ft. Smith (Arkansas) QRP Group for \$12, which includes shipping and handling. Kits going to DX locations are \$15.

To order, send a check made out to Jay Bromley to: Jay Bromley, W5JAY, 9505 Bryn Mawr Circle, Fort Smith, AR 72908.

A Manhattan-style homebrewing starter kit

The New Jersey QRP Club has put together a starter kit for radio amateurs who'd like to try their hand at

homebrewing Manhattan style.

This is the style of construction that calls for the builder to strategically glue on a printed circuit board ground plane small "islands" — also made of PC board material — that serve as solder points for your circuit's components. Included in the kit: two copper-clad boards 6 x 9 inches; four copper-clad boards 3 x 4.5 inches; five assorted small scrap pieces of copper-clad boards (good for creating braces, standoffs, punched pads); four thin 3/16 x 6 inch strips of copper-clad material (snip off in 1/8-inch pieces to create about 200 Manhattan-style solder point "islands"); a small tube of Elmer's Super Glue; one Scotch-Brite abrasive pad (for board cleaning); The "Manhattan-Style Homebrewing Guide" (some 20 pages of instruction, recommended tools, photo examples from experts, and simple practical example projects.)

The \$10 kit price includes shipping to U.S. and Canadian addresses. Orders going to DX locations should add \$3.

To order, make your check out to George Heron, N2APB, and send it to: George Heron, N2APB, 2419 Feather Mae Court, Forest Hill, MD 21050.

For additional information and to see other NJ-QRP Club projects,

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Reflection on the QRPer of yesteryear

The wave of nostalgia brought on by the resurgence of such simple QRP rigs as the Tuna Tin-2 seem to have put QRPer's such as Don Schramm, N4OIZ, in a reflective mood: "I am, and have been a CW QRPer since the Tuna Tin-2 came along," he writes from Sarasota, FL. "I still have my TT-2, Codzilla, CB Slider and Herring Aid 5 from that beginning.

"Most of mine were built the 'ugly way' with perf board and push-in clips, but they still operate and I made many enjoyable QSOs with them.

"I also operated with (Heathkit) HW-7s, HW-8s, the Ten-Tec PM-1, PM-2, PM-3 and (Argonaut) 509.

"My old HW-8 still puts out a good signal, but needs help on the receive side.

"I am member No. 401 in the G-QRP Club based in England. It now has 10,000+ members and some affiliated clubs in several countries. I became a member in the late '70s or early '80s. It is a GREAT organization and does much to promote QRP all over the world."

Don enclosed a couple of articles from *CQ* magazine by QRP legend Adrian Weiss, WØRSP, written in the early 1980s. One contains a reprint of a June 1926 *QST* magazine article titled "Of, By and For the Beginner," by J.T. McCormick, a QRPer in the early days of radio writing about the development of his simple station and his first-ever QSO: "9CFN was on the air. I called him with as much outward confidence as if I was in the habit of working the antipodes daily, but I had an inward conviction that my signals were having a struggle to cross the county line. I threw the switch to the receiving side — expecting nothing.

"I want to tell you, fellows, that the sound of my own call letters zipping through my phones was the sweetest music I had ever heard in my life! I shall never forget it during the rest of my days. The music in Heaven will doubt-

less prove to be a distinct disappointment to me, provided of course that I . . ."

I suspect many of us QRPer's can relate to the thrill J.T. McCormick experienced back in '26. At KI6SN that same rush of adrenaline courses through this operator virtually every time I get on the air. Ain't QRP operation wonderful?

Colorado QRPer's go relatively QRP

Roger Wendell, WBØJNR, of Aurora, CO, in early September alerted subscribers to the Internet QRP Mail Group QRP-L that members of the Colorado QRP Club would be featured in taped interviews on the University of Colorado, Boulder's AM station KVCU.

"Snippets of CQCers talking about Morse code, low power operating" and other topics would be interspersed, he said, between musical numbers during the station's three-hour "Hangover Brunch," which is hosted by Kelley and Milkman Dan, on the Saturday, 1 September broadcast. The station's web site billboarded it as "Morse Code Madness!!!"

Via KVCU's web site, QRP-Lers from around the world could link to

audio of the broadcast over the Internet. After a couple of mouse clicks, I was there. And sure enough, there were CQC members — including Marshall Emm, N1FN; Al Dawkins, KØFRP; Valeriy Agabekov, N2WW; and JNR — articulately talking about amateur radio and QRP between "Top 30" hits, such as "A Million and One Things to Do" by the hip hop group The Time Machine. Audio of a CW contest exchange between WØCQC and NØUR was played. And there was even a Morse code comedy routine slipped in among with CQC QRP anecdotes.

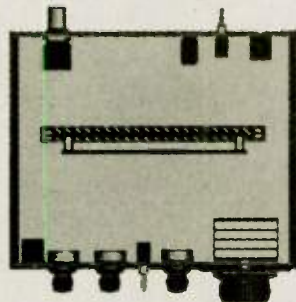
What a wonderful, innovative and interesting concept. And great publicity for QRP.

Independent, student-run KVCU is at 1190 AM and puts out 1,600 watts from its transmitter location north of Denver. Given the 50,000-watt powerhouses scattered across the AM dial, we'd have to say tiny KVCU is "one of us," all things considered. Right?

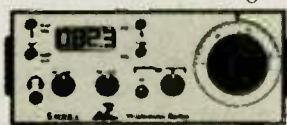
Welcome aboard.

— Richard Fisher, KI6SN, our micro-powered QRP columnist can be reached by sending snail mail to: 1940 Wetherly St. Riverside, CA 92506, or by sending e-mail to: ki6sn@aol.com.

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Wild winter search

William Vaughn Pulleys (SK)

Prior to the entrance of the United States into World War I, the U.S. Navy was very anxious to enlist personnel who had knowledge of radio. Radio amateurs were particularly desired. Because I had been an Amateur Radio operator for several years I was able to enlist at the age of 16 with parental permission.

One of the most interesting experiences during my tour occurred during the winter of 1918 while stationed at Woods Hole, Massachusetts. This was an exceptionally cold winter and Vineyard Sound was iced up. In a westerly blow the ice moved out through Nantucket Sound carrying the Cross Rip light

vessel with it. Its exact movements are not known as the vessel was just a hull with accommodations for the six men stationed on it. It had no power and no radio. It was last seen by people on Nantucket Island, drifting in an easterly direction.

The lighthouse service dispatched the Nantucket Relief Light vessel number 90 on a search, but being short handed she was to stop at Woods Hole Naval Base and pick up two firemen and a radio operator — yours truly being the lucky operator. The number 90 was an exceptionally rugged ship designed to withstand the terrific pounding of winter storms on the Nantucket station and she was a powerful icebreaker. She had a flush deck about 10 feet above the waterline, two light masts and a raised bridge amidships. At the base of each mast was a small cabin used for filling and trimming the lamps before she was electrified. The forward old lamp cabin was my radio shack. On board, the number 90 I ate in the officers' mess with Captain Allen, Mate Bartlet, chief engineer and assistant officer — that is when weather permitted eating.

We moved out in company with three navy ships, one a destroyer also dispatched on the search, into some of the worst weather imaginable — cold, gales, fog, snow and terrific seas. We went eastward as far as the Nantucket Light Ship and then searched southward for a few days when we were hit by a terrific southerly gale and the other ships turned back because of sickness and high seas. We entered Muskegat Channel — it was our only choice, and it was here that we hit bottom twice. Not that we ran into shoal water, but the seas were so high that in the deep troughs we dropped onto the bottom! But as said before the number 90 was an exceptionally stout vessel and she survived.

We went eastward through Nantucket Sound but there was nothing drifting to the southward now, passing the other light vessels, Stonehorse and Pollock Rip and searched Georges Banks and northward as far as Cape Sable. At the conclusion of a fruitless three-week search we returned through Pollock Rip and Nantucket Sound.

During the worst weather the seas would sweep our decks and, for safety,

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it was necessary to dog the door on my cabin which effectively locked me in — one time for about 24 hours. When the seas would hit my door the water would squirt in — not only through the lower jamb but the upper jamb as well. This resulted in about eight inches of water sloshing around the cabin at times. In addition to being inconvenient, it resulted in some nasty jolts from my quenched gap transmitter.

My Navy regulations were “not to use my transmitter except in emergencies.” However, one day, as we passed a merchant ship, the captain said, “Ask them if they have seen the Cross Rip Light Vessel. I explained that due to the regulations I wasn’t supposed to open up. He replied, “To hell with the regulations” (he was in the USLH service). So I opened up and called USMV but got no reply and the merchant ship just put on more steam and sped away, probably thinking our signal would draw a submarine.

Another day while in big seas, I heard a

very loud signal which seemed as though from a ship close by but unintelligible — like someone testing. I went on deck but could see nothing but big waves, when suddenly a big fishing trawler popped up on a wave not a quarter of a mile away. As the captain didn’t order me to contact him, I did not try. We came close aboard and the skipper spoke to the trawler. I don’t remember what was said. I do remember looking down on her and a man standing on dock. Since that time my horizons have widened and I have wondered about that vessel. Was she just a fisherman? If so, why the expense of radio? In those days radio was not the inexpensive, routine installation. You had to have a trained operator, and they were scarce! Who was playing with the transmitter and were they really just playing?

I don’t remember any other radio work during that search with the exception of intercepted messages that the other rescue ships were returning to port and some weather reports.

My receiver had a galena cat whisker detector and much of the time we were in heavy fog. In those conditions we had to sound our fog horn and the vibration of the very loud horn and the cat whisker didn’t mix very well.

To my knowledge not even a piece of wreckage of the Cross Rip Light Vessel or any of the six-man crew was ever found. It’s another one of the sea’s mysteries. Navigation Chart 13009 (Georges Banks and the Gulf of Main) shows 222 wrecks. She could be one of those, but nobody knows.

As far as I could observe, old Nantucket Relief number 90 was none the worse for all of her tossing around. Yes, I was seasick part of the time.

I don’t remember too much cold weather after we left Vineyard Sound though we did have snow.

Right after the war that I went to Nantucket as Chief Electrician Radio (that’s what they called us then) in charge of the first radio compass station on the East Coast.

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160M Gray Line continued How good is the model?

The May 2001 column looked at the hop structure and absorption on 160M along a gray line path from my QTH in Indiana to Turkmenistan (EZ) on 27 May at 0100 UTC with an SSN of 90. Figure 1 shows this path. The results with the Proplab Pro ray tracing software indicated that the distance 1500w could go on 160M before being below the noise floor of a typical receiver, assuming vertical monopoles on both ends of the path, was only about 5,000 km. That's certainly not very far, and resulted in the radical conclusion that gray line propagation on 160M really isn't very efficient.

There is a good reason for all this absorption along the terminator — it's the lower E region, which unfortunately has always been ignored in all the discussions of gray line propagation. The E region has sufficient ionization and sufficient collisions between electrons and neutral particles to take its toll on 1.8 MHz RF. Figure 2 (p. 56) shows the absorption on 160M on a mid-latitude one-hop path as the terminator sweeps by. The top plot shows absorption is least in the dark ionosphere, gradually increases as sunrise approaches, and is greatest in the day ionosphere. The bottom plot shows how the absorbing region moves up from the D region in daylight to the lower E region in full darkness. Thus gray line propagation cannot be discussed simply in terms of the D region. The lower E region and its impact to absorption must be included.

The 5,000 km limit stated in the first paragraph comes directly from modeling efforts with Proplab Pro. Before accepting this limit as reasonable, the model needs to be looked at to verify its accuracy with real-world conditions. Let's do that — hopefully we'll verify that Proplab gave us good data.

The 5,000 km limit is the result of

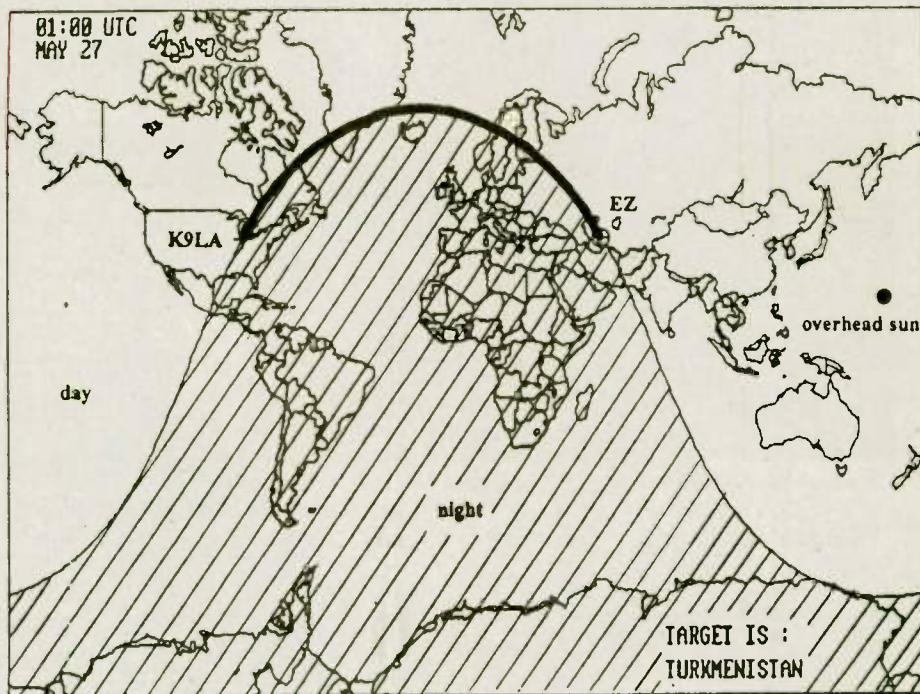


Figure 1. Grayline Path from K9LA to Turkmenistan on May 27 at 0100 UTC

absorption calculations, so we need to concentrate on those modeled parameters in Proplab that impact absorption. Since absorption is due to electrons set in motion by a passing RF wave and then colliding with neutral particles, the two parameters we'll focus on are electron density and electron-neutral collision frequency.

For electron density, we need to

compare the Proplab model of electron density to what's happening in the real world. In lieu of looking at the actual electron density profile versus altitude, we'll compare foE (the critical frequency of the E region) in Proplab to foE data from ionosondes along the path in Figure 1. Note from Figure 2 that we can neglect the F region in our absorption investigation.

Now I have good news and bad news. For my hypothetical path of Figure 1, the good news is that there are a number of ionosondes along or very close to the path — Sondrestrom in Greenland, Kiruna in Sweden, and St. Petersburg and Moscow in Russia. The bad news is that three of them do not have any data at all for 0100 UTC in May of 1999 (which corresponds to my May with an SSN of 90). For these three ionosondes, it appears that foE at 0100 UTC is below their lower frequency threshold. The only

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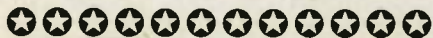
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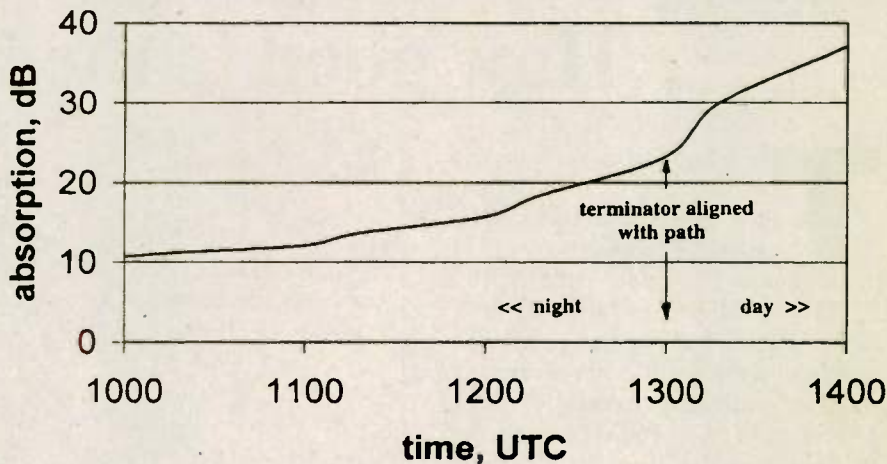
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Absorption Over A One-Hop Path

41N/86W to 31N/93W, Dec 15, SSN=100, 1.83MHz



Absorbing Region Altitude

41N/86W to 31N/93W, Dec 15, SSN=100, 1.83MHz

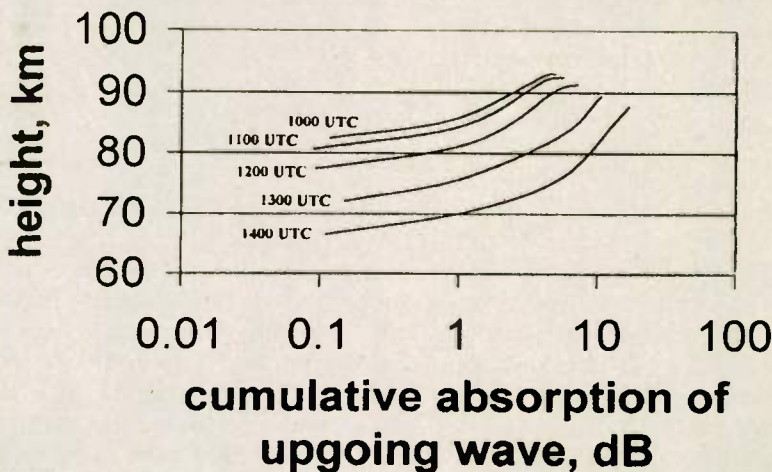


Figure 2.

ionosonde that has data is the one at St. Petersburg).

I took the daily ionosonde data from Leningrad at 0100 UTC and determined the monthly median foE for May 1999. It worked out to 1.25MHz.

Next I printed the foE map in Proplab at 0100 UTC for May 1999. This map gives contours of monthly median foE values, and foE is 1.20MHz at St. Petersburg at 0100 UTC. This is excellent correlation (within 4%), and was expected since the D and E regions are under direct solar control and can be modeled very accurately.

For the electron-neutral collision frequency, I did not have as good a feeling as I did with electron density. From all the scientific literature I dug up, the collision frequency at 100 km is

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Propagation

considered to be about 83,000 collisions per second. But all of this data was for daytime conditions. Nothing was mentioned about gray line conditions, let alone nighttime conditions. So I had to go get some help.

Dan Detrick and Ted Rosenberg at the University of Maryland analyzed nighttime riometer (relative ionospheric opacity meter) data for me, and determined that the nighttime collision frequency was about 65,000 collisions per second at 100 km. Taking the average of daytime and nighttime says I should re-run Proplab with 74,000 collisions per second for my gray line scenario, instead of 83,000. This will result in less absorption, as less collisions give less absorption. And less absorption means the 5,000 km limit will go up.

Re-running Proplab says the 5,000 km limit indeed needs to be revised upward to about 6,000 km. That's a big improvement percentage-wise (20%), but it still indicates propagation along the terminator on 160M is not very efficient. Thus the conclusion still stands. It would have been nice to have ionosonde data for the other three stations along my path. But I've looked at enough other ionosonde data on other paths to say that our monthly median models of the lower ionosphere are darn good.

There is one issue here that is worth a comment — the above comparisons were done using the monthly median results of Proplab (that's what all of our propagation prediction programs give). What happens on a daily basis? Could the electron density or collision frequency be low enough on certain "good" days to make gray line propagation efficient? The St. Petersburg ionosonde data says no, since on a daily basis it only varies by about plus or

minus 5% from the median. Similarly, the University of Maryland collision frequency data doesn't appear to vary enough on a daily basis to result in any significant change to the conclusion.

But the door isn't totally closed on daily variations yet. There are interesting things happening up in the ionosphere on a daily basis that our models don't include. For example, my predecessor Bob, NM7M, is looking at ion chemistry changes at high latitudes that result in a reduction in electron density (and hence absorption) that isn't in our monthly median models. Although this might help make gray line propagation more efficient at high latitudes (the upper part of the path in Figure 1), it doesn't appear to apply to mid and low latitudes (the ends of the path in Figure 1).

So where does this leave the concept of propagation along the terminator (gray line) on 160M? Unless we can find causes for daily variations that significantly reduce absorption, the data suggests that there's something else going on that makes it look like propagation along the terminator — perhaps something along the lines of refraction by the terminator (as seen in Figure 3 of the May 2001 column) so that propagation is in the dark ionosphere where absorption is minimal. Stay tuned for more on all of this.

— *Carl Luetzelschwab, K9LA, our fabulous propagatin' columnist can be reached by snail mail sent to: 1227 Pion Rd. Fort Wayne, IN 46845; e-mail: k9la@gte.net.*

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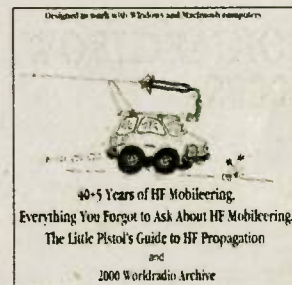
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Coiled choke

A local guru advised a reader of Kurt's Klassy Kolumn to wind a few loops of coax into a 3-foot diameter coil hung at the base of the tower just past his in-line lightning surge arrestor. The coil would act like an effective choke to any current surges which may not be protected by the arrestor. The reader has seen similar coils on telephone lines so he assumes the theory has validity.

But at the Dayton convention a manufacturer's rep from one of the makers of surge arrestors said that the coil acts like a transformer and increases the voltage going to the shack. So who is right?

The guru, of course. Think about it: You know that a coil is an inductor, not a transformer. And an inductor has reactance that is measured in ohms at radio frequencies. It offers resistance to RF current and will stop or reduce its flow. And a sharply-rising lightning surge has most of its energy at radio frequencies. So the coil will tend to

prevent the lightning surge from going on down the coax.

The manufacturer's rep gave you bum advice. Commercial radio stations use the technique to protect their transmitters. Sometimes they put ferrites over the coax to accomplish the same thing.

The basic plan here is to put an inductance in-line with the coax shield to make it a difficult path for the lightning surge. Between this inductance and the tower you put the best possible path you can make from the coax shield to ground. The lightning surge will probably take the easy path.

The coils on telephone lines, though, may be for a different purpose. They may be "loading coils." These are inductance coils that are placed every 6,000 feet on lines that are more than about three miles long. They compensate for the capacitance between the cable wires and improve the frequency response.

The Miracle Whip

A reader wants Kurt's opinion of The Miracle Whip. "Is it an expensive dummy load?" he asks.

Complete construction details on this interesting antenna appeared in July 2001 *QST*. And a commercial version is available at www.miracleantenna.com.

It uses a 48-inch collapsible whip mounted on a tiny metal box. In the box is a variable autotransformer that tunes the antenna from 3.5 to 30 MHz. The

whip itself is the antenna for 6, 2 and 440 MHz. On these bands you tune it by adjusting the length of the whip. So here is a miniature antenna for 3.5 to 440 MHz with just one tuning control. No other antenna tuner is required. Just connect it to your transceiver and you are ready to go.

VA2ERY designed it to go with his new FT-817 miniature QRP transmitter that covers all these bands. The whole setup of transmitter and antenna is small and light enough to go in your backpack or weekender traveling bag.

Sounds too good to be true, doesn't it? Well, there are serious limitations to it but, just like most projects, it is a compromise that fits a particular niche, in this case portable QRP operation.

The main limitation is that the efficiency is low. This is a short vertical antenna so it has low radiation resistance. Also it has a poor ground system so there will be appreciable ground resistance. Since the power divides between the radiation resistance (the part that gets radiated) and the ground resistance (the part that is lost to heat) not much of the power you put in on the HF bands will be radiated. This will change from band to band being worst at the low frequencies where the whip is a small fraction of a wavelength long.

The advertising says that you don't need a ground but what they mean is



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that you don't have to have anything more than the transceiver as a ground. No short vertical will work at all without some kind of ground. Why? Because the maximum RF current is at the base of the antenna and no current can flow there unless it has somewhere to go. The transceiver has enough capacity to ground to let some current flow. Not much though. The ground resistance is almost certain to be about 50 ohms. The radiation resistance of the antenna will be just a few ohms on 10 and about 50 milliohms on 80.

Kurt doesn't have a Miracle Antenna to measure but he can make an educated guess as to the radiated power. He won't be far off the mark. Here is the expected output radiated from the Miracle Antenna on each of the HF bands for 5 watts transmitter output:

Band	Output
10	½ watt
20	¼ watt
40	50 mw
80	5 mw

Obviously you are not going to work much DX on 80 Meters. But up on 10, 15, and 20 you'll get out OK. Not in contest pileups, of course, but for friendly QSOs you can work around

the world.

Look at it this way: What more efficient antenna are you going to put up in your motel room? Do you really want to lug around that antenna tuner, coil of coax, and your antenna wire coil with insulators and support wires? And then try to get away with putting it up without complaints from the management? If you have a tiny rig like the FT-817 it makes sense to have a tiny antenna to go with it.

The autotransformer that tunes the antenna is a slick idea. Just one knob tunes the Miracle Antenna from 3.5 to 28 MHz. You should be aware that it doesn't work as nicely as your standard antenna tuner. On some bands the best SWR you can get is 2:1 and maybe a little more. Those who still believe that you lose a lot of signal with 2:1 SWR will be unhappy. But those who read Krusty Olde Kurt's column regularly know that you lose almost nothing. And in this case where your coaxial cable will be just a couple of inches long "almost nothing" is an overstatement. Not to worry. All you need is to get the SWR low enough that the rig won't power-down.

Kurt gives the Miracle Antenna a "thumbs-up" approval for convenience. Just don't expect miracles from it. ☺

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8X CD-ROM drive	

Contest Calendar

Dave Goodwin, VE2ZP

Contest	Date & Time	Bands	QSO points	Multipliers	Exchange	Entry Categories	Entries
Ukrainian DX	1200Z 3 Nov 1200Z 4 Nov	80-10M CW & SSB	1pt/VE 2pt/NA 3pt/DX 10pt/Ukraine	DXCC + WAE Countries + Ukrainian Oblasts (27)	RST Ser# Ukr. Send Oblast#	Single Op: All bands, Single band, All band QRP, Single band QRP Multi-op: Single or multi-tx SWL	1mo. Box 4850 Zapozhzhie 330118 Ukr.
ARRL Sweepstakes CW	2100Z 3 Nov 0300Z 5 Nov	160-10M CW	2pt/QSO Work stns once, regardless of band	ARRL Sections Count once, regardless of band	Ser#, Pwr class, ur call, Yr first licenced, Section	Single Op: Low power (A), High Power (B), QRP (Q) Multi-op single tx	1mo. ARRL or e-mail to SSCW@arri.org
Japan Int'l DX	2300Z 9 Nov 2300Z 11 Nov	80-10M SSB	1pt/QSO 2pt/80, 10M Work Japan only	Japanese Prefectures (50) on each band JAs will send a 2-figure prefecture number	RST Ser#	Single Op: All bands, Single band Multi-op, single tx	31 Dec Box 59 Kamata Tokyo 144
European DX RTTY (Germany)	0000Z 10 Nov 2359Z 11 Nov	80-10M RTTY	1pt/QSO 1pt/QTC In RTTY contest, work stations outside Europe	WAE Countries worked on each band. x2 on 10/15/20 x3 on 40M x4 on 80M	RST Ser#	Single Op: All bands, Single band Multi-op: Single or multi-tx All entrants may use PacketCluster	15 Dec Box 1126 D-74370 Sersheim Germany
OK/OM DX Contest (Czech Republic)	1200Z 10 Nov 1200Z 11 Nov	160-10M CW & SSB	3pt/QSO Work OK, OL and OM only	Czech and Slovak counties on each band. OKs, OLs and OMs send a 3-letter county abbreviation	RST Ser#	Single op all bands: Mixed mode, CW, SSB, QRP Multi-op SWL	15 Dec OK2FD
ARRL Sweepstakes SSB	2100Z 17 Nov 0300Z 19 Nov	160-10M SSB	2pt/QSO Work stns once, regardless of band	ARRL Sections Count once, regardless of band	Ser#, Pwr class, ur call, Yr first licenced, Section	Single Op: Low power (A), High Power (B), QRP (Q) Multi-op single tx	1mo. ARRL or e-mail to SSPhone@arri.org
CQ WW DX CW	0000Z 24 Nov 2359Z 25 Nov	160-10M CW	0pt/VE 2pt/NA 3pt/DX	DXCC + WAE countries + CQ Zones	RST CQ Zone	Single Op: All Bands, Assisted, Low power, QRP, Single band Multi-op: Single of multi-tx	1mo. CQ mag. Or e-mail to cw@cqww.com
QRP ARCI Holiday Sprint	2000Z 2 Dec 2359Z 2 Dec	160-6M CW	5pt/ARCI member 4pt/non-mbr DX 2pt/non-mbr NA +2000 for home- brew TX +3000 pts home- brew RX	US States, Canadian provinces and territories, DXCC entities on each band Multiply the resultant score by the power multiplier" x15 for 0-250mW x10 for 250mW to 1W x7 for 1-5W x1 for over 5W	RST QTH ARCI members will also send their membership numbers	Single Op: All bands, single band, high bands, low bands, portable. Multi-op Multi-tx	30 days N6GA or e-mail to CamQRP@cyberg8 t.com
ARRL 160M	2200Z 7 Dec 1600Z 9 Dec	160M CW	3pt/VE, W 5pt/DX	ARRL Sections + DXCC countries	RST Section	Single Op: High power, Low power, QRP Multi-op	6 Jan ARRL or e-mail to 160Meter@arri.org
ARRL 10M	0000Z 15 Dec 2359Z 16 Dec	10M CW & SSB	2pt/SSB 4pt/CW 8pt/USA novices/techs worked on CW	Canadian provinces, territories, Labrador, US States, DXCC	RST QTH DX stations will send Ser#	Single Op: Both or single mode, all with High, Low and QRP pwr cats. Multi-op., single tx, mixed mode (one multi-op category)	1mo. ARRL or e-mail to 10Meter@arri.org

Addresses: CQ - 25 Newbridge Rd., Hicksville NY, 11801 USA.

ARRL - 225 Main St., Newington CT, 06111 USA Callsign - Callbook Address

Bands: The 30, 17 and 12M bands are never used in any contest.

Please confirm the dates of these events on the Internet at <http://home.so.no/~janame/hammain.html> or <http://www.sk3bg.se/contest/>

California ARES group responds — again

In the wake of the "Oregon Fire" activation the last week of August, the Shasta County, California, ARES team barely had time to take a smoke-free breath before being activated again.

Shasta County Emergency Coordinator Drew Witham, W1SAR, reports that just as evacuation orders in Weaverville were being canceled and the California Department of Forestry and Fire Protection was announcing near containment of the Oregon fire, another huge blaze broke out in the nearby town of Hayfork. By late in

the day of 31 August, the "Hyampom Fire" had scorched an estimated 450 acres and prompted another round of evacuations.

Shasta County and Trinity County ARES members responded quickly to shadow CDF and Red Cross team members. Witham said this enabled communication from the mountain communities back to CDF and Red Cross incident support centers in Redding.

"Heavy smoke and difficult terrain made direct communication difficult," Witham said. "At times messages were being relayed via two monitoring stations using three different repeaters." Witham said that all of the public information coming from the CDF's multi-agency information center in

Redding was relayed via Amateur Radio.

Witham said he'd first learned of the "Oregon Fire" while on duty battling another blaze with his local volunteer fire department. Still in his wildland firefighter's yellow Nomex gear, he headed for CDF Headquarters in Redding, where DEC Dick Cloyd, WO6P, had responded to the CDF activation of ARES. They quickly formulated a plan, and Witham headed for the fireline 60 miles away in the mountains.

"Despite the distance, CDF and Red Cross personnel had communications within the hour, and support was continued as needed right through the holiday weekend," Witham said. ARES operators stood down 3 September. — W1SAR/SCARES, ARRL Letter

Hamfests — November

ALABAMA

Montgomery ARC Hamfest and Computer Show 24 Nov., at the Garrett Coliseum in the South Alabama State Fairgrounds. Adm: \$5. Parking: FREE. Tailgating: \$5. VE exams @ 8 a.m. — 3. TI: 146.24/84, 449.50/444.50, and 49.45/444.45. For info: Hamfest Committee, c/o 7173 Timbermill Dr., Montgomery, AL 36117-7405. Or contact Phil 34/272-7980; E-mail: k4ozn@arrl.net. Website: <http://jschool.troyst.edu/~w4ap>.

FLORIDA

Lake Amateur Radio Association Hamfest/Computer Show 3 Nov. at Umatilla High School Annex, 60 Smith St. Umatilla, FL. Adm. \$5. Tables \$10/ea. Tailgate space \$7. VE exams at 10 a.m. For info: Chuck Crittenden, KE4EXM, P.O. Box 15, Altoona, FL. Phone: 352/669-2075.

ILLINOIS

Chicago ARC Ham Auction 11 Nov., at DeVry Institute of Technology (3300 N. Campbell). Bring items for auction before noon. For info call Melissa, KB9QWZ, 773/384-7514 or write: CARC, P.O. Box 110535, Chicago, IL 60641-0535.

INDIANA

Evansville Winter Hamfest 8 a.m. - 2 p.m. 24 Nov. at Vanderburgh County 4H Center Fairgrounds Auditorium. Adm. \$5. Tables \$8/adv., wall spaces \$10/adv. TI: 145.150(-); 146.925(-) or 443.925(+) (PL 107.2 for all machines). For info: Neil Rapp, 2744 Pinehurst Dr. Bloomington, IN 47403. Phone: 812/333-4116. Web site: <http://w9ear.org/hamfest.htm>

Fort Wayne Hamfest/Computer Expo 17-18 Nov. at Allen County War Memorial Coliseum Exposition Center, 4000 Parnell Ave. Fort Wayne, IN. Open Sat. 9 a.m. - 4 p.m., Sun. 9 a.m. - 3 p.m. Adm \$5. Tables \$20 for flea market, \$40 for premium. \$27.50 for AC power. Parking \$2/par vehicle. Guest speaker Riley Hollingsworth. Over 1,000 tables available. For info: ACARTS/Fort Wayne Hamfest, P.O. Box 10342, Fort Wayne, IN 46851-0342. Call 219/484-1314 for general info; 219/483-8163 for table info. Web page: www.fortwaynehamfest.com.

NEW HAMPSHIRE

Interstate Repeater Society Hamfest/Flea Market 8 a.m. 17 Nov. at Lions Club Hall on Mammoth Rd., Rt. 128, Londonderry, NH. Adm. \$10 at 6 a.m., \$3 at 8

a.m. VE exams 9 a.m. - noon. For info: Paul, K1NL, 603/883-3308; k1nl@juno.com. For VE exam reservations: Bill, AA1OC, 603/424-2857; bills@aa1oc.org.

NEW YORK

Hall of Science ARC Hamfest 9 a.m. 21 Oct at NY Hall of Science parking lot, Flushing Meadow, Corona Park 4701 111th St. Queens, NY. Adm \$5/donation, spaces \$10/ea. VE exams at 10 a.m. TI: 146.52 or 444.200 (136.5). For info: Stephen Greenbaum, WB2KDG, phone: 718/898-5599 (eves. only); wb2kdg@bigfoot.com. VE info: Lenny Menna, W2LJM, phone: 718/323-3464; LMenna6568@aol.com.

OHIO

Grant ARC Hamfest at the A.B.C.E.O. I. building (adjacent to the Brown County Fairgrounds). Adm: \$2. Table rental donation for charity at the discretion of renter but not required. Onstage auction, good food, and guaranteed great fellowship. TI: 146.730 MHz. Contact Rodney: wd8ctx@juno.com or Dot: huggie@bright.net for table reservation.

OKLAHOMA

NJ5S Memorial Hamfest sponsored by **Enid Hamfest Group**, 3 Nov., from 8 a.m. - 5 p.m., at Oxford and 4th at the Garfield County fair grounds (Hoover Building). Adm: \$2. Parking: FREE. Tables: \$1. VE exams @ 1 p.m. Free coffee & doughnuts in the morning and free hotdogs & soda at noon. TI: 145.29 - .600, 444.400 + 5.00. For info: Tom Worth, N5LWT 580/233-8473. Email: enidhamfest@yahoo.com.

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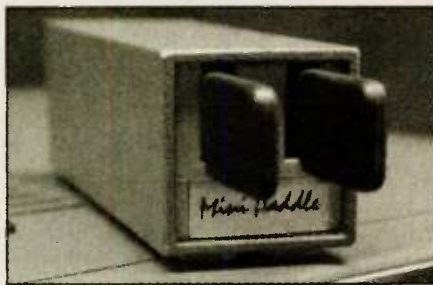
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The leather Radio Glove™ has a suggested retail price of \$19.95. The NEO model (neoprene) retails for \$14.95. For further information contact: Cutting Edge Enterprises, 620 Highland Ave., Santa Cruz, CA 95060. Phone 800/206-0115. E-mail: info@powerportstore.com.



Morse Express Miniature Paddle System

Morse Express announces the release of a new miniature dual paddle system from Palm Radio in Germany. Designers Hannes, DL9SCO and Dieter, DJ6TE,

have produced a small (1 x 1 x 3”) and light paddle system that covers all the bases for portable, mobile, and shack operation.

The system consists of the retractable paddle mechanism and housing (available in three versions), a snap-in mount which can be attached to a radio or other surface (with screws, magnets, or adhesives), molded connecting cord, and super strong magnets. Model PG has gray levery in an “Elecraft gray” powder-coated housing, and model PB has black levers in the gray housing. Latest model P817 is all black to match the FT-817 transceiver.

The Palm Mini Paddle performs like one of the big boys. With three adjustments on each rigid lever, it can be adjusted to feel just like a premium paddle. The secret is in the engineering details. The levers are injection molded and machined as single pieces for rigidity, and each lever has its own adjustable tension spring. Contact spacing and lever stop position are independently adjustable, and the contacts are gold-plated for reliability. The paddle mechanism slides all the way into its extruded aluminum housing for safe storage.

A snap-in “Quick-Mount” and connecting cable are supplied. The Mini Paddle housing is square in cross-section so it can be snapped into the mount in any of four orientations. That means you can attach it to the top, bottom, right or left side of a radio or other surface, with the finger pieces still the right way up. A pair of super strong magnets is also available as an option for the Quick Mount (supplied as standard with model P817).

The Palm Mini Paddle is \$69.95 (\$74.95 for model P817) plus s/h, and is available from Morse Express. Extra Quick Mounts and pairs of magnets are \$5 each.

Photographs and more information are available on the Morse Express web site at: www.MorseX.com. Or contact Morse Express at: 2460 South Moline Way, Aurora, CO 80014-1833. Phone: 303/752-3382. Fax: 303/745-6702. For orders only: 800/238-8205. E-mail: hq@MorseX.com.

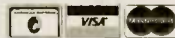


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As a service to our readers, *Worldradio* presents a feature listing of those VE exams, times and locations which are sent to us. Please remember that our deadline for publication is three months in advance. For example, if your VE group is scheduling an exam for December, please have the information to us by mid-September. *Worldradio*, 2120 28th St., Sacramento, CA 95818. Please mark the envelope "VE Exams." List the location (City), any information examinees should have (advance registration, etc.) and the name and

telephone number of a person to contact for further information. Examinees should bring their original license (along with a photo copy), two forms of identification (at least one should be a photo), and required fee.

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Arkansas				11/17/01	Minden	George, WW7E 775/265-4278	w/i pref.
11/10/01	Harrison	David, K5DEL 870/741-8604	p/r pref	New Jersey			
California				11/14/01	Ft. Monmouth	Mike, KC2Q 732/774-1095	w/i only
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11/17/01	Grass Valley	John Plamer, KK6XJ 530-273-0524	p/r pref.	11/17/01	Albany	WB9HZT 541/967-4167	p/r pref
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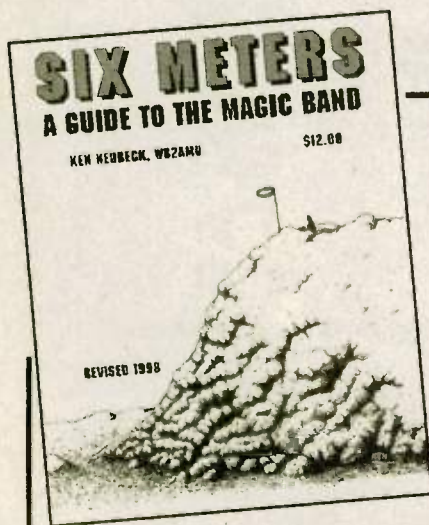
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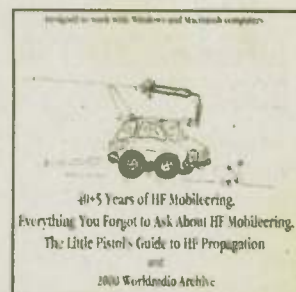
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ARRL helps to clear the air

The ARRL has successfully “run interference” in several recent cases where electric utilities were accused of causing problems for amateurs. One longstanding case in Tennessee involved suspected power-line interference affecting both the amateur bands and satellite dish reception. Other successful outcomes occurred in New Mexico and North Carolina, where amateurs had been plagued by line noise.

Paul Fulk Jr, N8ITF, of Springfield, Tennessee, had first complained to Cumberland Electric Membership Cooperative more than two years ago to get his noise situation resolved. After the company claimed it had done everything possible, the FCC’s Riley Hollingsworth advised the utility in June to get in touch with the ARRL. The ARRL convinced Cumberland to secure the services of Mike Martin, K3RFI, who operates RFI Services in Traceys Landing, Maryland. Martin was able to pin down the problems in fairly short order.

“As of today all interference has been cured,” Fulk recently reported to Hollingsworth. He credited Martin with “an exceptional job” in finding the interference sources.

Since his employment at ARRL Headquarters in May, RFI Engineer John Phillips, K2QAI, has worked closely with the Cumberland and other suspected power-line interference situations. He says even some experts are easily befuddled while trying to pin down interference sources, but Martin’s technique is nothing short of amazing.

“He’s almost supernatural in his ability to find line noise,” said Phillips, who attended Martin’s RFI seminar earlier this year. Phillips says line noise usually turns out to be the result of something that’s typically fairly easy and inexpensive to fix. “You just need to know the techniques,” he said.

Another recent case referred to the ARRL was resolved without heavy FCC pressure. Mark Mandelkern, K5AM, of Las Cruces, New Mexico, had reported noise apparently coming from lines oper-

ated by the El Paso Electric Company.

“We merely wrote a letter to the CEO of El Paso Electric, with a copy to Riley Hollingsworth, and it quickly trickled down to a local manager who called me with a real sound of apprehension in his voice,” Phillips recalled. Mandelkern wrote Hollingsworth 14 August that the company has been very cooperative and has begun work to completely rebuild a troublesome section of line.

In North Carolina, Jim Scholten, AD1V, had been frustrated by noise from Duke Power Company lines for several years. After a letter went out from ARRL to Duke Power, with a copy to the FCC, Scholten reported that linemen suddenly appeared at the suspect poles, and his noise problems abated. “It was impossible to make the power company do their job without you!” he wrote Phillips.

Amateurs suffering from interference believed to be emanating from power-generation or transmission facilities may contact John Phillips, K2QAI, rfi@arrl.org. — *ARRL Letter*



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