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WORLD RADIO

Year 29, Issue 12

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June 2000 • \$1.50



**Martti Laine, OH2BH,
Dayton Hamvention
Amateur of the Year**

A big win for the City of Los Angeles

The City of Los Angeles has been granted an experimental license to run air-to-ground video downlinks in the 2402 to 2448 MHz band. The City of Los Angeles, the County of Los Angeles as well as several other communities in California and Nevada have made such applications. They want access to the bands for airborne video surveillance of criminal activities, wildfires and other emergencies. Most have also stated their willingness to continue sharing the spectrum with Amateur Radio and other users.

The American Radio Relay League has opposed the plan. In the past the League has even refused to meet with community leaders to discuss the idea. When the matter was brought to the FCC the ARRL filed opposition.

But it appears as if the needs of the many outweighed the wants of the few, at least in the eyes of the FCC. It has issued WB2XEN to the City of Los Angeles. Other licenses to adjacent communities are expected to follow in the not-to-distant future. — *Newsline*

Two killed installing antenna

Two tower workers in North Carolina are dead after falling 60 feet while trying to erect an antenna tower in heavy winds. Radio News reports that Chester Smith and Steven English fell to their deaths when a wind gust toppled a radio tower they were building.

According to a sheriff's detective, Smith, English and four other radio enthusiasts were building the tower

as a birthday present for a local ham operator. The detective said the other men were hoisting a section of tower to Smith and English atop the partially assembled tower when a wind gust broke the suspended section, which caused the tower the men were standing on to fall.

— *Radio News, Newsline*

Disputes don't belong on the air

The FCC has told a pair of amateurs to stop feuding on the air. It did so in a letter to Steven Tunder, N8WGM, of Freeport, Ohio and Roger Wiseman, KC8JBO, of Glendale, West Virginia.

Hollingsworth's letter to Tunder and Wiseman advises both Hams to review Section 97.1 of the Amateur Radio Service rules. It also tells them to make certain that whatever disputes may exist are not carried over to Amateur Radio frequencies. — *FCC, Newsline*

New Zealand amateurs to lose most of 70 cm band

New Zealand telecommunications regulators have decided to sell off, or at least reallocate a good part of the 70 centimeter Amateur band — a loss of 9 MHz of the 70 cm band.

Currently this portion of the band is used for ATV repeaters input, with output at 615 MHz (ch 39).

As Scott ZL1UWQ said in a packet bulletin, "This is a serious threat to our bands!"

A series of meetings have already been held on the topic as the Government's closing date for comments is 20 April.

ZL amateurs, led by Fred Johnson ZL2AMJ, are currently working on the NZART submission opposing the Ministry's proposals.

If New Zealand telecommunications regulators are successful in making this reallocation it could wind up setting a precedent throughout Oceania — and possibly worldwide. — *Q-News, Newsline*

"Captain Truth" nailed by FCC

The FCC has zeroed in on a Newton, North Carolina, Extra Class licensee as a prime suspect in its "Captain Truth" investigation into unidentified Amateur Radio transmissions and malicious interference.

FCC Special Counsel for Amateur Radio Enforcement Riley Hollingsworth wrote John M. Yount, K4QIJ, on 29 March, citing FCC and other close-in monitoring evidence to indicate that Yount's station was the source of "malicious interference and jamming" on 20 and 75 meters. "Radio direction finding bearings have led to your residence and antenna at 225 N Gate Road in Newton," Hollingsworth told Yount. The FCC said part of its monitoring evidence resulted from work done by the FCC's High-Frequency Direction Finding facility in Columbia, Maryland.

"Our evidence indicates that you have made unidentified transmissions, transmissions identified by the call sign 'K4OKA' as well as 'Captain Truth,' 'Captain Sod' and numerous derivatives thereof," Hollingsworth wrote.

The call sign K4OKA is assigned to John A. "Al" Abernethy of Hickory, North Carolina. Abernethy last year




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June 2000 Year 29, Issue 12

lost his HF privileges for six months following an FCC inspection visit to his station in early 1999 and complaints of deliberate interference.

The FCC said evidence in the "Captain Truth" case indicated that the malicious interference and jamming occurred at various times since March 1999 — as recently as 24 March of this year.

In his letter, Hollingsworth posed a series of questions to Yount. He asked the licensee if he had ever identified transmissions by the term "Captain Truth" or as "K4OKA," or "Captain Sod." He also asked Yount what other terms or call signs he has used to identify his transmissions and if he had ever made any unidentified transmissions from his station. For any answer in the affirmative, Hollingsworth requested that Yount supply the frequencies and circumstances involved.

Hollingsworth gave Yount 30 days to provide a written response and said the information provided would be used to determine what action to take in the case. Failure to respond, he told Yount, would result in the designation of his Amateur Radio license for a revocation and suspension hearing before an administrative law judge.

Hollingsworth also told Yount contact him by telephone to discuss the matter further. The ARRL Audio News is at www.arrl.org. — FCC, ARRL, *Newsline*

Crew reaches MIR — Amateur Radio activated

A pair of Russian cosmonauts have reached the Mir Space Station and are slowly bringing it back to life. The Mir crew docked with the space station on 06 April. A short time later the crew activated the Amateur Radio station. The first report that it was on the air came on 08 April from Israeli station 4X4LF. Shlomo says he heard the 143.625 MHz, during the 1006 to 1014 UTC pass. The signals were 5 by 3 to 5 by 5 and full quieting most of the time. Shlomo adds that he tried calling on 145.985 MHz using both packet and FM voice but got no reply.

You can expect to hear quite a bit of amateur activity from Mir while the crew is up there. Cosmonaut Aleksander Kalari is a very experienced amateur and a lot of activity is expected to take place on 145.985 FM simplex.

In the meantime, audio from Mir and other space missions can be found at Andrew Thomas website. The address is: www.andythomas.org.uk — *Newsline*

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Editor's Log

It's a conspiracy! The list of Lifetime Subscribers keeps growing and growing. I think you readers are doing this in an effort to get me to be quiet. Yes, I only have so much room for my rambling opinions, but if this keeps up, I won't be able to spout off!

Our latest list of Lifetime Subscribers:

- Tony Naglieri, N1NJ
Ware, MA
- Steven Wheatley, KU9C
Morristown, NJ
- Arthur Altarc, WA2KXE
Long Beach, NY
- Joe Owen, KO4RR
Box Springs, GA
- Glenn Winningham, KD8JW
Cincinnati, OH
- Fred Fisher, AA9OP
Indianapolis, IN
- Bernard Small, N9ML
Walkerton, IN
- Randy King, KØNC
Lincoln, NE
- John Cooper, KA6IJN
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- Tony Planinac, KC6NBI
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- Paul Zander, AA6PZ
Los Altos, CA

Welcome aboard, y'all!

I just heard something that has me puzzled. In a long conversation with Jim Haynie, W5JBP, our ARRL President told me about the ARRL's actions in the case involving the pirate attack off the coast of Honduras. He had me mixed up with another caller who wanted to know how much money the ARRL had spent in this matter. Jim stated that no funds from the ARRL treasury had been spent. He also told me he had lots of e-mail on the matter — some of it "hate" mail.

It seems that some are questioning the U.S. response to aid a foreign national in international waters. And in reading a report posted on the ARRL Members Only web site, there are reports of intentional interference taking place on the frequency while this emergency was being handled.

When I served as a radioman in the Coast Guard, we handled emergency traffic like this every day, and most of them were foreign nationals on the high seas. It was very common to pass along medical advice from the U.S. Public Health Service or a U.S. Navy doctor to a vessel on the high seas. In some cases

U.S. Air Force "PJs" would parachute into the ocean near the vessel and provide medical care until the vessel was within helicopter range and the patient could be evacuated, so this situation is basically normal ops for me. But when I hear about people questioning our handling of the case, it just makes me furious! Consider this — reverse the situation. You are on a boat 500 miles off the coast of Australia. You have a medical emergency so you call for help and the only government that can assist is Australia. But sorry, by some of the warped reasoning going around, you are out of luck because you are a foreign national in international waters. Better luck next time.

Let's get something straight — this is an INTERNATIONAL hobby! Borders, boundries, nationality or race do not matter. A human life was at stake, and Amateur Radio operators took care of the situation. Each and every Amateur Radio operator who took part in this was a hero! I believe that no one reading this editorial would be so low as to do something like this, so I would like you to spread the word over the air and at your club meetings. Please post the following, and you can say it comes from me.

I will offer some advice to anyone who sent "hate" mail to the ARRL, or interfered with the communications — **SELL YOUR GEAR** and get out of this hobby. You are no longer welcome here. Take up stamp collecting. We don't need your warped attitude in this hobby.

Worldradio was well represented last weekend at the Visalia DX Convention. Armond, N6WR, John, N6JM, Glen, W6RWR, Ashley, W6GUY, and I all had a great time. If you have ever worked a DX station, you really should make an effort to come to this convention. You'll be able to put faces together with the call signs, voices and CW signals you hear on the bands.

The contesters' dinner was lots of fun with 250 DXers simulating a pile-up by yelling their call signs, with a DX expert trying to copy as many calls as he could to establish a "list."

Sunday mornings' festivities included the conventions version of "Who wants to be a millionaire?" But in this DX version, the questions were about DXing.

Lots of food, fun and friends await you next year! — *WF6O*

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Amateur of the Year

— Martti Laine, OH2BH

Each year the Dayton Amateur Radio Association (DARA) names the Amateur Radio operator of the year, to be honored at the annual Dayton Hamvention. For the year 2000 the committee has selected one of the most well-known DXpeditioners Amateur Radio has ever seen — Martti Laine, OH2BH.

Martti has been active from some exotic locations during his Amateur Radio career. His familiar voice has been heard from the Aland Islands, Gambia, Madeira, Pagalu Island, Market Reef, China, Sudan, Albania, Conway Reef, Penguin Island, Revilla Gigedo and others. In recent months, Martti has been heard from North Korea and the Chesterfield Islands.

He certainly has a talent for unlocking doors closed to the usual requests for operating from foreign countries. North Korea, for example, has been a very "closed" society, not allowing any Amateur Radio activity for years. How does he do it?

It all started when Martti was 15 years old. He became interested in Amateur Radio after making a deal with his brother, Reijo, OH2EW. Reijo taught Amateur Radio courses and Martti loved to ride on his brothers' motorbike, so Martti would get a ride twice a week in exchange for attending his brothers' classes. It didn't take long for the Amateur Radio bug to bite and Martti received his license.

In the summer of 1962, Reijo asked Martti to go along on a DXpedition to the Aland Islands. After hearing the huge pileups attempting to make



but twice with another station in Madeira, signing as CT3BH.

Amateur Radio operation from China has always been a problem due to the government wanting to keep it a "closed" society. In 1995 Martti organized an International Amateur Radio Conference held in Beijing. Ideas were exchanged and Amateur Radio has been on the increase from China ever since. Last year, Martti brought up the same ideas to the government of North Korea, and operated briefly with a demonstration station.

contact with OH2EW/OHØ, Martti was hooked on DX. And he has been a prolific DXpeditioner ever since.




One of his greatest accomplishments has been his DXpedition from Gambia in the early 1970s. No one had ever held world records of both SSB and CW modes in the CQWW at the same time. He accomplished that goal, not once,

Efforts to put more stations on the air from North Korea have met with resistance from the government, but it's just a matter of time before Martti cracks this nut, too.

Not only does he operate from exotic locations, Martti is a well-known author of several articles and a book for those interested in organizing a DXpedition.

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Martti Laine, OH2BH, receiving his plaque for the 1971 *CQ* World Wide DX Contest from Larry Brockman, N6AR.

He truly has this down to a science. His book, "Where do we go next?" is much in demand by those considering a journey to a foreign land. He has also contributed articles to many of the Amateur Radio publications and supplied information for "DXpeditions Guidelines" by Wayne

Mills, N7NG. *Worldradio* presented his story of the H4ØAA DXpedition from Temotu in the September 1998 issue, shortly after it became a new DXCC entity.

Martti has been recognized for his accomplishments in other ways, too. He

was inducted into the DX Hall of Fame and the Contest Hall of Fame — both before he reached the age of 30. And, he is still the only Amateur Radio operator who has been inducted into both!

After a stint with his employer in the Far East, Martti has now returned to his native Finland — but it's just a matter of time before we hear his voice from another exotic location.

Congratulations, Martti. You deserve the recognition. And thank you for being such an outstanding ambassador for Amateur Radio!

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Your comments on restructuring

The March column on restructuring inspired or goaded many readers to respond via e-mail, snail mail, and the occasional metaphorical brick through the window. While the vast majority of comments were positive, a few hammered away at the "loss" of Extra privileges to the unwashed hordes who will mire the lower end of the CW bands with molasses Morse and the SSB portions with simian gibberish. A few others conjectured that I was adorned with the horns of the "anti-code." In reality I have enjoyed Morse code since I was a Boy Scout in the 1950s, although I admit I rarely sent semaphores at anything close to 5 wpm. These days I heat up the Bencher® for contests and even strap a key on my leg when I am mobile. Of course, I do consort with the code-less netherworld and enjoy masticating the rag on the 2-meter repeater with all my no-code "gud buddies."

One of my favorite responses to "Restructuring — The Bottom Line" was from Carl, K9LA, who wrote, "Couldn't have said it better myself!" Brevity is the soul of compliments. One whole family of Hams in Lompoc, CA, sent in their thoughts in support of the changes:

"If most of the Hams had your clear head, our Ham radio would be in immensely better condition than it is in today, especially re: getting youngsters involved to pick up the baton from the oldsters. The CW-to-the-death characters have held a strangle hold on Ham radio far too long. My wife is Tech-plus, and we have three sons —

General/N6AUN, Novice/KB6GGV, and Technician/N6CQC. It would be interesting if you, after a couple of months, were to tabulate your "hate mail" vs. "praise mail," ...the numbers might be revealing. Count this one as praise mail. Actually, you can count yet another four: my wife, Magrit (N6FQG), and our three "boys." Five "yay's" right off the bat! John Schmid, WA6PGA.

I admire John and Magrit for having a whole family of Hams... and naming their sons General, Novice, and Technician was truly inspired! I am optimistic for the future of Amateur Radio because there are a lot of Hams out there just like the Schmidts, and it will be easier to recruit new Hams without the onerous requirement of high speed CW as a "rite of passage."

Although the Bitter and the Gloomy are represented in the responses, the stats so far are vastly positive (about 95% in favor), including some of the following interesting comments:

"I can now more easily share MY opinions about restructuring with others

and, hopefully, help others better understand "the bottom line." The column helped me pull together all the thoughts swirling around in my head." Fred Stone, W8LLY.

"I agree. My only hang-up, and this is because I know only too well how the system works: by downgrading the code, the phone bands will be increased in size and we will go through another phone-CW war and that probably will be the end of CW." Lew McCoy, W1ICP/7.

"Thanks for telling it like it is. Why can the FCC be so wise to what is needed and the ARRL continue to plod along like it's 1966? I think a few of the directors need to wake up and join the century or at least think about retiring." Bob Kuhn, KC7YN.

"Bravo on your March column! I like the way you can round up the entire corral and give them the dickens! I am not anti-Morse code... after having been a Great Northern telegrapher in the mid '50s." Ed, K7FEZ.

"It may surprise you to learn that I am

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 24 April 2000.

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 D Novice	Group C Tech/Gen	Group B Advanced	Group A Am Extra
Ø	KCØHUI	++	KIØRS	ABØKB
1	KB1FBJ	++	KE1LW-	AA1VB
2	KC2GGC	++	KG2RB	AB2HC
3	KB3EVH	++	KF3DV	AA3TO
4	KG4HIJ	++	KV4EW	AF4RK
5	KD5JYV	++	KM5XB	AC5UF
6	KG6BDZ	++	KR6RA	AD6KR
7	KD7IUK	++	KK7WH	AC7BY
8	KC8OIC	++	KI8JW	AB8FH
9	KB9WEC	++	KG9TC	AB9KF
N. Marianas	WHØABM	AHØBC	KHØIK	NHØP
Guam	WH2AOB	AH2DN	KH2UT	++
Hawaii	WH6DGE	KH7ZE	AH6QA	WH7G
American Samoa	WH8ABI	KH8DO	AH8AI	AH8R
Alaska	WL7CVE	KLØWR	AL7RP	ALØV
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Puerto Rico	WP3NOT	WP3HE	KP3BM	WP3E

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Thank you!

Rules & Regs

a Ham of 39 years who holds an Extra Class license and loves CW, but I have been an advocate of the reduction or elimination of CW for many years. I think I'll keep your column for one year, and will then send you a note to tell you what impact restructuring has had on me, my friends, and Amateur Radio operations here in the Pacific Northwest." Bob Peschka, K7QXG.

"The column should make some of the old guard take a good look at themselves. In Western Washington, after No Code Techs got involved, a high percent of them are now Extras. Just had to get their feet wet and get involved with Amateur Radio clubs." Larry, NA7W.

"Your column is right on line! I have talked to the 'Vinces' of the Amateur Ranks, and I asked them if they really listened to the foul talk on 20 and 75 Meter bands. And if they did listen, did they ever look up the calls of the worst offenders? About 60% of the foulest mouths and procedures comes from the Ranks of the Extra Class! So just how on earth will getting new blood in the Amateur Ranks spoil anything? I do have one gripe. I resemble the 'old retired farts' referred to by you! (nice touch, heh heh!) Keep up the excellent column, it is writing yours that keeps me subscribed." Ed Ciecierski, WB5WOU.

"I agree with you 100%! I was at one time an engineer with Collins Radio in Cedar Rapids, Iowa. One of my goals in life was to own a complete line of quality Collins Amateur Radios. But the Morse code requirement kept me out of Amateur Radio for a long, long time. After having attained the Extra Class license, I surprised many Ham operators by being a major supporter of the No-Code Amateur license. In times

past, I saw many of my fellow engineers refusing to consider Amateur Radio when they realized that the ancient art of telegraphy was required just to enter the hobby. Thanks for putting most of my thoughts regarding restructuring into words." Norm Richards, N9EVM.

Not all the e-mails and letters were positive. A few interesting missives were from Extra Class amateurs who are upset about having to share their band segments with the under-achieving riff-raff Low-Coders.

"I just had to comment on KE3VV's writings on restructuring. It occurs to me that [Worldradio] and he are totally without credibility to comment — after all you both have a huge vested interest in the situation. More Hams means more business for [Worldradio] and a job for KE3VV. Not only that, KE3VV, Advanced license holder, has been presented with the gift of his life... memorize a few questions and he's an Extra!

"I agree with the premise of low/no code for entry-level licenses (including General), but it upsets me that the top license is so easily obtained. Why not retain something that is a little "tougher," a little more "selective," a little more "exclusive" that some can aspire to?" Woody Railey, K7TN.

I have no "huge vested interest" in adding new Hams. In "real life," I am an attorney and consultant. I do a fair amount of writing and speaking in connection with my law practice, but Amateur Radio is a hobby. Writing for *Worldradio* is pretty much "volunteer" work, done out of an interest in the hobby and the enjoyment of writing about it. *Worldradio* writers get token payments of about \$25 per column (and

I can hear you saying, "Well, that's what Rules & Regs is worth"... hi hi). In short, having more or fewer Hams has no impact on my bank account.

I have upgraded to Extra but I hardly consider a few kilocycles of bandwidth the "gift of my life." Woody's comments about "selective" and "exclusive" are exactly what I was writing about in my column. The idea of an Extra Class "fraternity" with high speed Morse code as a "rite of passage" (or "hazing" if you prefer) is something I strongly disagree with. To stretch the analogy to its extreme, I don't need to be "paddled" to join the users of those precious kilocycles at the bottom of the band. Old Timers may recall that those band segments were taken away from General Class amateurs when the incentive licensing boondoggle was introduced at the behest of the ARRL.

Ham radio was never meant to be "exclusive" in any way. That's what country clubs and other private social clubs are all about. Amateur Radio is an activity that uses a "public" facility — the airwaves. Think of the amateur frequencies as highways for radio waves and the Ham ticket more like a driver's license. The criteria for getting a license from the government to "drive" the ether are only those criteria relevant to regulating the airwaves, not keeping it reserved for a few "elite" practitioners of the ancient and revered art of hand-operated Morse code. Bottom line — I didn't care that much about joining the Extra Club, but I want to use the clubhouse, so I had to join.

Tim Moore, K4TK, wrote a looonnngg e-mail from Alabama (edited here to save a few trees), and told me up front it was neither a hate e-mail nor a flame! But he is certainly upset!

"I just can't sit by and keep silent while the debate on restructuring unfolds. I want to make sure guys like YOU know why some of us 'Extra Class frat boys,' are DEEPLY disappointed by restructuring. Let me explain...

"I have been a Ham since 1987, NOT some old codger who has been in the hobby for decades. At 43, I am part of the 'instant gratification' generation, many of whom don't want to have to go through the 'hassle' of earning anything the old fashioned way. I do NOT think learning the code makes someone a better operator. But it DID make you show that you were willing to make some kind of commitment to learn something about the hobby. But in today's 'something for

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nothing' environment, learning the code is too great a price to pay to upgrade.

I consider this lowering of standards a continuation of the 'dumbing down' of America. Here in Alabama, students only have to pass an EIGHTH grade level examination to graduate from High School. Some day we will no longer require ANY test for a Ham radio license. I could live with that if we had meaningful written tests. Even my license is 'tainted' by the fact that I took those EASY multiple guess tests. Bring back the fill-in-the-blank tests, make the written test more challenging, and then we can let the CW tests go away. Then we can be filled with pride at having accomplished something when we do pass our test and upgrade to a new license class.

"I do NOT have to like restructuring, but I accept the changes, and I certainly must try to help make the most of the situation by trying to Elmer in new Hams and Hams who upgrade to the HF bands." Tim Moore, K4TK.

I agree that the tests are not quite as difficult as the "old days" when you had to go to the FCC office and draw diagrams of push-pull oscillators and fill in the blanks. But even then we knew what the diagrams would be and just memorized them. You seem to think that the test questions and answers were not available then, but I can assure you that they were. Nothing much has changed in that regard. Multiple choice is easier than "fill in the blanks," but not much. I agree that the written tests are not all that meaningful, but they NEVER have been. And the code test is even less meaningful.

I also abhor the "lowering of standards," and a continuation of the 'dumb-

ing down' of America in some ways. A lot of standards have been lowered in the name of "fairness" or phony equality, so much so that some high school graduates are illiterate. But the analogy of a high school diploma and a Ham radio license doesn't hold water. Diplomas are supposed to reflect learning necessary life skills... Amateur Radio is a HOBBY. Where is it written that getting a Ham call sign is supposed to be difficult? Besides, eliminating 13 or 20 wpm code is not so much a lowering of standards as it is eliminating code SPEED as the criterion.

Learning the Morse code is still required to get on HF (or get an Extra), and I would agree with the "retain 13-20 wpm" proponents IF learning more than 5 wpm code really was a test of anything relevant to Amateur Radio. The analogy to getting a pilot's license (which I have) helps make my point. A higher speed code requirement is sort of like making a student pilot learn how to fly a tail wheel airplane because it is (a) harder and (b) everyone used to have to do it. But very few tail wheel airplanes are made or flown anymore. So even though landing a taildragger is more difficult and shows a commitment to flying, etc., it is irrelevant to becoming a modern pilot. The license is a ticket to get in the door, get involved, and learn more. Of course, in the case of a pilot's license, the consequences of not continuing to learn may be more drastic than a few RF burns and too much TVI.

Just a thought, but I found that learning to program all of the features on my 2-meter HT was a lot harder than passing a 13 wpm code test. And they sell those to no-code techs.

For those Extra Class Hams who decry

the loss of the "special" aura attached to the Extra Class, there are lots of ways to be a "special" member of the Ham community. Five-band DXCC or WAZ, DX Honor Roll, Worked All USA Counties (I am one of less than 1,000 Hams who have done that... that's really exclusive!), and there are lots more. You can be special by saving a life or bringing comfort to disaster victims as part of ARES or RACES, or helping coordinate Amateur Radio services for a local marathon to raise money for charity. You can be REALLY special by being an Elmer to new Hams of all ages and teaching them how to play the game.

I got some really good advice from W6ESJ...

"You will never be able to please all the people all the time, but I think the FCC did a commendable job. Like all of us there are parts we might not like (or ways we would do things differently) but it is done and now let's all make it work. Let's help and encourage the new Hams and make our hobby grow." Jim, W6ESJ (44 years a Ham and an ARRL Life Member).

I look forward to a new generation of HF amateurs who tell all their friends how much fun it is to turn on the short wave radio and share more than typing with the people they met on the Internet. "Yeah, man! There was this cool static and the DX windows never crashed once!" And maybe we should just try thinking of Amateur Radio as a Community rather than a Fraternity. That will expand EVERYONE'S bandwidth!



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I didn't have to pour concrete

Allen Sherwood, K6USN

I recently sold my QTH of many years and moved about four blocks away. I assumed that as a Ham, my big problem would be removing the 35-foot tower and monoband Yagi (the realtor, a non-ham, called it 'deal-killing,' but to me it was, and remains, a thing of intrinsic beauty). I got the tower down, by first trying to sell it, then giving it away to a local Ham as moving day approached without the lineup of eager buyers I had anticipated. The 2,000 lbs. of ready-mix concrete I poured, in eager anticipation of my antenna farm some 13 years earlier had now become an eyesore to the back yard. Digging it out was impractical, so was covering it with dirt since the sawed off legs of the Rohn 25 tower base protruded through the concrete like a three legged tank trap from Omaha Beach. I made a "planter" out of the base, with some redwood planking, and I sure hope the new owner doesn't stick a shovel into it (it's 3 inches of potting soil over a ton of concrete), or he will be vibrating like a tuning fork.





This stealth HF-antenna is disguised as a bird house. The SGC tuner attached to the fence is now hidden behind a fake bush.

Still, it passed inspection (the house inspector was much more interested in the termite infestation in the garage — thank goodness for the diversion!).

The new place was swell, until I got my copy of the CC&Rs at closing. The realtor never mentioned THAT when I asked early on. Any and all outside antennas were forbidden. I suspect they have geranium police that check

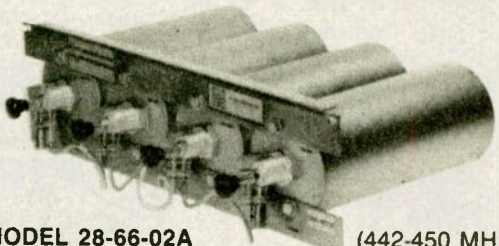
for the position of the potted plants as well. It is sort of like the military — what is not mandatory is forbidden. Anyway, I solved the problem with a trip to the hardware store and Radio Shack. My 'antenna-less' back yard now sports a 20' tall "birdhouse" which, if one looks closely, has 60' of #24 transformer wire running to a "bird feeder" via an attic vent. The whole thing is tuned with a Smarttuner hidden behind an artificial geranium (a nice touch, I thought) and the counterpoise runs along the bottom of the fence. This setup tunes 40-10 Meters in three seconds and has an





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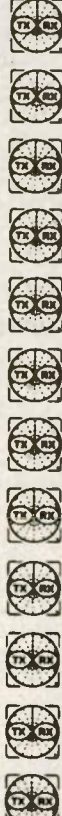
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almost flat SWR — which I attribute to the capacitance of the fake geranium plant. It does not work quite as well as the 3-elements at 40', but then I didn't have to pour any concrete either.

My first key down experience activated the burglar alarm, which enabled me to meet my new neighbors and the County Sheriff, all at one sitting, but a few ferrite beads and chokes fixed that right up. Well, most of the time — if I don't run more than 20 watts. And I didn't have to pour any concrete either.

My last duty was to let the FCC know I'd moved. I dutifully sent them a 3"x5" "change of address" card as supplied by a sister governmental entity, the Post Office. Silly, silly me! About two weeks later, as I was adding more ferrite beads to my house wiring, the postman delivered an official looking letter from Gettysburg. To my horror, it started out "Notification of Dismissal." It seems that my "application" (the change of address card) was being "dismissed" for not being on an FCC Form 605. That this dismissal was "without prejudice" was of small comfort. The form letter suggested I visit the FCC web site, and download the required forms. Unfortunately, my internet access was down (RFI), and when I got it going, I discovered I needed to download Adobe Acrobat software to get access to the illusive Form 605. But, I reminded myself, I didn't have to pour any concrete, right?

There was the caveat that one could call in and request the Form 605 the old fashioned way. Two hours working myself through the byzantine FCC voicemail system (designed to weed out all but the most persistent) got me a genderless mechanical voice that allowed me to give a mail address for them to send the forms to (I wonder why I

couldn't just give my new address and be done with it?).

Weeks passed. The mailman delivered a 10"x12" brown manilla envelope with the return cachet of the FCC, and sporting \$1.21 worth of metered postage. Clearly, this was serious correspondence. It contained 25 pages, leading off with a synopsis of compliance with "Paperwork Reduction Act of 1995" (I guess I am lucky they narrowed my forms down to a mere 25 pages to report my change of address). This process was taking a lot of time away from operating. I'd missed Field Day, the CQ Worldwide and WPX doing paperwork, and now here was the Big Enchilada, the long awaited, elusive, FCC Form 605. I poured over the 24 pages of instructions so as not to make some serious mistake that would send me back to Square Uno. It took longer than my Federal Income Tax forms, and was, I am certain, designed by the same team of mad bureaucrats. I decided, from the dozens of acronyms listed that "RM" (Renewal/Modification) was different than an "MD" (Modification). I tossed a mental coin and decided to shoot the works on "MD." Nowhere did anything say what to do if you moved four blocks south and wanted to let the FCC know about it. Done! 24 pages now line my cat's litter box and the infamous "605" is off to Gettysburg, hopefully on a one way trip.

The alarm system works flawlessly (most of the time) and the neighbors have stopped examining my birdhouse with binoculars. I added a large plastic owl to keep any pesky birds away from my antenna wire, and life is good. Besides, I didn't have to pour any concrete. And no, I'll never, ever move again!

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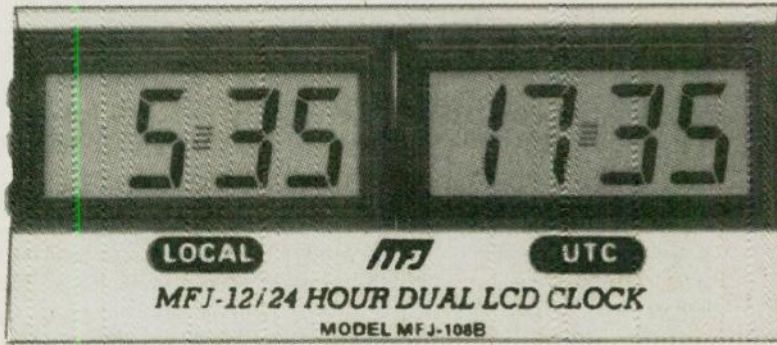
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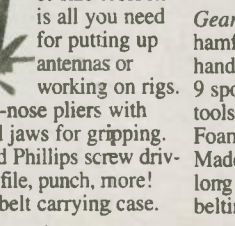
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A QRP DXpedition to AF-004

Carl Mason, GWØVSW

For my birthday this year we booked a last minute holiday in a warmer climate away from the ice and snow of our UK winter. We were fortunate to find a weeks holiday in Tenerife.

I took my QRP Plus, MFJ-971 and a power supply. Those of you who read my article in the December 1999 issue of *Worldradio* know the problems I had with batteries when I operated from Island of Zakynthos in Greece last year. My antennas consisted of a Pro-AM mobile whip for 30M with various mounts. This would also work on 20M with the ATU but was only used once. A half-size G5RV was packed, as well as several lengths of wire which would enable me to build a long wire with counterpoise if needed. All of this equipment packed neatly into my large camera bag and was carried as hand luggage aboard the aircraft.

Customs officials at the Bristol airport were very interested in my luggage and after a thorough check we were cleared

to board the aircraft for the four hour flight to the island. We arrived shortly before 1400 at Reina Sofia airport to overcast skies but much warmer weather, the temperature approaching 20C.

Tenerife is the largest of seven islands that make up the Canaries. It has two distinct climates. The Northeast side of the island is green and humid while the Southwest coast is dry and arid. We stayed in the resort of Playa De Las Americas at the Hacienda Del Sol Hotel and apartments.

The journey from the airport took just over 30 minutes dropping off other travelers on the way. When we arrived at our destination I was pleased to discover that the complex was on three floors. Our rooms were on the top floor on the end of one row which meant that we would have a balcony on two sides of the apartment. An ideal location for an antenna!

The following day was my birthday and I spent 30 minutes before breakfast installing the G5RV. The available plot was smaller than I had hoped but I managed to squeeze the antenna in by working one side along the wooden roof above one balcony and the other side in the clear, bent around the corner over the second balcony. Both ends dropped down about three meters and then ran along the balcony floor. Nearby was a small metal table where I placed a small mag-mount with the mobile whip. I

used this antenna to make my first and only QSO that day on 30M.

My first CQ as EA8/GWØVSW went out at 0918 and was shortly answered by Goran, EA8YU, who gave me a 5-2-9 report. Goran lives on the nearby island of Las Palmas and was surprised to hear another EA8 station on the band. He was using his new K2 transceiver with 10 watts and an end-fed wire. His signal with me was 5-5-9. We chatted for a while before signing clear. No other stations were worked that day but stations in F, DL, SP and OE were all copied on the band with good signal strengths.

The rest of the day was spent relaxing on the beach with my family in the nearby resort of Los Cristianos followed later on by an evening meal in "Joe's Place," a jazz bar we had discovered in our resort. Retiring late that night I looked forward to the next morning and my first serious attempt to operate on Tenerife.

On Sunday morning at 0800U, using 5 watts, I called CQ on 14.060 and after a short while was answered by Mal, GWØKYY, in Morrision, Swansea who had been listening for my call. He was 5-7-9 using 12 watts from his FT-1000MP and 3-element Yagi and gave me 5-5-9. The conditions on 20M were very good and a small pile-up developed. I worked 14 stations including 9A5I, PA3CME, and Dave, GM4ELV, in

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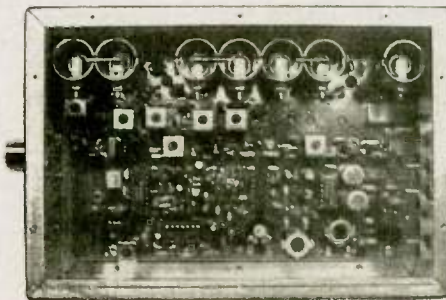
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Glasgow, who was my first two-way QRP contact and was using just 1 watt into a delta loop. Two fellow members of the G-QRP Club, Tom, DL4VM, using 5 watts and a dipole, and Paul, DK8SX, using 1 watt and a 3-element Yagi were also worked. Other countries worked included F, SP and IT9. I tried other bands but 20M was by far the best and this is where I decided to concentrate my efforts calling on the RNARS, FISTS and QRP calling frequencies.

The morning was the best time to operate. I would get up before the rest of my family and start operating just as the sun was rising and watch the light slowly creep up the side of the mountains behind our apartment and up towards the peak of Mt. Teide, an active volcano and Spain's highest mountain at 3,718m.

During the week we booked a coach trip to visit Mt. Teide in the Parque Nacional de las Canadas del Teide which is the fifth largest national park in Spain and includes an enormous volcanic crater measuring 48km in circumference. This park lies at around 2,000m above sea level and is a weird and wonderful place. It is more similar to the moons surface than any other place on Earth. It is made up of black lava flows and rock formations of pumice and basalt. There are twenty-one trails to walk on within the crater which are well marked and you are not permitted to stray off these routes. Unfortunately we did not get the chance to walk on any of them as the coach only stopped at a few places for us to stretch our legs and take a few photographs. There is a cable car that takes visitors from 2,356m to 3,550m up the side of Mt. Teide, just short of the peak, but this was closed for maintenance. Visitors are now no longer able to walk from this point to the summit because of the damage caused

over the years to the rare flora and fauna that are found there. We were very disappointed as we had looked forward to taking our children up to the summit of the volcano, something my wife and I had done during our first visit to the island 18 years ago.

Some operating was done in the evenings but band conditions were not good with signal reports several S-points down from the morning sessions. Contacts after 1730 UTC included CT1/G3VNG. Dave, a fellow RNARS member, was also QRP using 5 watts and a dipole. We exchanged reports of 5-8-9 and once again a small pile-up started with stations from DL, EA, EA6, F, OE, PA, S52 and YU entering the log.

During my morning sessions I heard, but was unable to work 5N4CPR, 9H1EL, N2YA, SV1CU/8, TA3DD and ZL2AOH. I just could not break their pile-ups!

Best DX during the week was Herb, SM6DOK, near Gothenburg. He was also QRP using 5 watts into his W3DZZ and reports both ways were 5-5-9. The lowest power station worked was G3ZWH. Doug from his QTH in Snodland, Kent, was using just 200mw when he called me one morning and would have been very good copy had it not been for several other QRP stations calling CQ on top of him. His report in the clear was 5-3-9.

By the end of the week 57 QSOs were made, 27 of which were 2xQRP. and 19 DXCC countries were worked. The G5RV had performed much better than expected and I had logged 19 countries by the end of the week. It was disappointing not to have worked into the USA but I had a lot of fun operating from AF-004 and now look forward to my next QRP DXpedition — wherever that may be!

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Terror on the high seas

Rene Steigman, K4EDX

It was an afternoon like most any other. The Maritime Mobile Service Net was in operation handling routine check-ins and phone patch request on 14.300 MHz.

Just a few kHz up the band, Phil Fiol, WB2BMC, was in QSO with Ray Faber, WB1AVE, when he received an urgent call from KH2TD aboard the S/V *Hayat*. Jacco Van Tuijl, the captain/owner of the vessel reported his vessel had been attacked by pirates.

Phil instructed Jacco to QSY to 14.300 where the Maritime Net was operating. Dick Fernandez, KD5BZ, one of the net controllers, received the call and learned that the S/V *Hayat* had been anchored some 100 miles off the coast of Honduras. Jacco and his son Willem were in a small dinghy a short distance from the *Hayat* when a wooden boat with four men had come along side the *Hayat* and asked for water. They boarded the sail boat and tied up Ms. Van Tuijl and yelled for Jacco and his son to return to the boat as they fired shots into the air from high-powered rifles. Jacco, seeing another vessel in the distance decided to make a run in an attempt to get

help. As he and his son started for the other vessel, the pirates opened fire. The result was the dinghy was hit and Willem was shot near the stomach. The pirates, apparently panicked by all of the commotion and the sight of another vessel in the distance, made a run for it leaving the vanTuijl's in the water.

Jacco managed to get his son on board the *Hayat* and then used his Ham rig to summon help.

Dick, KD5BZ, alerted the U.S. Coast Guard of the situation and attempted to patch them to the *Hayat* when his receiver failed. George, W4LT, alerted Rene, K4EDX, the net manager, via landline of the situation. Rene asked Fred, W3ZU, to assume net control as he had good propagation with the *Hayat* and all parties.

Jim Hirschman, K4TCV, a medical doctor in Florida was also summoned to the net. Jim remained on frequency throughout the night offering medical advice in an attempt to stabilize Willem until medical help could arrive on scene.

In the meantime, the Coast Guard had handed off the situation to the Honduran Navy which dispatched a vessel to the scene. The Navy vessel was equipped with HF radio and they established communication with Fred, W3ZU. Fred, who speaks both Spanish and English, acted as a relay between the *Hayat*, the Honduran naval vessel and the U.S. Coast Guard.

The *Hayat* begin to sail towards the Honduran naval vessel, as it was becoming obvious that rescue was going to take hours — there were no faster vessels in the vicinity. Throughout the night the *Hayat* and the Honduran naval vessel headed towards each other but at a speed of only six knots.

Fred, W3ZU, operated continuously from approximately 1800 Eastern time until 0700 Eastern time passing the vessels location to each other, relaying information and telephone patching the U.S. Coast Guard.

In the early morning hours the concern for the Willem's safety was peaking. His pulse was becoming more rapid, breathing was shallow and he had lost a lot of blood. One can only imagine the terror in the hearts of the boy's parents as they watch their son laying there knowing help was hours away. Jacco remained extremely calm, although at times you could hear the frustration and sometimes fear in his voice as he continued to report his son's condition.

Towards the early morning hours propagation was changing and signals were beginning to fade. Out of concern that contact might be lost with the *Hayat* and their rescuers, Phil, WB2BMC, and Mike, YV5VE7AMV, established an alternate frequency on 40 Meters. Fortunately, Fred, W3ZU, was able to maintain contact with the *Hayat* throughout the night and early morning hours and the 40-meter alternate frequency was not needed.

After what seemed like an eternity, the Honduran naval vessel reported VHF radio contact direct with the *Hayat*. When the two vessels were able to rendezvous, a sigh of relief was breathed by all on frequency. But this was short lived as there was still quite a distance to go to get Willem to a hospital. The naval vessel would have to make it to port and then the plan was to transport Willem by helicopter at first light to a hospital in Honduras. Jacco remained on the *Hayat* and would sail it to the port of Roi Tan off the Honduran coast. He would then join his family at the hospital.

Fred, W3ZU, and several other amateurs stayed on frequency though out the remainder of this ordeal to maintain contact with Jacco as he piloted his vessel to port and until he was able to rejoin his family.

As of this writing, Willem is in Childrens Hospital in Dallas, Texas, where he is reported to be recovering from his wounds. It was reported that he is paralyzed from the waist down and that neuro-surgeons are assessing this situation.

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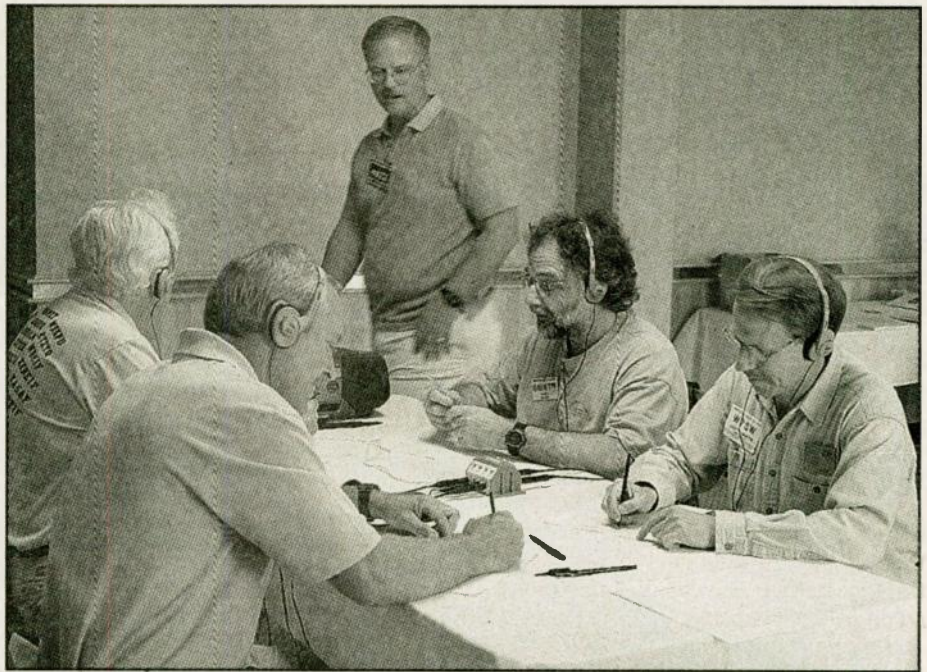
Visalia International DX Convention — 2000

John F.W. Minke, III, N6JM
Rick McCusker, WF6O

This was the 51st meeting of the Northern and Southern California DX Clubs, this time back at the Holiday Inn in Visalia, CA. California DXers from the north and south have been gathering together for 50 years and the event has grown to become an international affair. What other DX convention can match that? There was one deserving DXer attending who has attended all of them.

Worldradio was well represented this year with five of us attending. The festivities commenced Friday afternoon, 14 April, and continued until shortly before noon on Sunday, 16 April. Over 600 attended.

This year the event was again sponsored by the Southern California DX Club, with three co-chairmen: Will



CW pileup contests — 100 call signs are on the tape. The winner of the contest copied 59 correct calls. (There was a serious filter problem when the tape was recorded.)

Angenent, K6NDV, and the Gardenias husband and wife team, Carl, WU6D, and Cathy, N6DXC. Dave Bell, W6AQ,

was the Master of Ceremonies, and the club had an excellent program.

Attending DXers began gathering at 1300 when registration was opened, although some were there earlier for the 8th annual golf tournament. The exhibit area was also opened with several vendors maintaining a booth, including *Worldradio*.

At 1700 registration and the booth area was closed in preparation of the usual attitude adjustment hour, sponsored by HRO and the *DX Bulletin*. Following that were two specialty dinners, the 2nd Annual DX Convention Contest Dinner, with Fred Laun, K3ZO, as guest speaker, and an IOTA Dinner, which was down the road at Apple Annie Restaurant. Later in the evening Tom Orr, W6HT, gave a slide presentation of past conventions in the hotel lobby.

East Timor

A surprise presentation was given by Bernie McClenny, W3UR. Bernie edits *The Daily DX* which is available to those with internet capabilities and is also the "How's DX?" column in *QST*. Most DXers were aware that Bernie had just completed his DXpedition to East Timor and his trip was the subject of

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All of these U.S. Hams ventured out on a DXpedition during 1999. This is just a small portion of Amateur Radio operators fortunate enough to be able to operate from a foreign country.

his presentation.

Bernie said that he had been talking with United Nations people prior to any operations from East Timor and also said Martti Laine, OH2BH, had suggested that he attempt a DXpedition there. Martti was already involved with the Chesterfield Islands operation so he could not participate.

Bernie was all set to go with his license in hand, 4W6DX, which bore the date of 14 March 2000 from UN headquarters in New York. He even called them just prior to leaving on his DXpedition and was told everything was fine. Unfortunately, upon arrival he was told that the license was invalid. However, he was able to get a new license and was assigned the call sign 4W/W3UR.

Bernie said the original plan was to operate from Dili. However, they were transferred to Baucau, about three hours to the east.

There were many electrical problems to overcome as everything was in sort



Armond, N6WR, using a primitive speech processor to break a voice pileup.

of a mess. Power was available only for a few hours a day, mostly in the evening. The rest of the time he used a generator, which required a daily hike of two kilometers downhill to get 10 liters of diesel fuel then walk back uphill. The walk wasn't really that bad, except it was hot and humid.

Originally, there were to be two other operators assisting Bernie, but this just

didn't happen. This operation ended with Bernie by himself. However, Thor, 4M6MM, was able to help him install the antenna in his spare time when he wasn't working, which was about 12 hours a day.

A total of 9,191 contacts were made with 6,543 of those unique calls. Of that amount 2,001 were on CW, 7,134 on SSB, and 56 on RTTY. As for band



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Semi-formal portrait of all the foreign amateurs attending this year's convention.

breakdown he made 6,049 contacts on 15 Meters, 1,712 on 10 Meters, 1,404 on 20 Meters, 8 on 30 Meters and 18 on 80 Meters.

Other presentations

Bernie wasn't the only one presenting a program on a DXpedition. In last month's issue, *Worldradio* brought you the story about the Hillview Gardens/Borneo/Layang Layang DXpedition. Bob Schenk, N200, the leader of this effort was present with Jani Kusmulyana, YBØUS, and Tom Harrell, N4XP, all of them operators during the DXpedition. Also at the convention was Phil Weaver, 9M6CT, who lent logistic support for this major event.

An excellent presentation was given by Dave Patton, NT1N, on the newest mode on HF — PSK31. We'll be covering this exciting new mode in the next issue of *Worldradio*.

Bob Heil, K9EID, put on a demonstration called the "Science of Audio." He did an outstanding job of showing the differences between original microphones, broadcast-quality microphones and adjusting audio input in a rig to get the best sound to that rare DX station you're trying to snag. The crowd was thoroughly entertained by Bob's explanation and show about audio.

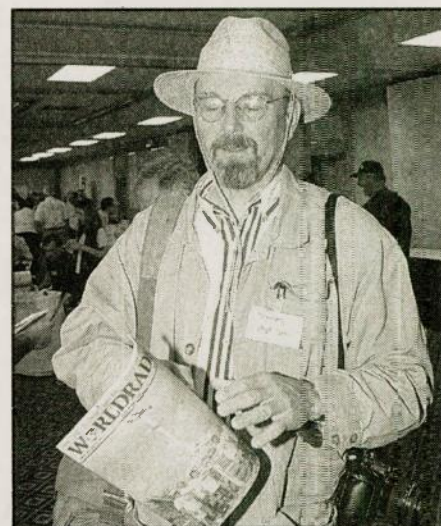
The Saturday evening banquet was tasty, and entertainment was provided by Bob, K9EID, banging the keys on a Wurlitzer organ. After dinner, several awards were presented along with lots of prizes given away. The DXer of the year for this convention was Harvey Shore, K6EXO.

Cathy Gardenias, N6DXC, was honored with a nice plaque for her work in putting this convention together. She also won several of the prizes given away, including the grand prize, a Yaesu, FT-1000MP. It was just in time — Cathy upgraded to Extra at this event, along with several other new Extra Class amateurs.

After the prizes were given away,

Wayne Mills, N7NG, put on a great show about the recent DXpedition to the Chesterfields. The slide and video presentation was first class!

Sunday morning things were starting



Henryk, SMØJHF, was one of the many Hams who stopped by the *Worldradio* booth to get a copy of our latest issue.

to wind down, but there was still one more really nice event — "Who Wants To Be A DX Millionaire?" hosted by John, K6AM, from the San Diego DX club. It was loosely based on the popular TV program. The only thing missing was Regis Philbin! It was a lot of fun and the contestants demonstrated their prowess in DX knowledge in an effort to win the top spot. The game will return next year.

Several comments about this being the best DX Convention in years were rewarded with the announcement that the convention will again be held in Visalia next year.

If you contact a DX station this year, chances are very good that you'll get to meet the operator at the convention next year. Start making your plans to join us at this educational and fun event.

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“Frequency”

Dave Bell, W6AQ

“**F**requency” is an imaginative fantasy based on the complex relationship between fathers and sons.

From an Amateur Radio standpoint, given the movie’s conceit, it could hardly have been better. The conceit is, of course, communicating through time, in this case the son in 1999 and the Ham father, W2QYV, I think, in 1969.

It’s hard to believe that this movie was not written by a Ham or perhaps the son of a Ham. Here is a picture which, in an oblique way, will convey the lure of Amateur Radio to the uninitiated. Long suffering spouses of Hams should leave the theatre nodding and smiling.

Any Ham club which can get it together to give demonstrations of Ham radio in action in front of theatres playing “Frequency” should get a lot of interaction from the crowds leaving the movie. Since a number of equipment manufacturers are offering prizes for the best Amateur Radio demonstration, and since it’s a very entertaining film, any club with the ability should make arrangements ASAP for a “movie field day.” There is a terrific PR opportunity here.

The director and writer take care at the beginning of the Ham radio sequences to go pretty much by the book, but as the movie progresses they move slightly farther from real Ham operating procedures as the movie itself moves farther from day to day reality. There’s a wonderful scene where little kids “want to talk on the radio.”

Starring Dennis Quaid in perhaps his most moving performance ever as the firefighter Ham from the 60s and relative newcomer Jim Caviezel as his son who’s not a Ham but knows how to push the microphone button, “Frequency” moves at just the right pace for the audience to follow the complex happenings on screen.

There’s a serial killer sub-plot which will undoubtedly annoy some real critics, but from my perspective it worked just great — heightening the tension and picking up the pace as it shifted ever back and forth between the 90s and the 60s.

There’s no doubt that the ending is a bit saccharine, but it is a fantasy after all, and ends as all but the most cynical want fantasies to end.

Baseball fans will enjoy this picture almost as much as Hams because an important plot turn involves “predicting” the outcome of the Mets-Orioles World Series of 1969.

The acting is uniformly good, with Shawn Doyle really creepy as a demented killer and Andre Braugher very believable as a cop in both the 60s and 90s. (Like all of us, 30 years has made him a little porky.)

As my friend Alan Kaul, W6RCL, said as we left the preview, “It’s a really good example of the law of unintended consequences.” And if you don’t know what that means now, you will when you see the movie. And I urge you to see it soon. I hope you enjoy it as much as I did. I’m going again. CU at the movies!



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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 8 x 10 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.

D-DAY INVASION OF EUROPE

The Historical Electronics Museum ARC will commemorate the use of electronics in the D-Day invasion of Europe on 03/04 June, 1400 - 2100 Z each day by operating special event station W3GR. Suggested frequencies are 7.115, 14.250, 21.245 and 28.440 MHz. At times the TBL-13 Navy transmitter or a BC-610 will be on the air. A certificate featuring the SCR-584 radar is available for a QSL card and two \$.33 postage stamps. Send to Historical Electronics Museum, P.O. Box 746, MS 4015, Baltimore, MD 21203. E-mail: w3gr@arrl.net. Web site: <http://members.aol.com/wk3p>.

CIVIL WAR RE-ENACTMENT

The Madison-Oneida ARC will be operating special event station W2MO 10 June, 1400 - 2000UTC as part of the 8th Annual Civil War Re-enactment weekend in Peterboro, NY. Suggested frequencies are 7.275, 14.275, 28.375

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30TH ANNIVERSARY

The Hot Springs Village ARC will operate a special event station beginning at 1300UTC 03 June 2000 to 2359UTC 04 June 2000 to celebrate the 30th Anniversary of Hot Springs Village. The call sign will be W5HSV and suggested frequencies will be 7.245, 14.245, 21.335 and 28.445 MHz. A certificate

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The Muskegon Area Amateur Radio Council will operate the Miss Michigan contest special event station, W8ZHO on 16, 17 and 18 June. Suggested frequencies are: 7.245, 14.275, 21.375 and 28.375 MHz. Certificates are available by sending a QSL, SASE and a green stamp to Dan Walsh, KC8JHX, P.O. Box 691, Muskegon, MI 49443.

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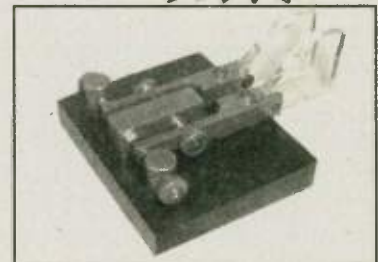
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"James Pole" 220 MHz J-POLE ANTENNA

John Everson, AB6LI

I know when many of you see the title with the phrase 220 MHz you will sigh, and then sigh again when you see the word "J-Pole." Well some people just don't know what they're missing! I was asked to do this review because I was one of the few people the editor knew that was active with 220 Mhz. A few years ago a friend and I purchased a local 220 repeater that was up and running but was getting no use. After a while we found the band to be a pleasant mix of the best characteristics of both the 144 and the 440 bands. Transceivers are a bit more scarce than the other more popular bands but antennas are widely available.

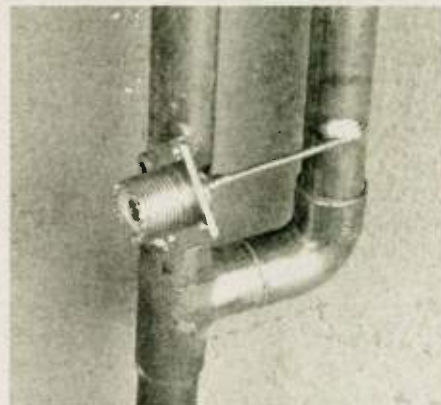
This brings us to the KB6WHT/KB6BLD 220 Mhz J-Pole. I think that all of us have seen a J-Pole at one time or another. Affectionately referred to as a "plumbers delight" as most are made of copper tubing much like the plumbing in your home. The offering from KB6WHT/KB6BLD is constructed from 1/2 inch copper thin wall tubing with all soldered junctions, which gives the antenna strength and rigidity without the weight. The overall length is 42 and 5/8 inches including the mounting stub. and can be easily mounted to any mast. The feedpoint is at the bottom and uses a teflon SO-239. Electrically speaking, the J-Pole is a 3/4 wavelength radiator with a 1/4 wave matching stub.

When I tested the antenna at my homebrew test range, it held up VERY well to a popular mass produced 3 dB gain antenna which will remain nameless. The SWR measured on the Bird 43 meter was better than 1.2 to 1 all the way across the 222-225 band.

So it was time to put the antenna in the air. Mounted just above the roofline above my shack, the antenna performed as expected. I was able to hear and work everything that I am able to work with my tower top (50 feet) mounted imported vertical. Most signals were similar with few exceptions. The test left me wondering why I spent \$170 on my antenna.

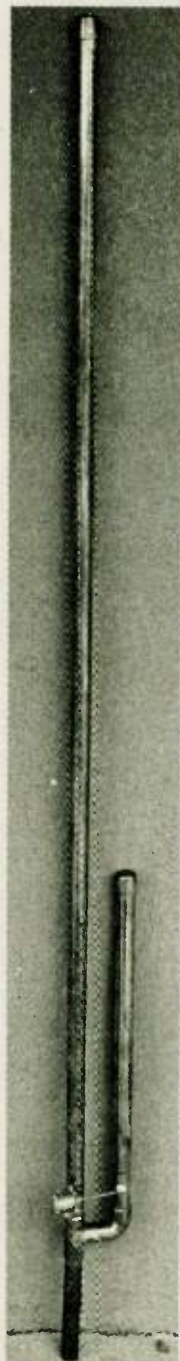
This antenna is a good performer. Light, sturdy, and compact. It could even be stood in a corner for a big signal from your HT or mobile for all you apartment and condo dwellers. Give 220 MHz a try. Give the "James Pole" 220 J-Pole a try. You won't be sorry.

The James Pole Company offers several different models for various bands, including a 144/440 MHz dual band, 440 MHz,



2144/220/440 MHz tri-band, 6 Meters, 10 Meters and a 2-meter/440 emergency roll up antenna. The 220 MHz antenna is priced at \$15, plus \$10 shipping and handling.

For more information, or to order contact James Pike, 18374 Hiawatha Road, Apple Valley, CA 92307; e-mail: kb6wht1@juno.com.



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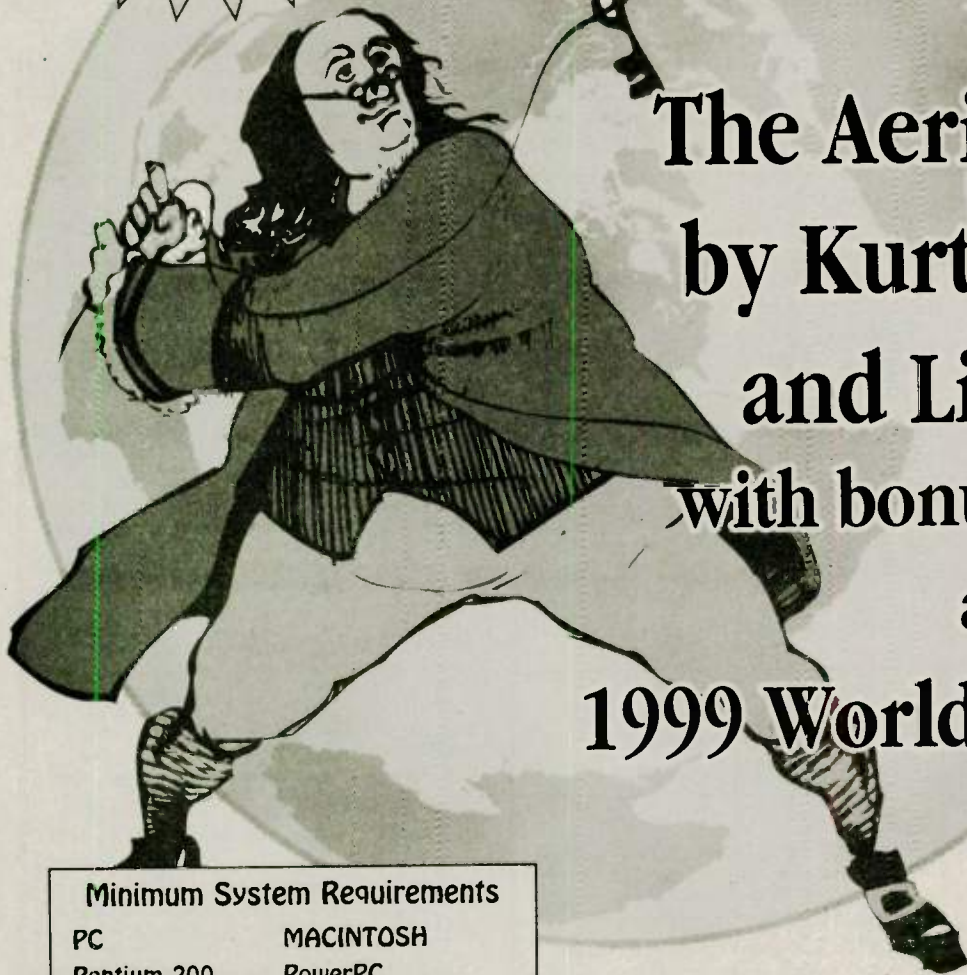
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Letters to the Editor

Rules & Regs

Just where is David Splitt, KE3VV, coming from? Your headline for his February 2-page "Rules and Regs" column "ARRL strikes out with FCC" fairly summarizes his negative comments on the League's Petition, RM-8763. What's constructive in the last sentence of his article: "Otherwise, don't look to the feeble efforts of the ARRL to have any more impact on local antenna restrictions than they have had on reducing Ham band interference, bringing young people into the hobby, or other issues of interest among its waning membership?"

Again, in "Rules and Regs" for March, David Splitt, KE3VV, again continues his anti-ARRL slant. He calls the League response to FCC's restructuring "whiney." What's constructive about saying: "Maybe the Old Guard in Connecticut sees their power to run the show slipping from their hands with the influx of new amateurs who don't give a Dah-DiDit DiDah DahDah about the ARRL and its faltering leadership role?"

I'm a League member of long-standing and have also subscribed to *Worldradio* for many years. I've enjoyed your devoting much space to the human side of our great hobby. And, until now, *Worldradio's* policy has always seemed supportive of the ARRL as the largest Amateur Radio membership organization.

But, despite Splitt's denial, these two articles in consecutive issues do sound like Wayne Green doing an ARRL-bashing editorial.

Let's get back in support of all who work for the betterment of our great hobby, the Amateur Radio service.

Carl Felt, N2XJ
Chatham, NJ

Vanity call signs

I couldn't help overhearing some local Hams talking about getting a new shorter call. I couldn't figure out why, as both

seem to be chained to their microphones on 2 Meters. I have yet to see any locals on CW, except me.

One Ham who just upgraded to General Class was thinking of getting a new, shorter call to which I thought to myself, "what for?" This obsession with changing calls every few years is ridiculous, I think.

The cost for obtaining personalized calls is too low. If the FCC is sincere about making and not losing money with licensing Hams, I think they should raise the price of the calls to anywhere from \$150 for the first specialized call to \$100 for additional successive change that's wanted; i.e. \$250, \$350, etc.

Too much, you may say? I don't think so. I intend to live with the call I was given back in 1961 until I die. This changing of calls every few years is baloney and the privilege should come with a hefty cost. It would save money and work for the FCC.

It may be unfair to those who can't afford to change their call often to go along with a recent fad, but that isn't necessary. Look at it this way; individuals think nothing of shelling out similar amounts for speeding tickets and other infractions, so why can't they pay more for specialized, vanity, etc. Amateur Radio calls?

These are just a few ideas to put and end to the excessive changing and hoarding of call signs. As usual, none of the steps will probably be enacted.

William J. Draeb, K9HJN
Kewaunee, WI

Dad's hidden talent

I'm surprised that you accepted the story (Amateur HI, March) at face value. Although it's a "warm fuzzy", it doesn't ring true. Maybe something was left out by Mr. Satterlee.

Mr. Satterlee would have us believe that he grew up not knowing that his father could copy code and that his father learned International Morse code from an association with "Uncle Elbert", a railroad telegrapher. I spent my early days in a AT&SF depot in Oklahoma and learned Morse before I learned International Morse. The code used by railroad telegraphers was totally different from the International Morse code we all (almost) know. yes, there are a few rare birds that can copy both and perhaps Uncle Elbert was one of them, but I'll bet not.

Oh well, it's still a nice story.

Ken Kopp, KÖPP
Anaconda, MT

Restructuring

Well, Amateur Radio restructuring has been with us for quite some time now, and I keep seeing and hearing more and more negative comments by many a fellow Amateur. I find this all to be very disturbing.

I have heard or seen comments to the effect that every amateur that gets either a new license or an upgrade after restructuring goes into effect, that some so-called Hams are going to tune up their 2 kW linear on the "newbies", to come down hard on anyone who can't do CW at 20 wpm or better, that all post 15 April amateurs will be nothing more than LIDS, that there will be no more "real Hams", (whatever that is), that Ham radio has been "ruined", that Ham radio is now nothing more than CB, and many, many more shameful comments.

While I may not agree with the current Amateur Radio restructuring, as I do not feel that it in any means "advances the radio art", as outlined Under Amateur Radio, Basis and Purpose, in Part 97 of the FCC rules and regulations governing Amateur Radio. However, I do not see how this trend of new Ham bashing is going to "advance" the Radio Art in any way, shape, form or fashion.

Exactly what does this mean? Not slowing down your CW speed to help out a newcomer? They will probably lose interest in it altogether. Tuning up an amplifier on a newcomer? They will probably become disgusted with Amateur Radio, or it will cause hatred and yet even more division among fellow amateurs. It is acts like these that could spell the so-called "downfall" of Amateur Radio. Do you really feel that good about bashing new Hams that are coming into our ranks? Does it somehow make you feel like a "bigger" person, or that so-called "real Ham" that I keep hearing about? Or is this just some form of self gratification? To me, it all seems like a bunch of school

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kids pushing, shoving and kicking sand on each others shoes in a playground. At least it sure seems to be on the same mentality level. Anyone who thinks otherwise really should read "The Amateur's Code", written by Paul M. Segal, W9EEA. In the very first part of it he states; "The Radio Amateur is: CONSIDERATE... never knowingly operates in such a way as to lessen the pleasure of others." Sure sounds like a man who knew what he was talking about to me.

The questions that we have to ask ourselves now are; Do I care enough about Amateur Radio to stop being a part of the problem and start being a part of the solution? And; What can I do to help out my fellow Amateurs, and to further the advancement of the radio art?

My challenge to you is to help out any and all Hams, both new and old alike. To bring back the art of being an "elmer", to learn to be a little more considerate and to care a little more about Amateur Radio and your fellow amateurs.

Also while you're at it, please try to remember this; every time that you or I key up a microphone, keyer, keyboard or whatever, there just may be a person or two out there who will hear us and write us off as a bunch of jerks. They might be a SWL, a prospective Ham, or someone that just might ultimately decide the fate of Amateur Radio.

"The only thing that separates an Immature Radio Operator from an Amateur Radio operator, is courtesy." — AB7RG

"The time has come for all of us to set aside our differences, help out all new Amateurs that are coming into our ranks, and help them to become the type of Amateur that we aspire to be." — Clinton Herbert, AB7RG

Sincerely submitted in the best interest of Amateur Radio,

Roy Clinton Herbert, AB7RG
Cottonwood, AZ

What the devil is it with all the complaining about the changes in our hobby?

I say to all who don't like the new rules, TOO BAD! Let me ask you this. Does that car in their driveway have a stick shift, do their wives still cook on a wood stove, do they read the evening paper by an oil burning lantern?

Sure, I got my Advanced ticket the old way, but those days are gone. You can be assured I will get my Extra under the new rules. How many of them have even looked at the new Extra exam? Let me tell you it's not a cinch.

Amateur Radio has enough real problems. It does not need all this useless nit picking. Let's work together and make

our hobby whatever it can be. If that isn't your goal then get out of the way and let those of us who appreciate the hobby get along with it.

Howard W. Sutton, KK7KL
Rupert, ID

Pick up any Amateur Radio magazine; get on the Internet or talk to any group of Hams. Wherever you go you will come across comments pertaining to the restructure of the FCC licensing system. Among these comments are quite a few from "Native Extras" (whatever Native Extra means — maybe born ready to copy 30 wpm code?). Each individual expresses his belief that he accomplished success over great odds, which others are, not required to do. Oh, how wonderful it would be if everyone were the same and faced the same challenges throughout their life. It would be assumed that each of these chaps accomplished everything the hard way. American citizen? Then of course they were in WWII, Korea, Vietnam, etc., to serve their nation. Drive a car? I'll bet the driving examiner was surprised to see the three pedals on the floor and the spark and throttle on the steering wheel column for the Model T Ford. Hey, no stick shift or, heaven forbid, an automatic transmission for them. Any of the chaps fly real airplanes? No, not the Cessna 172s. I mean real airplanes with round engines and two wings. Did they do the standard recovery from inverted spins? Break a stall the old fashioned way by popping the nose down?

Recover from unusual attitudes while on instruments? Learn in a tail dragger?

And just how many doctors out there learned the advantages of "bleeding" or the proper use of candles to get rid of a boil? How many "Native Extras" are farmers and never upgraded to tractor?. Hey, the only way to call yourself a 'real farmer' is to farm with a team of mules and a plow. How many of these comments come from Hams who will not buy equipment and have built and are still using home brewed transmitters and receivers? Fun winding coils on oatmeal boxes! Never let it be said that any of them are still not warmed by the glow of tubes as they try for the distant DX. When I was attending the Signalman school in the Navy we noticed that Radiomen learning Morse code did not have to read code sent by blinker light (much less learn semaphore). The point is: we all like to say we "did it the hard way" and subsequent generations and individuals have it too easy. But lighten up guys — it is Amateur Radio that is the object here. If it is to advance, there is generally a chance that changes will be made. I have access to a very old spark generator, which sends out quite a signal. Will I ever use it? I don't think so.

Archie Caldwell, K6AQH
Grass Valley, CA

(Ed. There you go, readers. Three letters about restructuring — and I promise I won't print another unless it is really, really interesting.)

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Worldradio Friends' Day

Every year, on the last weekend in June, it's the ARRL's great Field Day. Now, the first Saturday/Sunday in June, it's *Worldradio's* Annual Friends' Day.

From your letters, and in-person meetings at conventions, we do believe that *Worldradio* subscribers are the very finest Amateur Radio operators. They're very friendly.

You should meet each other! Great people should get together. Run into old friends, make new friends.

Start: 1800Z Saturday 03 June 2000

Stop: 1800Z Sunday 04 June 2000

Maximum time allowed 16 hours

Bands: All HF (No WARC bands) and VHF bands. Look for CW contacts on the half-hour marks

Call: "CQ, WR".

Exchange: First Name and the first three numbers of your ZIP Code. Canadians give the province. Non-North Americans, give your city.

Scoring: Two points for each completed 2-way contact. Multiplier is the total number of different ZIP codes and provinces and countries. Stations may be worked on different bands and modes. (CW contacts must be made in CW portions of the band.)

Awards: Certificates will be awarded to the top scorer in each ZIP Code (first three-number designation), Canadian province and country. Also an Honorable Mention certificate will be awarded to all others submitting logs. The certificates will be 8-1/2 x 11 and available for \$1 and a No.10 SASE.

QRP stations, 5W CW, 10W SSB, will be listed in their own category.

Deadline: Entries must be received by 06 July 2000. Results will be printed in *Worldradio* as soon as possible. (Volunteers in the Sacramento area to help with the entries will be greatly appreciated.)

Power: As a possible "tune-up" for Field Day any station operating from any non-"plug-in-the-wall" power source may add 100 points to their score.

So as to reduce RF pollution in North America, power is restricted to 150 Watts or less. Except non-North American stations may run up to their legal limit to help facilitate intercontinental contacts.

Non-subscriber contacts: You might not get too many because with the contest on Saturday, non-subscribers will be taking their weekly bath that day. Saturday night they'll be drunk.

However, if someone hears you calling "CQ WR" asks what it is, tell him it's the QSO Party for *Worldradio* subscribers. If he asks, "Can I give you a point?" Say, "Yes, Please" give and get the exchange and log him for 1 point, no multiplier.

Log entries will only be accepted from *Worldradio* subscribers.

Logs: Just send in the total number of contacts, number of multipliers, total points, and off times.

We don't need all the contact logs because *Worldradio* subscribers don't cheat! On the off-chance that there might be one, if he wants to hang a certificate on the wall that shouts "Liar, Liar" that's his problem.

Any suggestions for this annual gathering of the Good Guys and Gals will receive careful consideration from the Contest Committee.

Note: Since this has the potential (except for Field Day) of being the largest on-the-air event, efforts should be made to minimize interference to non-contest stations. Also, while it may appear as a contest, we do encourage chatting in the contacts. And, we expect that when you are on the air some friend may say something like, "I always thought you were brilliant, but hearing you call 'CQ WR' proves it even more."

ROY FERREN, K6RA

Roy W. Ferren, K6RA, died 05 January. He received his Amateur Radio license at the age of 15 and was active continuously since then — nearly 72 years. He was Director of the North American Aviation Flight Test Program, an avid horseman and UCLA Plato Society member. — Mrs. Grace Ferren

VICTOR ST. LAURENT K1JZN

Vic was a lifetime Ham radio technician and experimenter. His legacy to Ham radio is the great Ham radio family that he leaves behind and includes sons Roger, W6AQC; Robert, Raymond, W3HFL; Ronald, ND5S; Roland, KV1O, and Richard, N1CWT. Yes, all the boys' names start with "R." In addition, he leaves his daughter-in-law Sue, KF5LG, and grandson Steve, N1RTU; Ron's wife and son respectively.

Vic was born in Fall River, Massachusetts and moved to Rhode Island as a child. He spent the rest of his life in Rhode Island. As happened to many people during the Great Depression, Vic left school early (in the 8th grade) to help supplement his family's income. He came from a family of six boys and two girls. His formal education ended then, but he never stopped learning. He became a top-notch machinist and toolmaker. During World War II he worked in jobs to support the war effort

as he already was the father of two sons. Eventually, four of his six sons would wear U.S. Air Force uniforms. During the war, Vic worked on the prototype of one of the Norden bombsight, which was a major contribution and pivotal development of the war effort and was used in the famous B-17 bombers. Vic's brother, Leo, gave his life as a waist gunner on a B-17. Vic ended his work career as an electronics/mechanical inspector for the Raytheon Company.

One of Vic's favorite Ham stories was when he won a 6-element, 6-meter beam at the Swamscott Ham Convention in the early 60s. He topped off his tower with that antenna and began to work a bunch of fellows from Puerto Rico on 6-meter AM. All his buddies were phoning him, as they could not hear the signals that he was working in rapid fire succession. Vic kept that stack of KP4 QSL cards all these years.

Vic cherished each piece of Amateur Radio equipment he owned. I still remember the kits he built from Knight, Eico and Heath. I used to see wires running through the walls of his shack terminating at some hulk of surplus equipment to "borrow" a stage in the circuitry and bring that back to the shack via other wires.

Vic was anxiously looking forward to the day he could turn his Tech license in for his General license under the new guidelines. Unfortunately, he missed

that event by less than a month. Vic would join in on the weekly family skeds at the shack of his son Roland. These skeds will continue in his memory.

His six sons carried Vic to his final resting-place. — ND5S

WILLIAM B. "BILL" LEE, KDØIL

Bill Lee, KDØIL, a long-time Amateur Radio operator died 31 December 1999. Bill was actively working stations until two months before his death. His favorite mode was CW but he spent some time on SSB as well.

Bill, who was a dentist, was also a WWII hero. He graduated from Washington University School of Dentistry in 1929, and practiced for 51 1/2 years. He was called to active duty in April 1941 as a Major in the Army Dental Corps and was sent overseas into the Asiatic-Pacific theater of operations, serving in New Guinea, Australia and the Philippine Islands. Bill was assigned to the 2nd Field Hospital and was part of General MacArthur's forces in the invasion of Leyte, Mindoro and Zamboanga in the Philippines. He served 16 months in these combat zones.

During the voyage to Mindoro, Japanese Kamikazes attacked his ship for three days. Bill called that adventure a "memorable experience." After the invasion of Zamboanga, Bill was sent to the Theater Surgeon's Office and promoted to Lt. Colonel. He returned home in time for Thanksgiving in 1945.

Bill loved Amateur Radio and spent many hours in QSOs all over the world. QSL cards adorned his walls and he could recall the contact with many like it was yesterday. — WØFF

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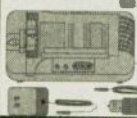
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Ron Bidwell, AE4QK

My XYL and I built a new home three years ago with a new radio shack in mind. It's a specially designed 12 X 18-foot room with 18 electrical outlets and a 220 VAC outlet for an amplifier. All antenna coax, one cable for 2 Meters, one for 440MHz, three for HF and rotator control wire, is in PVC pipe buried at a depth of three feet and it enters the shack through the floor behind the desk.

Starting at the top — lots of shelf space for manuals and notebooks. Next is a Kenwood TM-V7 2-meter rig and a Hy-Gain rotator control. Then comes the Ameritron AL82 amplifier and an Astron VS50m power supply for the 2-meter radio and scanner. On the bottom is external speaker, a Yaesu YO-901 scope, an Icom 775 DSP and a Ameritron ATR-30 antenna tuner. The microphone is a Eltro-Voice RE50. The computer is a Dell with the keyboard on a pull out shelf. The 17 inch monitor is mounted on a swing arm — easily visible from anywhere in the room.

Amateur "Hi"



Ever had a funny or strange experience with Amateur Radio, on or off the air? If so, type it up (or print neatly) and send it to us for consideration in our monthly AMATEUR "HI" contest. You could win a free year's subscription to Worldradio!

Penny-wise — Pound-foolish

Several weeks ago I was forced to remove my antennas from the roof of the apartment building where I live. I had a 1/2 wave 40-meter dipole and a 2-meter 5/8 wave mag-mount on an air conditioning unit.

Forty was the problem. I tried a 33 foot 1/4 wave wire out of my window that worked fairly well, but I wanted a better antenna.

I decided to attend a local Hamfest, and since I don't have a car, I took the Long Island Railroad to Lindenhurst. I then took a cab to the Hamfest, which cost \$2.50. I said to myself, "I can walk

this!"

At the Hamfest I bought a new 40-meter mobile antenna and started walking back to the LIRR station. On the way back, I fell on the sidewalk. My lip was bleeding, my left hand was scratched and I loosened two front teeth. I went to see my dentist, (K2JQB) and luckily my teeth were not damaged.

Had I just taken the cab back from the Hamfest to the station I would not have fallen! Penny-wise and pound-foolish!

And the new antenna works just fine.

— Mark Grossman, K2CON
Jamaica, NY

W-100-N

No certificates for W-100-N were issued during the month of March, although there were some received that had to be rejected. Please take note of what is referred to as a nation. A list of valid nations is available from *Worldradio*.

CATZ

Applications for our CATZ award are slowly beginning to attract interest. The rules are printed every other month. Please note that the start date is 01 July 1996. Any contacts prior to that date cannot be accepted. The following DXers successfully completed the requirements for this award:

20. Paul H. Baumgarte WD8RJR
06 March 2000

21. Ira S. Gottfried K6IRA (All Single Year) 27 March 2000

A good handy tool for researching this one is the "National Geographic Atlas." Another is the "Rand McNally International Atlas." They list the actual coordinates of places in the index — just what you need for verification.

Tunisia (3V)

Andy Lueer, DJ7IK, announces to the DX community that they will mount a DXpedition to Kerkennah Island (AF-073) in Tunisia. They have been assigned the call TS7N. Andy says that Kerkennah Island is one of the most wanted islands for the IOTA program and has not been active in more than 25 years. So, just in case you missed the 3V8BT operation from the island in March you will have another shot at it.

The goals of the DXpedition include the activation of a rare IOTA island; the new prefix TS7; activate Tunisia on all bands and modes including 6 Meters; and participate in the CQ Worldwide DX Contest.

The DXpedition team is scheduled to be on the air between 15 and 30 November 2000. Special consideration will be made to work west coast stations and novice bands.

Vietnam (3W)

The *Ohio/Penn DX Bulletin* notes that Coly Stchelokov, UAØFM, has been active signing with 3W5FM on several bands and his length of stay is unknown.

There also has been an increase in activity recently from other calls, almost

all of them visitors, including that of the OK DX Foundation team signing with 3W5OK from Cat Ba Island (AS-132).

East Timor (4W6)

We have another new DXCC Entity! This is East Timor, better known as United Nations Temporary Administration of East Timor (UNTAET).

The International Telecommunications Union has assigned the prefix block 4WA-4WZ for use by radio stations within the areas administered by UNTAET. This prefix assignment is for the use of UNTAET as long as it exists, and will be released to the ITU at the end of its existence.

UN stations within East Timor may be assigned 4U prefixes for official use, while UN amateur stations may use the prefix 4U1. This includes the UN Amateur Radio Club station, 4U1ET. All other private and Amateur Radio stations in East Timor will use the prefix 4W6. Individuals who expect to be there less than one year would use 4W6/home call, while those who will be there in excess of one year may obtain 4W6 call signs. Permanent residents of East Timor who were previously licensed may also obtain permanent call signs.

Active calls found on the band since this announcement include 4W6MM, who is Thor Stefansson, TF1MM; 4W6UN, Ross Ballantyne, VK1UN/VK8UN; 4W6GH, Antonio Pereira, CT1EGH; and others. However, calls such as YC9MKF, although located on Timor Island, do not count for East Timor.

Don't confuse the new entity with that of Portuguese Timor, those former CR8 calls, that was added to the Deleted List effective 14 September 1976. Even though Portuguese Timor occupied the same geographical boundaries as the present East Timor, it is not the same entity. And, they both included the small enclave in western Timor known as Ocussi-Ambeno, and the small island of Atauro, 23 km north of Dili, the capital. The enclave is separated from

the rest of East Timor by approximately 70 km. There is another northshore island known as Jaco.

I do not know where the IOTA committee will stand on this, but Atauro Island is included as the same reference as Timor Island (OC-148), and now two different entities are located on the island. I would think this one would be covered under East Timor Coastal Islands.

For DXCC purposes, UN Temporary Administration of East Timor will be added to the DXCC List with the effective date of 01 March 2000. QSL cards for QSOs made after that date will be accepted on and after 01 October 2000.

Bernie McClenny, W3UR, Editor of *The Daily DX* and the "How's DX?" column in *QST*, says that the 4W prefix had been assigned to Yemen, and when Yemen and Democratic Republic of Yemen (7O) reunited 10 years ago, all operations since then have used the 7O prefix.

And, just as things were being wrapped up with the Chesterfield Islands DXpedition (see below), Bernie and his group came on with a major operation signing with 4W6/W3UR. Team members also included Jose de Sa, CT1EEB; and possibly Pertti Turunen, OH2RF, who was to come over after finishing with the Chesterfield operation. Olli Raissanen, OXØXX, was originally scheduled, but had to drop out due to business commitments. During the first days of operation

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they were on 15 meters transmitting on 21.200 MHz and listening above 21.300 MHz.

Steve Lawrence, WB6RSE, heard a local packet posting that three members of the TXØDX operation would join Bernie following that operation.

Lesotho (7P)

The *Daily DX* informs us that a German group of six operators will have a DXpedition to Lesotho in July. They plan to leave Frankfurt on 02 July with their operation commencing one or two days later. Their activity will run for three weeks ending 22 July.

No call sign has been assigned at this time; however, they'll have three stations on the air simultaneously on 6-160 Meters on CW, SSB and RTTY. QSL chores will be handled by Fritz Bergner, DL7VRO, either via the bureau or direct. After the DXpedition they will have an online log search at <http://dx.qsl.net/logs/index.html>. See their website at <http://www.qsl.net/7p8dxpedition2000/>.

St Paul Island (CY9)

Rick Harris, AI5P, will head a small group of DXers on a DXpedition to St. Paul Island (NA-094) this summer between 6 and 10 July 2000. Rick says that although landing permission has been received from the Canadian Coast Guard, there is a new rule that the island housing structures cannot be used and liability insurance will be required. They hope that these additional requirements can be successfully met.

Detailed information is available at <http://www.geocities.com/Heartland/Pines/7651/DXpedition.html> and further information will be given when it is available. The group is looking for sponsors (particularly foreign clubs) and they are encouraged to directly contact either Duane Traver, WV2B, or Rick.

Chesterfield Islands (FK/C)

This one came up on schedule and right on time, 23 March 2000, and exactly at 0000 UTC. This one became

another new entity as the result of the IARU vote regarding membership of the Association des Radio Amateurs de Nouvelle Calédonie, New Caledonia's Amateur Radio society. TXØDX was signing from the Chesterfield Islands (OC-176). The initial operation began with 15 Meters, both CW and SSB, and 17 Meters SSB. It was a madhouse, literally, but soon calmed down after a while.

The TXØDX site was one of the small islands in the southern part of the Chesterfields. Although not quite as big as some of the other islands, the landing appeared to be safer with sufficient room for plenty of separation between the CW and SSB stations. The CW site was located at the north end of the island and the SSB site some 1,000 feet to the south.

Despite frequent rain showers, the operators at TXØDX completed almost 35,000 contacts by the third day of operating around the clock. That's an average rate of approximately 500 per hour!

However, all good things must come to an end. The weather deteriorated during the last two days of operating with the seas building as a north wind came down from a storm thousands of miles to the north. There was also the possibility of the team being stranded on the reef had the weather continued deteriorating. So the operation ended at 0040 UTC, Wednesday, 29 March 2000. In the six days of operating, TXØDX collected 72,654 contacts. The majority were on 15 Meters, SSB and CW, as per the original strategy to provide the maximum number of DXers their first-ever Chesterfield contact. However, other complimentary bands and modes were activated sporadically, including 6 Meters with more than 2,500 contacts and RTTY with some 800 stations in the log.

The weather had been watched closely as it was the typhoon season and there was always the possibility of having to cut their stay short.

TXØDX was also an active call in the

CQ Worldwide WPX Contest and was transmitting up around 28.745 MHz and listening down. We heard some poor misinformed DXer come on his frequency and ask "where is he listening?" That is a no-no! Any DXer worth his salt would have heard the pile-up. He would have tuned across it on his way up there.

The team members for this one included Eric Esposito, FK8GM; Petitjean Franck, FK8HC; Kan Mizoguchi, JA1BK; Trey Garlough, N5KO; Wayne Mills, N7NG; Pekka Kolehmäinen, OH1RY; Kari Leino, OH2BC; Martti Laine, OH2BH; and Pertti Turunen, OH2RF. Tim Totten, N4GN, was originally scheduled to participate, but business commitments kept him from going. He was replaced by Trey.

Do not submit Chesterfield cards for DXCC credit from previous operations such as that of FK5C, an IOTA DXpedition to the islands back in February 1993. The entity is not retroactive.

There has also been some questioning on the validity as a new entity in regard to the rule on open water separation as there was reported to be an intervening island between New Caledonia Island and the Chesterfields. Tim Totten, N4GN, said that on the way to the Chesterfields the TXØDX group made a slight detour to the area where intervening reefs are indicated on some older maps. They were able to confirm the French Navy's documentation that the claimed islands simply do not exist.

Clipperton Island (FOØX)

The DXpedition team to Clipperton Island (NA-011) landed safely on the island on 01 March and immediately began the process of setting up their radios on the southwest side of the island near Clipperton Rock. Heavy monsoon-like rains and wind had kept them from getting much done until that day. One station was on 14.195 briefly and said that they were continuing the setup and would be back on the air later. In a few hours they would be roaring away with five stations signing with FOØAAA on all bands, 6 through 160 Meters. At the end of the first 24 hours they were reported to have made over 14,000 contacts — perhaps a record.

Their satellite operation suffered a serious delay as their computer assigned to the satellite station crashed and all data and prediction software was lost.

The operation was grueling to the operators with around the clock opera-

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tion, which required each operator to do a full 9-hour shift. Most of the operators averaged 2 to 4 hours per day. After 72 hours their logs showed 39,316 contacts; after 96 hours it was 50,135 contacts; and by the end of the day on 07 March they had 69,400 contacts.

At 1800 UTC 08 March it was time to break down the sites as they had to be ready to leave the island by 0030 UTC the next day. The DXpedition has a website and can be found at: <http://www.qsl.net/clipperton2000>.

It is also interesting to note how I became DX Editor. Worldradio's DX Editor at the time, Charles Signor, WA9INK, was busy organizing the 1978 DXpedition to Clipperton Island, and had no time for DX editor duties. And that is how I started.

Turks & Caicos Islands (VP5)

The members of the Frankford Radio Club will head to the Turks and Caicos Islands for the October 2000 CQ World Wide SSB DX Contest. WA2VYA, K2WB and N2VW will operate from the home of Jody Millsbaugh, VP5JM, on Providenciales Island (NA-002) from 24 to 31 October. During the CQ WW DX SSB Contest they will sign with VP5T. Look for them on CW and PSK-31 on all bands before and after the contest. QSL VP5T to N2VW. E-mail requests for VP5T bureau cards can be requested via n2vw@ar1.net. In other words, if you need a confirmation, just send an e-mail as no QSL card need be sent. QSL requests for all others should be sent via their home calls.

Cocos (Keeling) Island (VK9C)

Bert van der Berg, PA3GIO, plans to be active from Cocos Island (OC-003) between 26 August and 01 September 2000. Look for him signing with VK9CQ. Check his website at <http://www.qsl.net/pa3gio/vk9cq/>.

Christmas Island (VK9X)

Look for Bert again signing VK9XV from Christmas Island (OC-002) following his Cocos operation, beginning 02 September and through until 13 September 2000. Website for this one is the same except replace VK9CQ with VK9XV.

Cook Islands (ZK1)

If you missed the activity from this group earlier this year you will have another chance this summer. Gerard

DX Prediction — June 2000

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 = 149. 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.

UTC	AFRI	ASIA	OCEA	EURO	SO AM
8	(21)	*22	*23	*21	*20
10	24	20	*21	*23	*22
12	29	22	*19	*26	*30
14	32	*24	*18	*28	*35
16	34	(18)	18	*29	*39
18	*36	18	17	*29	*42
20	*36	23	34	*27	*43
22	*30	26	*41	*24	*41
24	25	*28	*44	*21	*36
2	*22	*29	*44	*18	*30
4	*24	*27	*41	*16	*26
6	*26	*27	*35	*21	*23

WEST COAST

UTC	AFRI	ASIA	OCEA	EURO	SO AM
10	24	*21	*21	22	*25
12	27	*18	*19	23	23
14	31	*20	*18	26	*30
16	33	*22	18	*27	*36
18	*35	*24	17	*28	*39
20	*36	*29	*34	24	*42
22	*30	*30	*41	*20	*39
24	25	*30	*43	17	*35
2	22	*30	*44	15	*29
4	*24	*30	*42	21	*25
6	30	*28	*36	24	*22
8	24	*26	*24	22	*20

EAST COAST

UTC	AFRI	ASIA	OCEA	EURO	SO AM
7	25	20	*27	19	*21
9	28	20	*22	*22	*21
11	*34	23	*20	*25	*29
13	*39	*26	(19)	*28	*35
15	*42	*22	(18)	*29	*39
17	*43	19	(17)	*30	*42
19	*39	22	(24)	*29	*43
21	*32	25	38	*27	*42
23	*27	*28	*42	*23	*38
1	*24	*28	*44	*21	*31
3	*20	27	*43	*16	*26
5	*29	24	*36	*21	*23

Dijkers, PA3AXU, will visit the islands and will be on first from the South Cook Islands between 03 and 07 July where he will operate from Rarotonga Island (OC-013). His operating calls for SSB, CW, RTTY and PSK. Then he will head to the North Cook Islands and sign from Penrhyn Island (OC-082) between 08 and 15 July. Finally, he will return to Rarotonga and operate some more until the 20th. His call is unknown at this time.

Bosnia-Herzegovina (T9)

In the last issue I commented on the

fact that the Overseas QSL Bureau in Newington could not forward cards for YT4, YU4, YZ4, 4N4 and 4O4, unless contacts were made prior to May 1993. I said this was apparently a problem with the Bosnia and Herzegovina QSL bureau, which now uses the T9 prefix.

With that in mind I went on to think that they would count the same as the T9 calls as long as they were made after May 1993. Not so. I received an e-mail from Zdravko Kurtovic, YU4AR, who says that his Amateur Radio Society (SRRS), of the Republic of Srpska, claimed to be an entity of Bosnia-Herzegovina,

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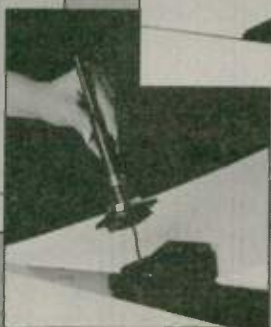
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* **NEW MSG-1000S** • Dual-band 146/446MHz w/spring whip and fold-over
Gain & Wave: 146MHz 3.5dBi 1/2 wave • 446MHz 6.0dBi 5/8 wave x 2 • Length: 43" • Conn: PL-259 • Max Pwr: 150W

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will accept the cards, since the regular Bosnia-Herzegovina bureau refuses to accept. In other words, not really Bosnia-Herzegovina.

I worked YT4AY and YU4UW in the March ARRL DX Contest and had word from Dan Henderson, N1ND, the Contest Branch Manager in Newington, that they would not count the same as T9, and would only count for Yugoslavia. So with that in mind that block of calls would be of no use for DXCC credit either.

IOTA

Mike Wise, GØGPX, is currently active from Canouan Island, in The Grenadines (NA-025) signing with J87AB. Mike is a missionary pastor and should be there through the end of this year, maybe longer, before returning to England.

If you were active in the March ARRL DX Contest and worked 8S7A, that was Oland Island (EU-037). A special QSL card has been prepared for this operation. You may request one via SM7CRW or W3HMK.

Harvey Van Hauwaert, ON5SY, announces a DXpedition to the Isle de Sein (EU-068) for the IOTA contest in 2000. This group, known as "The Minkies Boys" will again be lead by Harvey and will include a team of 10 Belgian DXers. Many of these team members were on their previous DXpeditions, such as Minkies Reef (EU-099) in 1997; Guernsey (EU-114) in 1998; and Ouessant (EU-065) in 1999. The expected departure date for the island will be 27 July with the operation beginning the following day. They plan to operate through 31st. Please refer to their website at: <http://www.qsl.net/on6ck>.

Effendy, YC8XNE, and his XYL, YC8XNY, reside on Sula Island (OC-076), which is one of the rarer IOTA island groups and can often be found near 21.260 MHz being assisted by other local calls, YC9BU or YC8TXW.

Bernard Stefen, DL2GAC, has once again been traveling about the Pacific activating some rare locations, including some never activated before. Despite his problems with malaria he has been turning in a good effort. Some of the operations included: H4ØMS, Temotu Islands (OC-100); H44MS, Florida Islands (OC-158); and P29VMS, Green Islands (OC-231) and Loyalty Islands (OC-069).

The following operations have provided the IOTA Committee acceptable validation material in February 2000:

NA-123 V31JZ	Turneffe Islands	Jan/Feb 1999
NA-123 V31RL	Turneffe Islands	Jan/Feb 1999
SA-032 XQ5BIB/8	Wellington Island	January 2000

The committee is still awaiting validation material as of 8 March for the following operations:

NA-064 AL7RB/P	Artru Island	September 1999
OC-076 YC8NXX	Sula Islands	Feb/Mar 2000
OC-114 FOØDEH	Austral Islands	Sep/Oct 1999
SA-050 CE8/R3CA	Riesco Island	January 2000

Finally, here is our March selection of IOTA island activity:

AF-067 5Z4WI	Wasini Island	09-15 Mar
AF-073 3V8BT	Kerkennah Islands	23-26 Mar
AN-015 8J1RL	Ongul Island	09-22 Mar
AS-005 RAØBK	Dickson Island	16-18 Mar
AS-005 RAØBY	Dickson Island	18 Mar
AS-008 JA1CKE/1	Izu Archipelago	11 Mar
AS-015 9M2KT	Penang Island	13 Mar
AS-015 9M2TO	Penang Island	02-22 Mar
AS-017 JR6EA	Okinawa Island	19 Mar
AS-017 JS6PX	Okinawa Island	14-17 Mar
AS-023 JE6EMW	Amani Archipelago	21-30 Mar
AS-017 JR6TJP	Okinawa Island	11 Mar
AS-024 JQ1DPP/6	Yaeyama Islands	18 Mar
AS-024 JR6USF	Yaeyama Islands	24 Mar
AS-025 UAØIA/Ø	Paramushir Island	11-30 Mar
AS-026 HL4HLD	Cheju Island	15-30 Mar
AS-030 JD1BKR	Iwo Jima	02 Mar
AS-032 JA6CTW	Yaku Island	01-29 Mar
AS-036 JA6VAG	Tsushima Island	23 Mar
AS-036 JA6LCL/6	Tsushima Island	18-19 Mar
AS-037 JI3DST/6	Koshiki Islands	17-19 Mar
AS-040 JH6TYD	Goto Island	02-31 Mar
AS-045 HL5FUA	Ullang Island	09-28 Mar
AS-053 HSØ/TK4MRH	Phuket Island	01-31 Mar
AS-056 JA6GXX	Mejima Island	01-06 Mar
AS-058 9M8DX/2	Langkawi Island	14-15 Mar
AS-083 RA9LL/9	Belyj Island	01-22 Mar
AS-103 BV9AAC	Penghu Island	11 Mar
AS-103 BV9AYA	Penghu Island	15-21 Mar
AS-117 JI3DST/3	Honshu Coastal	25 Mar
AS-128 3W2GAX/P	Phu Quoc Island	20-27 Mar
AS-132 3W5OK	Cat Ba Island	05-17 Mar
AS-136 BD4ED	Chong Ming Island	01-16 Mar
EU-009 GMØHTG	Orkney Islands	17-21 Mar
EU-009 GMØHTT	Orkney Islands	27 Mar
EU-009 GM3POI	Orkney Islands	04-29 Mar
EU-010 GM3J1J	Isle of Lewis	03 Mar
EU-010 GMØPWS/P	Great Bernera Island	29 Mar
EU-010 MMØBGQ/P	Great Bernera Island	29 Mar
EU-016 9A2GF	Brac Island	02-29 Mar
EU-016 9A1CPB	Brac Island	08 Mar
EU-016 9A4KF	Hvar Island	12 Mar
EU-016 9A3FT/P	Proizid Island	24 Mar
EU-016 9A4DU/P	Korcula Island	23 Mar
EU-029 OZ8ABE	Zealand Island	06-20 Mar
EU-029 OZ/DK9LO	Lolland Island	05-10 Mar
EU-031 IC8JAH	Isle of Capri	12 Mar
EU-031 IC8AMR	Ischia Island	06-28 Mar
EU-031 IC8PSO	Ischia Island	13 Mar
EU-037 SM7DLZ	Oland Island	01-29 Mar
EU-037 8S7A	Oland Island	05-26 Mar
EU-040 CQ7B	Berlenga Island	01-03 Mar
EU-040 CT1EKY/P	Berlenga Island	01 Mar
EU-042 DK8OL	Isle of Sylt	09 Mar

EU-046 LA1CI	Ringvassøey Island	12-18 Mar
EU-047 DJ9IN	Norderney Island	07-21 Mar
EU-049 SV8CYV	Samos Island	01-29 Mar
EU-049 SV8DCY	Lesvos Island	17-31 Mar
EU-052 SV8CKJ	Kefalonia Island	10-30 Mar
EU-055 LA2BKA	Reksteren Island	06-30 Mar
EU-061 LA7XK	Hvaler Island	11 Mar
EU-067 SV1CU/8	Tinos Island	10 Mar
EU-075 SV1TP/P	Poros Island	10-14 Mar
EU-082 U1ZA/A	Kildin Island	08 Mar
EU-089 CU9AC	Corvo Island	02-28 Mar
EU-091 IK7DXP/P	Pedagne Archipelago	18 Mar
EU-091 IK7LXM/P	Pedagne Archipelago	18-19 Mar
EU-091 IK7WXP/P	Pedagne Archipelago	19 Mar
EU-091 IK7FPX/P	Pedagne Archipelago	19 Mar
EU-119 RV3MA/1	Morzhovets Island	09-10 Mar
EU-129 DL4AO/P	Usedom Island	06 Mar
EU-130 IV3WMI	Grado Island	30 Mar
EU-131 I3THJ	Venezia Island	03-09 Mar
EU-132 SO3CE/1	Wolin Island	03 Mar
EU-133 R1ASP	Kotlin Island	08 Mar
EU-133 RA1AZ	Kotlin Island	21 Mar
EU-136 9A4A	Pag Island	06-14 Mar
EU-145 CT1EEN/P	Culatra Island	11-12 Mar
EU-145 CS5END/P	Culatra Island	11-12 Mar
EU-145 CT1EGW/P	Culatra Island	11-12 Mar
EU-145 CS7AHU/P	Culatra Island	11-12 Mar
EU-145 CT4NH/P	Culatra Island	11 Mar
EU-151 EA5DHK	Escolla de Moro	05 Mar
NA-010 VE1DCG	Cape Breton Island	02 Mar
NA-031 W1LY	Conanicut Island	13-15 Mar
NA-036 VE7DXQ	Vancouver Island	10 Mar
NA-046 W1GAY	Martha's Vineyard	01-02 Mar
NA-051 VE7TLL	Queen Charlotte Is	06-14 Mar
NA-051 VE7RHS	Queen Charlotte Islands	15 Mar
NA-055 AA1KS	Moose Island	09 Mar
NA-067 WD8NES/4	Roanoke Island	15 Mar
NA-059 KL7/NO7F	Unalaska Island	04-06 Mar
NA-062 K2ZR/4	Key West	01-20 Mar
NA-065 KK7GE	Cypress Island	25-26 Mar
NA-065 N7WI	Whidbey Island	13-30 Mar
NA-065 AD7U	Whidbey Island	21-28 Mar
NA-065 N6FD/7	Fidalgo Island	01-30 Mar
NA-067 AA3ID	Hatteras Island	21 Mar
NA-110 AA4V	Isle of Palms	09-31 Mar
NA-110 N2EJO	Lady's Island	08 Mar
NA-110 WB4WTY	Folly Island	09 Mar
NA-110 K9JWV	James Island	30 Mar
NA-119 KB5GL/5	Timbalier Island	02-06 Mar
NA-123 V31JZ	Turneffe Island	26-31
NA-138 N5VL	Amelia Island	01 Mar
NA-143 AB5EB	Galveston Island	09-31 Mar
NA-143 W5GI	Galveston Island	21 Mar
NA-180 V31GI	Southwest Caye	19-29 Mar
NA-198 VO1BAR/P	Exploits Island	07 Mar
OC-008 P29PB	New Britain	12 Mar
OC-022 YB3ASQ/9	Bali Island	04-05 Mar
OC-022 YC9BU	Bali Island	02-30 Mar
OC-033 FK/F6DLN/P	Lifu Island	07-20 Mar
OC-046 FO5JV	Tahiti Island	02-19 Mar
OC-046 FOØSHA	Tahiti Island	12 Mar
OC-059 V63AO	Kosrae Island	09 Mar
OC-064 A35MQ	Vava'u Group	29-31 Mar
OC-067 FO5QS	Huahine Island	03-29 Mar
OC-067 FO5NL	Raiatea Island	03-28 Mar
OC-069 P29VMS	Lihir Islands	16-17 Mar
OC-075 Y5YAS	Batam Island	01-02 Mar
OC-075 YC5TA	Batam Island	17 Mar
OC-076 YC8XNE	Sula Islands	17-19 Mar
OC-076 YC8XWJ	Sula Islands	15-20 Mar
OC-082 ZK1XXC	Penrhyn Island	01-06 Mar
OC-083 ZK1XXC	Aitutaki Island	07-10 Mar
OC-129 DU6RCR	Negros Island	14 Mar
OC-130 DU8BOF	Mindanao Island	09-15 Mar
OC-130 DU8DJ	Mindanao Island	02-28 Mar
OC-137 VK4CY	Lamb Island	08 Mar
OC-137 VK4GP	Bribie Island	13 Mar
OC-137 VK4LV	Bribie Island	15-20 Mar
OC-147 YC9YKI	Yapen Island	01-12 Mar
OC-148 YC9NBR	Timor Island	08 Mar
OC-148 YC9MKF	Timor Island	01-29 Mar
OC-151 YC9LQA	Flores Island	08-10 Mar
OC-152 FO5FD	Tubuai Island	01 Mar
OC-152 FOØSHU	Tubuai Island	22-31 Mar
OC-169 A35RK	Lifuka Island	16-19 Mar
OC-210 YC8RRK	Sangihe Island	10-16 Mar

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OC-210 YC8RBC	Sangihe Island	10-22 Mar
OC-210 YC8TXW	Sangihe Island	10-30 Mar
OC-231 P29VMS	Green Islands	08-11 Mar
SA-008 CE8/ONSAX	Terra del Fuego	08 Mar
SA-008 LU3XX	Terra del Fuego	31 Mar
SA-023 PY6JJ	Itaparica Island	01-23 Mar
SA-024 PY2EL/P	Comprida Island	07 Mar
SA-024 PY3PAZ/P	Comprida Island	07 Mar
SA-026 PPSOW	Santa Catarina Is.	11-31 Mar
SA-030 CV1Z	Flores Island	06-10 Mar
SA-068 8R1AK/P	Leguan Island	05-19 Mar
SA-078 HK3JJH/1	Isla Palma	12-17 Mar

Antique QSL department

The selection of cards for this month come from Bob Donovan, W7CF, of Bellingham, Washington. At the time of these contacts Bob was signing with W7EYS.



The first card is for a 1947 contact on 20 Meters CW with MD1D in Libya. The operator is shown as Danny Lockyer, who was with the British Forces located there. The card was sent via the bureau with Frank Pratt, W7DXZ, of Tacoma, as the local bureau manager.



Bob worked Fred Woerner of Saarland, who was signing with 9S4AX. At the time Saarland was a separate entity. Fred later became DL8AX. The date was 1950 and the respective bureau managers were Heinz Pankow, DL1BA, and Maryann Tatro, W7FWR.

The third card is for FQ8SN of French Equatorial Africa, who Bob worked back in 1947. Some 13 years later this one would be added to the Deleted Countries List. According to the Callbook the operator, Marcel Montblanc, is now F5CS, assuming he is the same person.



The card is rather colorful as the background is in red and yellow. The call and name are printed in black while the rest of the printing is in red.

Do you QSL?

Do you have good QSLing practices? I mean do you respond to requests for your QSL card? Ray Balch, K6VX, expresses his views and says, "Many of the USA stations only QSL for the cards that they need and pay little attention to the needs of our foreign friends. I know lots of Europeans are after the California Award, 5BWAS and the U.S. Counties Award so I faithfully QSL 100 percent all new contacts and new band countries. Lots of our BIG DX friends don't bother to QSL except when they need a card for a new entity or band country. It's just a courtesy that too many of our USA stations neglect."

Ray passed on some comments he has received from some of these Europeans, such as that of Guy, ON4AOI, who said that there has always been a problem receiving cards from USA. Working 5BWAS was not a big problem but it had cost him a lot of money and patience to get them all confirmed. Guy said that he has some 7,242 American contacts in his log and only 2,061 of them bothered

to confirm. He also has worked over 1,500 counties, but only 602 of them have been confirmed.

So, if you don't care to collect QSL cards, please at least have the courtesy to respond to such a request. And, on the other side of this issue, if you ignore such a request please don't use these cards to better your own end. Nothing rubs me worse than the so-called DXer who proudly applies for DXCC without ever having to send out a QSL card.

Thanks go to the following contributors for this month's column: ON9CGB, PA1AW, V31JP, N1ND, N4GN, A15P, AH6IP, WD6EAW, K6VX, Western Washington DX Club (WAØRJY), Northern Arizona DX Association (W7YS), DXCC Desk (NC1L), Web-Cluster (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).

Oh what a month for the deserving DXer! That was the month of March 2000. Clipperton was activated after several years of no activity, a brand new one for many younger DXers. Then came East Timor with very little notice and topped off with the DXpedition to the Chesterfield Islands. Don't forget your IOTA credit if you worked these.


If you did not participate in the annual ARRL DX Contest you really missed the boat. Those seeking the DXCC Millenium Award could have wrapped it up that weekend as there were well over 100 different entities represented. This could have been very easy, even without the use of spotting or packet systems. I worked 98 (but heard more) and not one of these was assisted. 73 de John N6JM.

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R1ANP NT2X
R1ANZ RU1ZC
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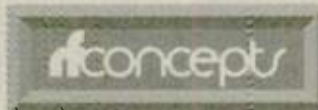


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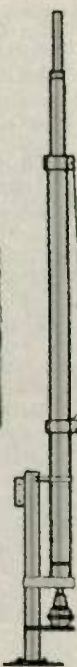
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Having the right tools

Several weeks ago one of our senior editors called me with a late night emergency need. I'm used to getting called late for a variety of reasons relating to work or emergency service, however this call was unique. It seems she had left on a late flight to Atlanta and her bathtub faucet would not completely turn off. She asked if I'd see if I could fix it as she would be out of town for several days and didn't want her house to flood.

My macho thinking kicked in and I volunteered, saying, "no problem." The next morning I stopped by her house, borrowed the key from her neighbor, and with my box of tools set out to tighten the faucet or, in worst case, replace the leaking washer. The house is one of Salt Lake's older homes and the plumbing was not quite as old, but not modern. The water in her area has high mineral content and there was a hefty amount of crust built up on the faucet.

Undaunted, I removed the handle and the decorative covering. With crescent wrench in hand I attempted to tighten or remove the valve stem. No luck. It was solid and I realized that further attempts would only damage the faucet and then I'd be in big trouble. The next day, Saturday, my son and I made the trip across town again, this time with several large wrenches I was sure would fit. None did.

We then went to a hardware store determined to get a one-inch and a 15/16th wrench, one of which we were sure would fit snugly and allow us to remove the valve stem. Neither did. We finally determined we needed a 31/32th wrench, something no store had, the time now being beyond normal store hours.

Completely humbled, I called my neighbor, the plumber. Questioning him, I discovered that plumbers have a set of "faucet wrenches" that have no sizes, but, said he, there are a number of them and one would fit. He said older faucets were not quite standard size, hence my dilemma. He also recommended a supplier he assured me would have parts for older faucets.

It was now our third trip across town to accomplish what I'd anticipated to be a 15-minute job. It took a large pipe wrench,

a special faucet wrench, and taps on the handle with a small sledge hammer before the crust broke free and

the valve stem came loose. However, it had been so solidly stuck that the stem was now in an oval shape and would no longer seal properly. It was also after work and nothing was open.

The fourth trip was to be our last. Having now taken a half day off work, I visited the specialty plumbing shop and they did have the identical valve stem. Hurrying back to the home (where the water had been turned off at the curb for the night) I replaced the stem, tightened it, and restored water to the home, hours before the editor was due back. What a relief when I observed no leaks and all was well.

So why a plumbing story in an Amateur Radio magazine? As with most events, there is a lesson to be learned and this is no different. The first lesson is that things are often more complex than at first realized. The easy assignment may be the most difficult so it's always best to evaluate before you agree to accomplish a certain task. The second lesson is that of having the proper tools to do the job. Whether it is plumbing or communicating, you are most effective when equipped with what is required to get the job done properly.

We often let our pride and ego get in the way as we flail about trying to make the best out of a poor situation. I was listening to an emergency drill some months ago and the individual charged with net control kept everyone on a single frequency when the scenario would have benefited had more frequencies been used and assigned by function. When I inquired later under the guise of, "What did you learn?" The response was that the individual only had a single radio at the station and was unwilling to delegate. What resulted from not using the proper tools was a confusing event more complex than needed.

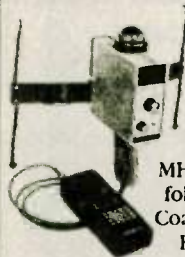
Before you leap into an assignment, take the time necessary to evaluate what is needed and then assemble the most effective tools to accomplish the job. I've often heard the argument that in an emergency we need to respond quickly — and this is a true statement. But we should never respond so quickly that we leave without proper equipment to accomplish the task. Can you imagine a fire engine responding and leaving the hose behind because of the rush to respond to an emergency?

Two-way street

A reader asked me for advice concerning their local radio group who has prepared to support a local agency but never gets called to participate or even to practice during exercises. It's always nifty to claim that your group is on call for several agencies and have your members all pumped up and ready.

It's discouraging then to sit idle and never get called upon to participate. My take

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on this is that it's a two-way street. Many agencies will pay you lip service in the interest of good public relations — an elected official does not want to alienate anyone, especially of voting age.

I always like to sit with the agency chief and spell out what our group can do and what resources we will bring to assist when called. I then like to ask the agency what they will do for us. In the world of politics, sometimes you need to play their game, and it always boils down to; "What's in it for me?" This is where the agency chief might even look surprised, but relieved when you simply ask that they agree to include you in training exercises and to call upon your group in situations you both agree, in advance, that you can be of benefit.

I've yet to find an agency rep who won't keep peace after an event is over and tell you "next time" you're sure to get called. Often "next time" never comes and your group is left frustrated and finally without member support because they never get called to participate.

So here's what I told the reader. First put together a quick summary (and make it realistic) of what your group can do and what resources are available. As a group, you must be of one mind to be willing to train, prepare, and be ready to do ALL you say you will do. You then sit with the agency chief who wants your services. Be direct and tell the agency that in order to be able to support them, your group needs to be included in planning, exercises, and response, otherwise, you're all wasting each other's time. I'm in favor of spelling out specific categories of events that your group can respond to and be of benefit to the agency. Such things might be phone outages, evacuations, large scale emergencies, communications failures, etc. But be specific. If the agency is unwilling to prepare a formal memorandum of understanding, it's a good bet you're not going to be included and used as you both "thought" was the agreement as you shook hands and smiled for the camera.

Remember that if the agency really wants your help, they'll be willing to spell it out in writing and then work with you and develop response plans, conduct exercises, and call you when needed. You're a volunteer resource that, without respect and involvement, will decrease in value as your members realize their skills were not really in demand, it was all politics, smiles, smoke and mirrors.

Using HF frequencies

As I tuned the HF bands one Saturday morning, I heard a station identify and ask for a clear frequency as he supported an emergency exercise. It was great to hear other operators politely move to other frequencies and to hear exercise traffic handled on HF. It was clear from listening that HF was a great choice for two locations obviously not connected by repeater or line-of-sight.

It was also clear that the two HF stations involved were linked locally via repeater and were operating from their homes. Each conversed about their station and what equipment they had as they filled empty space between exercise traffic. There is a perception that when an emergency strikes, you need to respond and set up a station from the event. When you think outside tradition, you realize that "respond" simply means "participate

effectively" and often doesn't mean you do anything other than operate your station at home in support of an event.

When you plan and respond to an event, I always advocate having an established, fixed station as part of your effort. There are always things one can do easier and more efficiently than from a field station. Phone calls, monitoring other frequencies, relaying news media reports, etc., can enhance an operation when done from a well-equipped home station. I've heard home stations used as data resources to look up computerized information, to make telephone calls outside an affected area, and to use HF equipment with antennas already erected and better than could be set up at a field location.

When you consider "resources" and "responding," include your home stations. Many are set up with generators, good antenna farms, and immediately operational equipment. Your net control station need not be at the scene and information can be valid if relayed from the scene to a station better equipped to handle it. Packet and simplex links to stations are often more effective than trying to take everything, including the kitchen sink, into an emergency area.

Practice, practice, practice

I always like to hear new operators participate in key roles during an exercise or during a public service event. The only way they learn is by doing and by making mistakes. As I get older, I am better able to resist the temptation to jump in and help solve problems before they happen. Usually I'm content to sit by and observe as the "newbie" learns first-hand how to conduct a net or to handle an assignment.

It's always easier to offer advice after the other station has suffered through inexperience and made poor choices. This is the time as an experienced operator I can sit on the porch and kindly offer suggestions for next time. What is thrilling to me is when someone will take a suggestion, test it during an exercise, improve upon it, and then share experience with the next "newbie." With all the newly licensed and upgraded operators, there is always need for practice and participation. With summer upon us, take the opportunity to get involved in the upcoming exercises and public service events. Should you find yourself able to have a newbie tag along with you, do it. That's how expertise is shared, one-on-one, as it happens.

Until next month, have a great time communicating! Best wishes from Salt Lake City.

— Jerry Wellman, W7SAR, can be reached at: P.O. Box 11445, Salt Lake City, UT 84147 or via e-mail: jw@desnews.com

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Nancy Kott, WZ8C

Thank you so much for all the encouraging letters resulting from my column about the Restructuring and the licensing requirement changes. Those letters went a long way toward lifting my spirits and restoring my faith in the knowledge that Morse code will continue to thrive, no matter what happens to the rules. I want to share some of the letters with you, in hopes that they will inspire you too.

Rich Jurkowski, WB2WGX, writes, "When I was studying the code, I just wanted to pass the General test so I could have phone privileges. A few years later I got my Advanced license, and started to chase DX on 10 and 15-meter SSB. It was then that I noticed the really good DX was on the low end of the CW bands. So out came the old Vibroplex from the drawer and I earned my Extra Class license. After using the bug at 25 WPM, I realized I really needed an electronic keyer and paddles if I wanted to keep up with the 35/40 wpm DX stations. It was about this time that I had to copy in my head rather than

write everything down. I also noticed that I really **STARTED TO ENJOY OPERATING CW**, even more than SSB. Over the years, I have lost the desire to chase DX, but I still work some for fun, just to see if the antenna is still radiating. Now I like rag chewing!"

I am hoping that some of the restructured Hams will also be intrigued by the CW they hear at the other end of the subbands and give it a try. From Rich's experience, as well as my own, we know that it can happen.

Richard Pearsall, NA2VY writes, "My Elmers were CW people. I'm not sure one of them ever used a microphone. It is a shame that the new licensees will probably not remain in the hobby after getting bored with SSB. I have been a Ham for only four years and I love CW. I'm going to be 75 this year. I hope I live long enough to reach 40 wpm like my Elmers. I am helping a friend learn code. I persuaded him to learn it because he would use it — not because he had to learn it. He is finding it rewarding to work at it. Nancy, I love Positively CW. Thanks."

Thank you, Rich! I'm glad to hear you enjoy this column. And thank you for Elmering (helping) your friend to learn code. I'm sure he will do well, your enthusiasm about using and learning code is contagious.

William Draeb, K9HJN, says that people who don't know code equate learning it to climbing Mt. Everest. William is a substitute teacher and when he has spare time, he writes code on the blackboard. The kids become intrigued and start asking questions. Kids learn things so quickly, and love the idea of having a "secret code."

Code software for Macs

I have gotten letters from Hams asking about a code tutor program for Macintosh computers. I recently heard that Black Cat Systems has a new program called "Morse Mania" for the Macintosh computer. The software package helps you learn Morse code at speeds ranging from 5 to 30 words per minute, and supports the Farnsworth method. In addition to repetitive drills, "Morse Mania" also allows complete text files to be sent so that "real life" messages can be used for practice.

"Morse Mania" is shareware. A fully functional copy of "Morse Mania" may be downloaded from the "Morse Mania" web site. The URL is <http://www.blackcatsystems.com/software/morsemania.html> I haven't seen Morse Mania in action, so I can't give you a first hand report, but it sounds worth a try, particularly since code tutors for the



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Mac are few and far between. If you try it, let me know what you think.

Logging programs

Are you looking for a logging program? If you have access to the Internet, you're in luck! Joe Gordon, KC7TNT, wrote and told me about a terrific web site that has six different types of logging programs. The URL is <http://members.aol.com/snkDavis/page1.html>.

Another very useful Web page can be found at http://coulee.com/ka9fox/links_software.shtml. There are many different logging programs and code training freeware/shareware, including "RUFZ" and "Pile Up." "RUFZ" is an abbreviation for the German word "Rufzeichen," which means "call." If you haven't tried "RUFZ," you owe it to yourself to download it and give it

a whirl. It's addicting! Most Hams are probably familiar with the stock market and the ticker tape that shows the stock trades during the day. On this ticker tape, sometimes shown on the bottom of the screen on TV, a stock is indicated by a one, two, or three letter symbol that represents the name of the corporation on the New York Stock Exchange. Zork Briggs, KK6DW, has discovered that a corporation symbol on the stock exchange often has the same letters as our CW abbreviations. He gets a charge when he sees "CW" come across the stock screen! One day he decided to look up some of his favorites, and he sent them to me to share with you. Here are some ticker symbols that also have a second meaning for us hams: CQ = Comsat Corp; CW = Curtiss Wright Corp; RST = Boca Resorts, Inc; K =

Kellog Company; SSB = Salomon Smith Barney Holdings Inc; QSO = Stolt Cornex Seaway; R = Ryder Systems Inc; DE = Deere & Co; RIG = Transocean Sedco Inc. Thanks, Zork! Isn't it amazing how one way or another, Ham radio infiltrates every part of our life? Don't forget that Field Day is coming up in June. Volunteer to set up a CW tent. Your club will welcome the extra points and it will be an excellent to introduce your fellow club members, and the general public, to the wonders of Morse code! Drop me a note or e-mail and let me know how your Field Day went, I would love to hear about it. Nancy Kott, PO Box 47, Hadley MI 48440; email nancy@tir.com

— Nancy Kott, WZ8C, can be reached at: P.O. Box 47, Hadley, MI 48440-0047 or via email at: nancy@tir.com

FCC to Generals — Advanced subbands off limits

The FCC says a lot of newly upgraded General Class licensees have begun asking if they may operate in the current Advanced class subbands. "The answer is: Absolutely not," said the Bill Cross, W3TN, of the FCC's Public Safety and Private Wireless Division. "No privileges changed for any license class."

Cross pointed out that the Advanced Class license did not cease to exist under restructuring, which went into effect 15 April, although the FCC no longer accepts applications for Novice or Advanced class licenses. He said current Generals do not earn Advanced class privileges until they upgrade to Amateur Extra class, at which point they earn both Advanced and Extra privileges.

The FCC also says General Class operators may hold only Group C (1x3) or Group D (2x3) call signs, as it was under the old rules. Generals are not

entitled to apply for or hold Group B (2x2) call signs under the new rules.

Cross cautioned newly upgraded licensees to check the revised Part 97 rules carefully to make sure they're not operating beyond their privileges. "Now that they've gotten the license, it's time to look at the real rules," he said.

Amateurs further are reminded that in order to apply for upgraded volunteer examiner privileges or for a vanity call sign reflecting new license status, a licensee first must have been issued an upgraded license grant by the FCC.

Interim privileges conveyed by a Certificate of Successful Completion of Examination, or CSCE, are insufficient for these purposes.

Revised FCC Part 97 rules are available on the ARRL Web site.

The FCC this week released the Errata to its 30 December 1999, Report and Order on restructuring. The Errata incorporate minor errors contained in the original R&O and already made in the version of the new rules that appeared in *The Federal Register* earlier this year.

— ARRL Letter

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<p>Lakeview Company, Inc. 3620-9A Whitehall Rd., Anderson, SC 29626 • 864-226-6990 FAX: 864-225-4565 • E Mail: hamstick@hamstick.com • www.hamstick.com</p> <p>All 100% made in USA • Add \$7.50 per order for S/H</p>		<p>Tri-Magnetic Mount</p> <p>MODEL 375 Only \$39⁹⁵</p>  <ul style="list-style-type: none"> • Holds all Hamstick Antennas and many others. • Over 400# of holding power. • 12" x 14" foot print • 3/8 x 24 thread mounting. • 15' RG 58 coax w/PL-259. • No rust aluminum construction. 																								

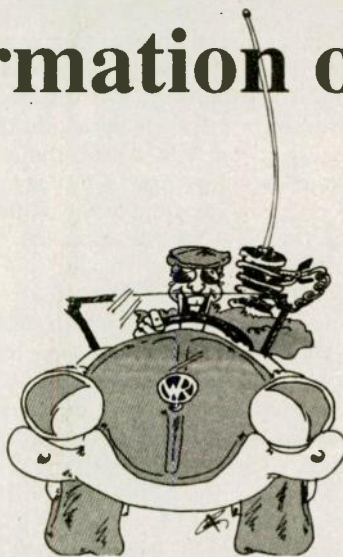
More information on RF noise

Let's start off with HF mobile antennas. A while back, someone wrote to me that they had a stick-type mobile antenna that had developed an intermittent connection at the base. At that time, my only experience along those lines was with a 20-meter stick that I won at a hamfest years ago, but never used until about four years ago. This one is no longer manufactured, but is copper wire-wound fiberglass with no top whip. It developed an intermittent after only a day of use on a coast-to-coast trip. Inspecting it, I could see a nick in the wire through the shrink tubing, about an inch above the bottom metal fitting. Since there was no damage to the tubing, it had to have been a manufacturing defect. I was able to repair it in the motel.

But recently, I tried to use a 40-meter stick that I bought at a swap meet in a bundle of three such antennas for different bands. It also had an intermittent connection. I cut away the plastic shrink tubing from the bottom metal fitting and saw that the copper wire had been flattened against the fitting, but not tinned nor soldered. The metal under the wire had been tinned. I fixed this, and I am about to put a short length of shrink tubing over the repaired area. I assume that the original owner had no problem with this antenna until the copper wire started to oxidize. The plastic shrink tubing would have clamped the wire against the bottom fitting. This would have been imperfect, but maybe not noticeable. Has anyone else had experiences like this? Was this just a one-time manufacturing error, or did they expect the mechanical connection to last?

The old noise subject refuses to die. Not only was there e-mail between some of the noise-plagued Hams that I mentioned in April, but there were some new comments too. I'll try to summarize.

Greg LaHaie, K7YDL, researched the Ford noise problem phone number that we printed in the April column. At this writing, I haven't heard how he came out with the fuel pump RFI kit on his Ford Explorer. But Monte Chamber, KO6XI, who raised this question in the first place, had the kit installed on his 2000 Mercury Marquis. The dealer had no idea what Monte was talking about until he showed them the eight faxed



pages from Arnie Nielson at Ford. But it didn't solve Monte's problem. The noise doesn't go away until he pulls the fuse on the engine electronics. But in killing the engine, it still takes three seconds for the noise to drop off.

Gary Harrison, KØBC, QCWA President, also was going to try the Ford fuel pump RFI kit on his Ford Explorer. Jim Walch, W7LVN, QCWA General Manager (another plug!), elected to listen to his fuel pump on his '88 Bronco rather than drop the tank, etc. Vern Chinen, W6IC, asked me for the Ford noise information before the April issue came out. To save you looking back, Arnie Nielson at 313/845-7565 is their RFI guy.

Carl Fisher, WØHIK, commented on ground loops that we mentioned in February. He talked about a classic case where a two-way radio had overwhelming noise until he used insulated washers to bolt down the radio. He also commented on 10-meter ignition noise on his 2000 Buick LeSabre that only developed after a very few thousand miles. After checking that all the usual remedies were in place, he was beginning to suspect a bad spark plug.

Bob Snowman, KR1B, would like to give out New England counties on CW mobile, but has too much noise with the engine running on both his 1994 Jeep Cherokee, and his 1994 Toyota Tercel. He is looking for specific experience in solving noise on either vehicle. I will pass on any comments, but I feel that there are few, if any, vehicle-specific fixes (unless it is on Ford fuel pumps!). The first thing to do is to run through the standard noise tests and remedies listed in any good mobile book.

Chuck Flanagan, W5GK, saw our April column in a sample *Worldradio* copy, and is going to subscribe. He said that his dealer knew all about the fuel pump RFI filter for his 1997 Lincoln Town Car, but Chuck went with the ClearSpeech DSP speaker. He says, "The Noise is gone and I'm HAPPY!"

When I put together my April column, I was just leaving for two consecutive Ham Radio campouts at Quartzsite, Arizona, the same as last year. I went into more detail in the June 1999 *Worldradio* about the following two groups, and the Winter RV influx at Quartzsite, but I'll stick to the short version this time. Driving to Quartzsite, I talked briefly each day to my friend Ross Stevens, WØXJ, on the 20-meter Elks Net. At Quartzsite, I camped with the Sam's Radio Hams, 27-30 January and at the Quartzfest 2000, 01-06 February. Sam's Radio Hams is a Southern California Chapter of the Good Sam RV Owners Club and they were there on a monthly campout. The Quartzfest is an informal RV Hamfest that draws Hams from all over the U.S. During both events, I was able to meet with some serious mobileers and RVers and hear some interesting talks. While driving home, I checked in to the Sam's Radio Hams 40-meter net and heard about the further travels of some of their members. See my web page listed below for a link to a longer version of this trip, which includes the Quartzfest 75-meter antenna shootout.

When I got home, I had a nice e-mail waiting from Paul Owen, W6UHF, who heard me in QSO, driving to Quartzsite, and recognized me as being responsible for this column. Unfortunately for HF mobile, I was on 2-meter simplex at the time!

I'm now leaving on another trip which will include the Mt. Vaca Radio Club annual Spring desert trip, at Goffs, California, followed by a monthly Sam's Radio Hams campout, near Merced, California, which is on my way home. I expect to be mobile on 40 and 20 Meters and will report anything new next time.

Let me hear from you on any HF mobile subject! Send e-mail to lcobb@compuserve.com, or write: Les Cobb, 4114 Horgan Way, Sacramento CA 95821. More at <http://home.pacbell.net/lcobb/>.

Visit Your Local RADIO CLUB

CONNECTICUT

ALASKA

South Central Radio Club. 8023 E. 11th Ct., Anchorage, AK 99504. Meets 2nd Fri./monthly, 7 p.m., UAA Business Ed. Bldg., Rm. 220. KL7CC, (907) 338-0662. Info: club rpt 146.97(-) PL 103.5Hz 10/00

ARIZONA

Arizona Repeater Association. P.O. Box 35758, Phoenix, AZ 85069-5758. Operates 20 VHF & UHF rpters in AZ. Meets 4th Thurs./monthly, 7:30 p.m., APS Shure Building, 2124 W. Cheryll, Phoenix, AZ. Info:www.goodnet.com/indirect/www/ara 12/00

Cochise Amateur Radio Assn., (CARA). Meets 1st Mon./monthly, 7:30 p.m. at club facility on Moson Rd., Sierra Vista, AZ. K7RDG/R 146.76(-) rptr. PL162.2 5/01

Old Pueblo Radio Club, (OPRC). P.O. Box 42601, Tucson, AZ 85733. Meets 2nd Wed./monthly, 7:15 p.m., Tucson Med. Cntr., Grant & Beverly St. in the AZ Rm. of the Volunteer's Bldg. (1st bldg. on the left going north off Grant) 2/01

CALIFORNIA

Amador County Amateur Radio Club. 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. Info: 146.835(-). 5/01

Amateur Radio Club of Anderson, (ARCA). Meets 2nd Thurs./monthly, 7:30 p.m., VFW #9650, 3210 W. Center St., Anderson, CA. Net every Tues., 7:30 p.m. on 146.640 freq. Website: www.snowcrest.net/bgorski/index.html 2/01

Beach Cities Wireless Society. P.O. Box 4016, San Clemente, CA 92674. Meets 2nd Thurs./monthly, 7:30 p.m., Ole Hansen Beach Club, 105 W. Avenida Pico, San Clemente. Rptr. 146.025(+)- PL 110.9 9/00

Clairemont Rpt. Assoc. Meets bi-monthly brkfst mtg, 3rd Sat./odd numbered months, Westminster, CA. Info: send SASE to P.O. Box 7675 Huntington Bch, CA 92615 or W6UTE in Call Bk. Net ea. Tue., 7 p.m. 145.220(-) PL 103.5 in So. CA 3/01

Coachella Valley ARC. Box 11092, Palm Desert, CA 92255-1092. Meets 2nd Wed./monthly, 6:30 p.m., Portola Com. Cntr., 45480 Portola, Palm Desert. Info: Bill Dews, (760) 346-8611. Net Thurs. 7 p.m. 146.025(+)- PL 107.2 5/01

Contra Costa Communications Club, Inc., WD6EZR. 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. 2/01

Fresno Amateur Radio Club. Meets 2nd Fri./monthly, 7:30 p.m., Ernie Pyle School, 4140 N. Augusta, Fresno, CA. 146.94(-) 223.94(-). 11/00

Golden Empire Amateur Radio Society, (VEC). P.O. Box 508, Chico, CA 95927. Club call W6RHC, rptr. 146.85(-). Meets: 3rd Fri./monthly, 7:30 p.m. at 345 Cherry St. (Library Rm.), Chico. 5/01

Golden Triangle Amateur Radio Club. P.O. Box 1335, Wildomar, CA 92595. Meets 4th Mon./monthly, 7 p.m., Beverly Health Care, 24100 Monroe Ave., Murietta, CA 92562. Rptr: W6GTR 146.805(-) PL 100. Info: H. Wijma, AC6VN, (909) 693-2383. E-mail: ac6vn@cs.com 8/00

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. 2/01

Los Banos Amateur Radio Club. Meets 2nd Sat./monthly, 7 p.m., Scout bldg. at Pacheco Pk., 7th St. & Pacheco Blvd. Info: M. Germino, AD6AA, (209) 826-0903, e-mail: AD6AA@arrl.net. Net 147.060(+)- PL 107.2 every Thur. 7 p.m. Rpt. KB6NMP 147.06(+)- PL 107.2 & 444.00(+)- PL 241.8. http://www.qsl.net/lbarc/ 6/00

Motorcyclist Amateur Radio Club. Meets 2nd Sat./monthly, 8 a.m., Lake View Cafe, 2099 E. Orangethorpe, Placentia, CA, 91 Fwy/Lakeview. Info: R. Davis, KD6FHN, (949) 551-1036 or (949) 551-2010. 5/01

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: (510) 932-6125. 8/00

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: L. Johnson, KE6HWE, lindasue@mail.telis.org. (530) 273-2008. 9/00

North Hills Radio Club. Meets 3rd Tue./monthly, 7:30 p.m., Carmichael Elks Lodge, 5631 Cypress, Carmichael, CA. Nets 8 p.m. Tue., (except 3rd Tue.) & Thur., 145.190(-) (PL 162.2 Hz) & 224.400(-) MHz. Info: B. Griffin, N6WWY, (916) 729-7117. E-mail: nhrc@K6IS.org or http://www.k6is.org 4/01

Orange County Amateur Radio Club. 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 Parry Hoffman, K6LDC, (714) 636-4345 WWW.W6ZE.ORG 2/01

Redwood Empire DX Assoc., W6KB. P.O. Box 455, Santa Rosa, CA 95402. (707) 544-4944. DX & contest club. Dinner mtg. 3rd Wed./monthly, 6:30 p.m., Carrows Rest., Hwy 101 & E. Washington, Petaluma. www.redxa.com 12/00

River City A.R.C.S. Meets 1st Tues./monthly, 7 p.m., SMUD Bldg., Don Julio at Elkhorn, Sacramento, CA. License classes offered. Info: (916) 492-6115.10/00

Sacramento Amateur Radio Club. Meets 2nd Wed./monthly, 7 p.m. Sac. Blood Ctr., 32nd St. & Stockton Blvd., Sacramento, CA. Info net, noon on rptr. W6AK/R 146.91(-). T. Preston, KC6EO, (916) 722-9358 or L. Ballinger, WA6EQQ, (916) 393-4775. 4/01

Sacramento "Old Timers" Amateur Radio Society and Sacramento Valley Chapter #169 QCWA (Quarter Century Wireless Assn.). Meets 2nd Wed./monthly, 8 a.m., Lyon's Rest., 1000 Howe Ave., Sacto. CA. Info: Paul Wolf, W6RLP (916) 489-8112. 12/00

Shasta Cascade Amateur Radio Society, (SCARS). P.O. Box 493549, Redding, CA 96003. Meets: 3rd Wed./monthly (Sep-May), 7:30 p.m. at the C.D.F. Conf. Rm. Grape St., near Parkway Ave., Redding, CA. Net 146.64, Wed., 8 p.m. 3/01

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 94.8. Sun. net 7:30 p.m. 28.415. 6/00

Sonoma County Radio Amateurs, 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 ea. Tues., 7 p.m. W6SON. Rptr. 146.73(-) PL 88.5. www.cds1.net/scra 12/00

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 W6MYMD rptr. 244.38(-). Info: (310) 328-0817. 8/00

Southern California Six Meter Club. P.O. Box 10441, Fullerton, CA 92635. USB Net Tue., 8:00 p.m., 50.150. FM Rptr. Net Thurs., 7:30 p.m., 52.86/52.36 tx. FM Smpix, call freq. 50.300. Net Sun., 10 a.m. 50.40. 12/00

Stanislaus Amateur Radio Assoc., Inc. (SARA). P.O. Box 4601, Modesto, CA 95352. Meets 2nd Tues./monthly, 7:30 p.m., NW Modesto Police Station, 2005 Evergreen, Ste. 600. Net 1.2+4 Tues. 7:30 p.m. 145.390(-) PL 136.5 2/01

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. 1/01

Trinity County ARC. P.O. Box 2283, Weaverville, CA 96093. Meets 2nd Wed./monthly, County Sch. Adm. Bldg., Weaverville, 7:30 p.m. Rptrs: WA6BXN 146.73(-) PL 85.4, W6HOR 146.925(-) PL 85.4. 2/01

United Amateur Radio Club, K6AA. L.A. Maritime Museum, Berth 84, Foot of 6th, San Pedro, CA 90731. Meets 3rd Fri./monthly (except Dec.), 7:00 p.m. Monitors 145.52 Simplex 10 a.m.-5 p.m. 8/00

Victor Valley Amateur Radio Club. P.O. Box 869, Victorville, CA 92392. Meets 2nd Tue./monthly, 7 p.m., The Lewis Cntr, 20702 Thinderbird Rd., Apple Valley, CA. Talk-in 146.94(-), PL 91.5. Net Sun. 7 p.m. 146.94(-) 3/01

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 2/01

Westside Amateur Radio Club. P.O. Box 11092, Marina del Rey, CA 90295. Meets 4th Tues./monthly, 7:30 p.m., W. Dist. R. C. Bldg., 11355 Ohio Ave., W.L.A., CA (VA Cntr. grounds). Net Tues., 8 p.m. 146.67(-) except mtg. night. Website: http://www.qsl.net/wa6rc Voice Mail: (310) 478-7555 9/00

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. 9/00

Yolo Amateur Radio Society. Meets 1st Tues./monthly, 7:30 p.m., Davis Explorit! Science Cntr, 3141 5th St., Davis, CA. Contact Dave Nishikawa, KC6YFG, (916) 756-6375/Talk-in 144.430. 3/01

COLORADO

Boulder Amateur Radio Club (BARC). Meets 3rd Tues./monthly, 7:30 p.m., NIST rm 1107, 325 So. Broadway, Boulder, CO. Talk-in: 146.70(-) Info: (303) 380-6540, e-mail: BARC50@arrl.net or www.thisistrue.com/barc.html 8/00

Tri-City Amateur Radio Club. P.O. Box 686, Groton, CT 06340-0686. Meets 2nd Tue./monthly, 7 p.m., St. Lukes Lutheran Church of Gales Ferry on Rt. 12. Info: B. Dargel, KA1BB, (860) 739-8016. 8/00

Western CT. DX Club. Meets 1st Tues./monthly, 8 p.m., Brookfield Com. Cntr. (on Pocono Rd. across from Brookfield P.O.) Info: contact Victor at: victoras@EROLS.com 8/00

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. 11/00

Lake Monroe Amateur Radio Society. P.O. Box 151353, Altamonte Springs, FL 32715. Meets 1st Thurs./monthly, 7:30 p.m., Casselberry Sr. Cntr., Lake Triplett Dr., Casselberry, FL. Info: K. Lambert, KB4DCR, (407) 359-7767 10/00

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/pslra or 146.955-. 11/00

South Brevard Amateur Radio Club. P.O. Box 2205, Melbourne, FL 32902. Meets 1st Tue./monthly, 7 p.m., Public Library, 540 Fee Ave., Melbourne, FL 12/00

GEORGIA

Cherokee Capital ARS. Meets 2nd Tue./monthly, 7 p.m., New Echota Methodist Church, 488 Red Bud Rd., Calhoun, GA. 146.805(+). Info: Felton Floyd, AF4DN, (706) 629-0369. 1/01

Dalton Amateur Radio Club, Inc., (DARC). P.O. Box 143, Dalton, GA 30722-0143. Meets 4th Mon./monthly, 7:30 p.m., Magistrate Court Bldg., corner of Waugh St. & Thornton Ave., Dalton, GA. Info: Harold Jones, N4BD, 706/673-2291. 5/01

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 Dr., Lawrenceville, GA. 147.075+ PL 82.5. Contact: Mike Swiderski, K4HBI, (770) 449-0369. 8/00

HAWAII

Big Island Amateur Radio Club. P.O. Box 1938, Hilo, HI 96721. Meets 2nd Sat./monthly, 2 p.m., Keaau Community Ctr., behind Fire Station on Old Volcano Rd., Keaau. Talk-in on 146.88(-). Lunch, 11 a.m. Fridays, Hilo Hawaiian Hotel - Queen's Court Restaurant. 9/00

Emergency Amateur Radio Club, (EARC). P.O. Box 30315, Honolulu, HI 96820-0315. Meets 4th Thurs./monthly, 7 p.m., Lincoln Elementary School, 615 Auwaioimu, Honolulu. Nets: nightly 7:30 p.m., 146.88 & 146.80. Rptrs: 146.76(-), 146.80(-), 146.88, 146.98(-), 146.94(-). Info: (808) 256-6001, WH6CZB. 12/00

Koolau Amateur Radio Club, (KARC). 45-145 Mikihilina St., Kaneohe, HI 96744. Meets 2nd Sat./monthly, 9:30 a.m., Hoomaluhia Botanical Garden., Kaneohe, HI. Info: (808) 235-3042. http://www.chem.hawaii.edu/karc/ 8/00

ILLINOIS

Chicago FM Club Inc., (CFMC). P.O. Box 1532, Evanston, IL 60204. 146.76(-) PL 107.2/224.10/224.18/443.75 PL 114.8. Ham help line: (773) 262-6773. Info net Tues., 9 p.m. on 146.76(-). Meets 3rd Wed./monthly, 8 p.m. 8/01

Dupage Amateur Radio Club. (DARC). P.O. Box 71, Clarendon Hills, IL 60514. Meets 4th Mon./monthly, 7:30 p.m., Fire Station #3, between 59th & 63rd, Westmont, IL. Net Sun., 9 p.m. on 145.250. W9DUP rpts. 145.25(-) 107.2PL, 442.550(+)/PL 114.8, 224.68(-). Info: (630) 985-9256 10/00

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. 8/00

Peoria Area Amateur Radio Club, (PAARC). P.O. Box 3508, Peoria, IL 61612-3508. 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(-). 8/00

Schaumburg ARC. P.O. Box 68251, Schaumburg, IL. Meets 3rd Thurs./monthly, 7 p.m., Rec. Center, Bode and Springinsguth Roads. (630) 612-9446. <http://members.aol.com/sarcradio> 10/00

Wheaton Community Radio Amateurs, (WCRA). P.O. Box QSL, Wheaton, IL 60189. Meets 7:30 p.m., 1st Fri./monthly, College of DuPage, Wheaton, IL. Rptrs: 145.39(-) (107.2), 224.14(-), 444.475(+)& (114.8). Info: Ron Hensel, K9ZE, (630) 365-0213, k9zze@aol.com 8/00

LOUISIANA

Baton Rouge ARC. Meets last Tue./monthly, 7 p.m., Catholic High School, 855 Hearshstone Dr., Baton Rouge, LA. Net: 146.79MHz, 8:30 p.m. Sun. www.brac.org. E-mail: W5GIX@aol.com 11/00

MAINE

Androskoggin Amateur Radio Club. Meets 1st Wed./monthly, 7 p.m., Auburn Police Station, 1 Minot Ave., Auburn, ME. Info: (207) 782-8699. 6/00

MASSACHUSETTS

Genesis Amateur Radio Society. P.O. Box 1234 Plymouth, MA 02362. Meets last Mon./monthly, 7:30 p.m. at Plymouth Airport, So. Meadow Rd. Tues. net: 146.685, W1LLM, 8 p.m. 7/00

MICHIGAN

Adrian Amateur Radio Club, W8TQE. Box 26, Adrian, MI 49221. Meets 1st Fri./monthly, 7:30 p.m., Civil Air Patrol Bldg., Lenawee Co. Airport, Cadmus Rd., Adrian. ARES net Sun., 9 p.m. 145.37(-). Info: Neil Griffith, KC8DAR, (517) 263-5774. 6/00

Chelsea Amateur Radio Club, Inc., WD8IEL Meets 4th Tues./monthly, 7 p.m., Key Bank, 1478 Old Chelsea-Manchester Rd., Chelsea. Info: Bill Altenbernd, WB8HNS, (734) 475-7938 Rpt: 145.450(-). 5/01

Genesee County Radio Club, Inc. Meets 3rd Tues./monthly, 7:30 p.m., Genesee Area Skill Center, Torrey Rd., Flint, MI. (810) 733-2082. 3/01

Hiawatha 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. 10/00

MISSISSIPPI

Jackson Amateur Radio Club. Inc. Meets 3rd Thurs./monthly 7 p.m. Am. Red Cross Bldg., Riverside Dr., Jackson, MS 39202 11/00

West Jackson County ARC, Inc. Meets 3rd Tues./monthly, 7 p.m., Ocean Springs Ctr. Rm., Ocean Springs, MS 1/01

MISSOURI

Macon County ARC. P.O. Box 13, Macon, MO 63552. Meets last Wed./monthly, 7 p.m., Macon R-I High Sch., rm. 167. Net every Thurs., 8:30 p.m. 146.805. E-mail: nopr@arrl.net 1/01

NEVADA

Frontier Amateur Radio Society, (FARS). Meets: 1st Sat./monthly, bkfst. mtg. 10 a.m., Chicago Hot Dog Drive In, 1078 No. Rancho Dr., Las Vegas, NV. after AES swap meet. Club info: Jim Frye, NW7O, (702) 456-5396 or Bill Scarborough, WA6ASI, (702) 269-9551. 8/00

Sierra Intermountain Emergency Radio Assoc., (SIERA). Meets 2nd Tues./monthly, 7:30 p.m., Minden Med. Ctr., Hwy 395 & Ironwood Tr., Minden, NV. Info: George Uebele, WW7E, (775) 265-4278, ww7e@arrl.net, Rpt. 147.330 MHz. 1/01

NEW HAMPSHIRE

Port City Amateur Radio Club, (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. 10/00

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. 6/01

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. 12/00

South Jersey Radio Assoc., (SJRA), K2AA. Meets Jan.-Oct., 4th Wed./monthly, 7:30 p.m. (Nov.-Dec. 3rd Wed), Bloomfield Fire Hall in Pennsauken, NJ. Talk-in: 145.29(-) rptr. 8/00

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. 2/01

Hall of Science Amateur Radio Club. 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. 3/01

The Radio Club of J.H.S. 22, N.Y.C., Inc. WB2JKJ. P.O. Box 1052, New York, NY 10002. 24-hr. hotline: (516) 674-4072. Fax: (516) 674-9600. E-mail: crew@wb2jkj.org. Non-profit org. using Ham Radio to enhance the education of youngsters, nationwide. Join us—"Class-room Net," 7.238 MHz, 7 a.m. E.S.T. PSE QSL! 10/00

South Towns Amateur Radio Soc. (STARS). Meets 1st Thurs./monthly, 7:30 p.m., Hamburg Youth Ctr., Prospect Ave. Hamburg, NY (exc. Jul, Aug @ NIKI Base). Info: N2TEZ, 180 University Ave., Depew, NY 14043. Web: www.cmp-express.com/stars. Rpt: WB2ELW 147.090(+)/PL107.2 11/00

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 WB2ZIVR 147.06(+)/PL 114.8/2A. 10/00

Yonkers Amateur Radio Club, (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(+). 2/01

NORTH CAROLINA

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/scarcl 5/01

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(-). 1/01

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, KA8CAS. 10/00

Western Reserve Radio Assoc. P.O. Box 81252, Cleveland, OH 44181-0252. Meets 2nd Wed./monthly, 7:30 p.m., Jenkins Communications Ctr., Main St., Olmsted Falls, OH. Info: C. Bade, W8CJB, Sec., 146.73(-), 444.900(+)/MHz. 10/00

OREGON

Central Oregon Radio Amateurs, Ltd. (CORA). P.O. Box 723, Bend, OR 97709. Meets last Thur./monthly, 7 p.m., Bend Sr. Ctr., 1036 NE 5th, Bend, OR. 146.940(-)/MHz. Info: (541) 388-3831. 10/00

Hoodview Amateur Radio Club. P.O. Box 20624, Portland, OR 97220. Meets 3rd Thurs./monthly, 7:30 p.m., Mt. Hood Com. College/Gresham, Rm 1001. Rptrs: 147.28(+), 448.475(-) (tone 167.9). 5/01

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: WØQOT/R 147.12(+)(PL100) or (541) 863-7692. 7/00

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. 145.Ø5. 6/01

Mid-Atlantic ARC, (MARC), WSNWA. Meets 3rd Thurs./monthly, 8 p.m., Radnor Mem. Library, Wayne, PA. Rtrs 147.06, 145.13. Net, Sun., 8:30 p.m. <http://www.marc-radio.org> 11/00

TEXAS

Brazos Valley Amateur Radio Club, (B-VARC). P.O. Box 1630, Missouri City, TX 77459. Meets 1st Thurs./monthly, 7 p.m., Sugar Land Community Ctr., 226 Matlage Way., Sugar Land, TX. 12/00

VIRGINIA

Mt. Vernon Amateur Radio Club, (MVARC). Meets 2nd Thur./monthly (except Dec.), 7:30 p.m., Mt. Vernon Gov. Ctr, 2511 Parkers Ln., Alexandria, VA. Contact: Bob, KT4KS, (703) 765-2313. E-mail: mvarc@juno.com, <http://www.mvarc.org/>, Net: Tues. 8:30 p.m. 146.655-. 10/00

Ole Virginia Hams ARC, (OVH). Meets 3rd Mon./monthly, 8 p.m., Northern Virginia Electric Coop. Tech Ctr, 5399 Wellington Rd., Gainesville, VA. Info: Mary Lu, KB4EFP, (703) 369-2877. <http://www.qsl.net/olevahams> 3/01

Southern Peninsula Amateur Radio Club, W4QR (SPARK). Meets 1st Tue./monthly Sal. Army Com. Bldg., Hampton, VA. Rptrs 146.73(-), 449.55(-). VE Exam info: (757) 898-8031, W4RTZ. 3/01

Virginia Beach ARC. Meets 1st Thurs./monthly, 7:30 p.m., Virginia Wesleyan College, Wesleyan Dr. off N. Hampton, Village 2 Commons, Graybeale Bldg., Virginia Bch, VA. 2/01

WASHINGTON

The Mike & Key Amateur Radio Club. Meets 3rd Sat./monthly, 10 a.m., Salvation Army Renton HQ., 720 Tobin St., Renton, WA. Talk-in on 146.82(-) (103.5 CTCSS) rptr. Doors open 9:30 a.m. 5/01

WEST VIRGINIA

Jackson County Amateur Radio Club. Meets 1st Thurs./monthly, 7:30 p.m., Saint John Episcopal Church of Ripley. Net Mon. 9 p.m. on 146.67(-) WØBNU/R. Info: D. Tennant, N8ZYB, Rt. 1, Box 188 Mt. Alto, WV 25264. 7/00

WYOMING

University ARC. Meets 1st Tues./monthly, 7:30 p.m., University of WY, Engineering Bldg., rm. 2100, Laramie, WY. 146.01/61. 12/00

NATIONAL

Bicycle Mobile Hams of America. 46 states/6 nations membership. Annual Forum at Hamvention. Info, sample newsletter, e-mail address to: hartleya@aol.com or, SASE to BMHA, Box 4009-W, Boulder, CO 80306-4009. 2/01

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HT have you stumped? Bring it to a meeting!

Restructuring became the hottest news in the Amateur Radio community following the release of the FCC Report and Order on the restructuring of Amateur Radio.

Gwinnett Amateur Radio Society president David Adcock, KA4KKF, best summed up the situation in his "The President's Pen" column. "What more could you ask for? Amateur Radio got its wish."

Apparently a large number of Hams wished for more or less. Clubs reacted quickly to the building controversy, as evidenced by the large number of articles and editorials appearing in club bulletins and newsletters. Clubs used their meetings, newsletters, and nets as a forum to discuss the Report and Order and answer the myriad of resulting questions.

The Bandspread bannered "Restructuring is Here" across the front page of the February 2000 issue. In the lead article Wabash Valley Amateur Radio Association president Ray Andrews, K9DUR, reported the key changes to the regulations. In a following editorial, Andrews greeted news of the release with a very positive attitude.

"Whether we agree with the restructuring or not does not matter, it is a fact of life. As of 15 April 2000 our hobby will have changed. As a club, we need to look at these changes, not as something good or bad, but as an opportunity to expand our service to the local Amateur Radio community and to the general public."

WVARA's officers wanted club members to come forward with ideas and assistance to help advance Amateur Radio in our community. Andrews indicated that the Executive Board had already received several good suggestions and had them under consideration for possible implementation.

Andrews' closing thought is one every amateur and every club should agree with. "Together we can keep Amateur Radio the useful and rewarding hobby it has been during the first 100 years... and make it even more so during the next 100 years."

Many clubs immediately scheduled classes for and offered other assistance to members eligible to upgrade by the 15 April deadline. The St. Paul Radio Club, for example, offered a five week class on the Element 3B exam for Technician

Class licensees. The club also set up a telephone mentoring team which was available to Advanced Class amateurs preparing to take the element 4B exam.

David Adcock of the Gwinnett ARS went on to say in the column mentioned above that there'll be discussions on how this (restructuring) will make it like CB radio in the 70s. "I think the only way that will happen is if we don't train the new person. We'll need the operator that can pass on the old traditions... and heritage of Amateur Radio so the spirit will never die. Training is where it is."

What David next says about the GARS is equally true about all Amateur Radio clubs. "This club has a depth of experience that hasn't been touched yet. We must keep an active education program, demonstrations, social activities, and fundraisers. GARS should be the place to come to for Amateur Radio operations in Gwinnett County." His remarks end with "I believe the Amateur Radio clubs must step forward and train the new operators."

The front page of *Feedback* contains the following note. "The Warminster Amateur Radio Club is a volunteer-based organization. Without the selfless work performed by volunteers such as yourself, there would be no Club." Editor Rich Maialetti, N3HSV, knows his club members well. The list of club officers includes nine names and is followed by a list of no less than 45 committee chairpersons.

Best idea I've heard about in a long time for a meeting program comes from the Kern County Central Valley AR Club. President Jim Thompson, KE6RRS, wrote in the Communicator that the next club meeting should be fun for those who have wondered how to program those darned handheld radios. "I would like for every one to bring their favorite or not so favorite HT and the manuals so we can help those who may be in the market for a radio or those who have just had the dickens of problems learning how to program those things..."

The Lincoln Amateur Radio Club announced a program by Ed Holloway, NØQEG, on how cable TV gets to your home. Ed progressed from cable installer to design engineer, experience which makes him knowledgeable of the system from the "front end" to the "house end." His presentation was to include informa-

tion on how to minimize RFI into and out of the cable system, of particular interest to Hams.

Bonnie Bare, AB7ZQ, was on the docket to talk about the Amateur Packet Reporting System (APRS) at a recent McMinville ARC meeting. As a PalmPilot user, she has downloaded and installed software which enables the Pilot to work with a TNC.

The Ford Amateur Radio League noted in *The Bolt* that its repeater equipment in the Dearborn, MI, area will be 31 years old this year. There must be some good techs among those Ford Motor Company amateurs who keep those ancient repeaters operational.

The Tucson IBM Amateur Radio Club abandoned the state of the art for its February meeting by staging a home brew crystal radio contest. Entrants were to build and demonstrate a working(?) set. Judges were to select the winning set based on originality of design, components, and construction. The club provided an antenna and ground, both necessities for the radio to operate.

Curious about what all those knobs and gizmos are? Not sure where to plug in your noise bridge? The Peoria Area ARC has a solution — attend its Equipment Show and Tell. The club invited members to bring a piece of equipment from their collection to share with the group, whether it be a home brew kit or the latest radio from Yaesu.

Ever see a real radio, one that glowed in the dark? James Pike, KB6WHT, recently displayed several tables of "antique radio stuff" at the Conejo Valley ARC. His collection included a model 20 Atwater Kent receiver, Patterson all-wave receiver, Heathkit receivers and transmitters, Hallicrafters, Hammerlund, military rec/transmitters, various types of multi-meters, and much more.

— Mike Flaherty, WA6UBW, can be reached at: P.O. Box 189490, Sacramento, CA 95818-9490

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Non-BASIC Antenna and Moxon's Rectangles

Starting things off, how would you like an easy-to-build multiband wire antenna for HF? One that doesn't require traps or stubs or linear loaders, yet can cover all amateur HF bands from 40 Meters and up. How about one with the major lobe on all bands broadside to the wire, and one with relatively low take-off angles for optimized DX?

In fact, the antenna is so simple it doesn't even need a computer program to design it. All you have to do is remember just one number, 44 feet, and cut the antenna to that length. Feed it with twin-lead transmission line, put it up as high as possible (preferably 66 feet, which is a quarter wavelength for 40 Meters), and start working the world.

The skeptical might be asking "How can this be? If it's so simple, why hasn't it been thought of before?" Well, the basic idea has been around for a while, but I think this is the first time I've encountered the 44-foot number. Basically, the antenna is a short doublet on 40 Meters, an off-tuned half-wave dipole on 30 meters, and a somewhat modified extended double Zepp on the higher frequencies.

Credit for this one goes to R.L. Cebik, W4RNL, who came up with the 44-foot

```

10 CLS: PRINT: PRINT "MOXON.BAS, BY KD5DL, 6/00"
20 PRINT: INPUT "FREQUENCY (MHZ) ";A: B=984/A
30 C=.5*B: D=.36017*B: REM C=REF LENGTH, D=ANT WIDTH
40 E=.13786*B: F=(C-D)/2: REM E=ELEM SPACING, F=REF TAIL
50 G=(.009+A*.0001)*B: H=E-(F+G): REM G=GAP, H=DE TAIL
60 J=2*H+D: PRINT: PRINT: REM J=DE LENGTH
70 PRINT "ANTENNA SIZE IS";
   INT(D*100)/100;"X";INT(E*100)/100;"FEET"
80 PRINT "THE DRIVEN ELEMENT
   IS";INT(J*100)/100;"FEET LONG (WITH
   TWO";INT(H*100)/100;"FT TAILS)"
90 PRINT "THE REFLECTOR IS";INT(C*100)/100;"FEET
   LONG (WITH TWO";INT(F*100)/100;"FT TAILS)"
100 PRINT "THE GAP BETWEEN THE TAILS
   IS";INT(G*100)/100;"FEET": PRINT
110 INPUT "DO ANOTHER";A$: IF A$="Y" OR A$="y" THEN
   20 ELSE END
    
```

dimension (or 88 feet if you want to add 80-meter capability).

You will need to have an antenna tuning unit, because antenna reflections (SWR) are terrible on most bands, but it proves one thing that I've been harping on for years; an antenna does not have to resonate in order to radiate. High SWR means virtually nothing to antennas and feedlines when they are practically

lossless.

Full details are available on Cebik's web site at www.cebik.com/radio.html as "Suppose I Could Have Only One Wire Antenna..." You'll find some interesting facts about this antenna's capabilities, radiation patterns, and details for constructing one from aluminum tubing.

Cebik, an inductee into the QRP Hall of Fame for his series, "Antennas

The Smith Chart

Electronic Applications of the Smith Chart, by Phillip H. Smith This is an updated edition of the original, classic reference book by the legendary Smith Chart inventor himself. This book describes how the Smith Chart is used for designing lumped element and transmission line circuits and includes tutorial material on transmission line theory and behavior, circuit representation on the chart, matching networks, network transformations and broadband matching. It also includes a new chapter with example designs and a description of *winSmith* (see below). **Our Price \$59.00**

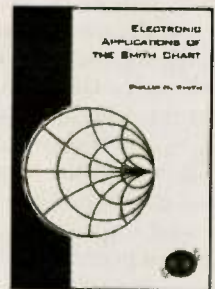
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From the Ground Up," has chapter upon chapter of information on all kinds of antennas in a virtual antenna textbook at his site. One of the most interesting chapters deals with Moxon Rectangles.

L.A. Moxon, G6XN, is editor of the best-selling book, "HF Antennas For All Locations." The latest edition, published by the Radio Society of Great Britain, is available from the ARRL as order number 4300 at a cost of \$15, plus \$4 shipping and handling.

In 1982 Moxon wrote of a three-band beam that looked somewhat like a horizontal quad. The antenna, designed by F.J. Caton, VK2ABQ, was built on x-shaped spacers, like a quad, but midway along its sides Caton cut the wires and inserted insulators (which he made from coat buttons).

In effect, this turned his antenna into a Yagi. The ends of the driven element were bent back toward the reflector, and the reflector's ends were bent forward toward the driven element, much like these brackets []. Even though the gap between the two elements was only the width of the holes in the buttons, the antenna's radiation pattern appeared very much like that of a Yagi.

Apparently Moxon was intrigued, and he began several modifications to Caton's basic design. One of his first experiments was a rectangular shaped antenna with transmission lines feeding both the driven element and the reflector. By putting a signal into one of the lines and by shorting the other at some multiple of a quarter-wavelength, he was able to change the antenna's radiation pattern by 180 degrees merely by flipping a switch at the transmitter!

Bending the outside element sections toward each other has two definite advantages. One is smaller size. The length of the rectangular antenna is about 75 percent the length of a similar two-element Yagi. The other advantage is its input impedance. A Yagi might exhibit an impedance somewhere around 35 ohms, depending on element spacing and gain considerations. A typical Moxon design has an input resistance closer to 55 to 60 ohms, presenting a good match to conventional coax feed lines.

An unexpected benefit of the Moxon is its greater front-to-back signal ratio. When optimally tuned, a Moxon might have a 30 dB or more attenuation of signals off the "back side," whereas a Yagi might show only 20 dB front-to-back. In its forward direction, the Moxon

exhibits a little less gain than a Yagi, but it has about a ten degree greater beamwidth.

Since antennas are reciprocal devices, this means that if you want to receive a particular station, but are having a hard time because a second one is using the same frequency, you can cut the offending station's signals significantly just by pointing the back of the antenna in its direction. The preferred station's signals might be reduced slightly, but not anywhere near the five S-unit drop in the offender's signal!

This month's BASIC program is a simple routine that computes the dimensions of a wire Moxon Rectangle for any specific frequency, amateur or otherwise. It gives the physical size of the antenna, the amount of wire in the driven element and radiator, and the gap distance between the ends of the two elements. Obviously, since the element lengths are longer than the antenna's width, each element's two "tails" are bent toward each other. The antenna is fed at the center of the driven element using 50-ohm coax.

The program assumes a wire size of 14 AWG and "free space" calculations, and should be accurate to within a quarter of an inch for other practical wire sizes. As with any calculations, actual sizes may need to be trimmed slightly, by trial-and-error, for operation in a "real" environment.

According to Cebik, adjusting the width of the antenna has the most effect on feedpoint impedance while adjusting the gap between element tails most affects the front-to-back ratio.

To confirm that the program has been typed in correctly, run it with an input frequency of 14.040 MHz. Your results should show an antenna that is 25.24 feet wide by 9.66 feet deep. The driven element should be 33.3 feet long and have 4.03-foot tails at each end. The reflector should be 35.04 feet long with 4.9-foot tails; and the gap between the two elements' tails should be 0.72 feet. If you don't get these results, check your listing for possible typos.

Before we go: If you use an Apple Macintosh, you might find these BASIC sites useful; www.emulation.net will allow you to run PC, Apple, Commodore, Sinclair and several other forms of BASIC on your Mac, as well as simulate several popular games. The site has been down for several months while its operator was relocating his QTH, but now it's up and running again.

If you have a PowerMac with at least 24MB of RAM, you might want to look at <http://public.srce.hr/~msaric/GDS> for a free download of METAL v1.3. METAL is META-Language, an extension of BASIC with some pretty impressive graphic capabilities. Unfortunately, many of the generic BASIC listings we've presented in this column aren't directly compatible with METAL, but a little effort at rewriting should get most of them up and running.

And speaking of running, that's just what I have to do. Until next time, stay radio active.

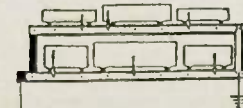
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Who Needs A Beam?

Cecil Moore, W6RCA

The sunspot cycle is on the rise and 10 Meters will soon be hopping. This article describes a simple, inexpensive, dipole antenna that will rival the performance of a 10-meter beam. It's our old friend, the Extended Double Zepp but this one has been dressed up to achieve some benefits that are not readily apparent at first glance. Here are its characteristics:

1. 10 dBi gain with a takeoff angle of 15 degrees on 10 Meters
2. Horizontal beamwidth of 31 degrees on 10 Meters
3. Rotatable using an inexpensive TV rotor for coverage in any direction
4. Low wind resistance — less than three square feet of loading
5. More gain than a dipole on 20m, 17m, 15m, 12m, and 6m
6. Performs close to a resonant dipole on 30m (and is rotatable)
7. Performs well enough on 40m (and is rotatable)
8. Fed with low-loss 300-ohm ladder line or TV twinlead
9. Requires 1: 1 current balun (choke) between the coax and ladder-line
10. Mounted on a 33 foot tall pole or tower (but higher is better)

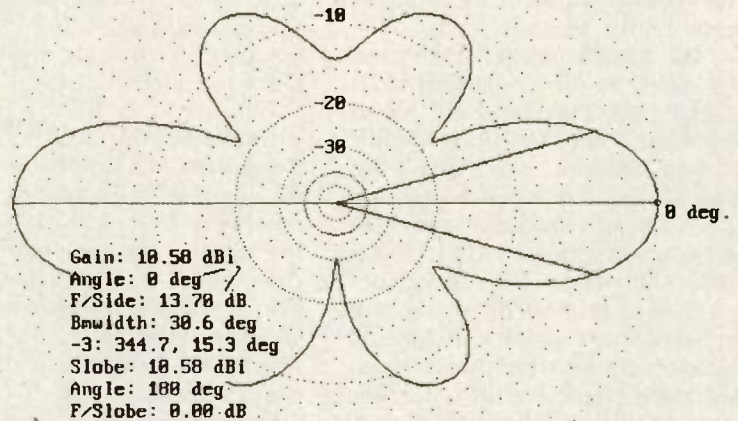
Sound unbelievable? Let's take it a step at a time. The Extended Double Zepp (EDZ) has some well-known features — the most well known being the approximately 3dB gain achieved over a dipole. It accomplishes that gain because it has a narrower horizontal

44 Foot Rotatable Dipole

0 dB

EZNEC 2.0

06-24-1999 20:06:44
Freq = 28.4 MHz



Cursor = 10.58 dBi
= 0.00 dBmax
Outer Ring = 10.58 dBi
Max. Gain = 10.58 dBi

Cursor Az = 0.0
Azimuth Plot
Elevation Angle = 13.8 deg.

beamwidth than a dipole. For rotatable antennas, the EDZ will outperform the half-wavelength dipole by approximately half an S unit.

EDZ's have a bad reputation for being hard to match. They are hard to match with coax but not with ladder line. And if the EDZ is fed at a current maximum point on the ladder line, one doesn't

even need an antenna tuner.

For details on this no-tuner matching technique take a look at:

"W6RCA's No-Tuner All-HF-Band Antenna" at: <http://www.bigfoot.com/~w6rca>.

Let's take a look at some "magic" lengths of dipoles.

3/8 wavelength — the minimum effective dipole length recommended by Walter Maxwell in his book, "Reflections." Below this length, the resistance decreases rapidly and the capacitive reactance increases rapidly resulting in a very high SWR. A 3/8 wavelength dipole is 48 feet long on 40 Meters.

1/2 wavelength — the most popular dipole length associated with resonance. 1/2 wavelength on 30 Meters is 46 feet.

Double Zepp — The Zepp is an end-fed 1/2-wavelength antenna that once was trailed from a Zeppelin airship. A Double Zepp is simply a one wavelength dipole. A Double Zepp on 15 Meters is 44 feet long.

Extended Double Zepp — A 1.28 wavelength dipole giving the maximum broadside gain possible from a dipole, about 3dB gain over a 1/2-wavelength dipole. An EDZ on 10 Meters is 41 feet.

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If one wants best performance possible on 10 Meters, then 41 feet is the length of choice. If one wants best performance on 40 Meters then 48 feet is the length of choice. This article describes a compromise between 10-meter performance and 40-meter performance. The compromise dipole length is 44 feet.

The antenna is assembled from eight 6-foot long pieces of telescoping aluminum tubing and is a total of 44 feet long, center-fed with 300-ohm ladder line. The length of the feedline is important if one wants to avoid/satisfy an antenna tuner. The sizes of six foot long aluminum tubing available from Texas Towers is two each of 6063-T832 stock with ODs of 0.375", 0.500", 0.625", and 0.750." Note that with these lengths, one can assemble a dipole of length up to 44 feet. It is recommended that the smallest pieces of tubing be made adjustable as a telescoping element into the next larger size tube. Forty four feet may not be the optimum length for your antenna and the overall length is adjustable from 32 feet to 44 feet. If one wants to forget operation on 40M, one can use six lengths of aluminum tubing, instead of eight, and settle for a 32-foot dipole.

The 300-ohm ladder line used for these simulations has a 0.8 velocity factor. Other 300-ohm feedline may vary from this value. The 450-ohm ladder line could just as easily have been used and usually has a 0.9 velocity factor.

Let's say we have our 44 foot, 10-meter rotatable EDZ fed with 88 feet of 300-ohm ladder-line mounted and operational on a 33-foot tower. It has essentially the same gain as a two-element Yagi. What else can we do with it? Believe it or not, there's not much else we can't do with it all the way from 7 MHz to 54 MHz.

The 44-foot dipole is resonant on approximately 10.6 MHz so when it is used on any HF frequency above 10.6 MHz it exhibits more gain than a dipole. That includes all HF amateur frequencies from 20M through 6M. And 44 feet is long enough to do a good job on 30M. The gain is that of a dipole on 30M and is somewhat lower than a dipole on 40M. Besides, it is rotatable and thus will beat a fixed 40M dipole most of the time.

Figure 1 is what EZNEC tells us about the horizontal radiation pattern of the 44 foot dipole on 10M. Mounted at a height of 33 feet, it has a whopping 10.4 dBi gain, approximately 3dB better than a half-wavelength dipole.

Band - Gain	Takeoff Angle
40M: 5.8 dBi	65 degrees
30M: 6.0 dBi	42 degrees
20M: 7.5 dBi	29 degrees
17M: 8.8 dBi	23 degrees
15M: 8.9 dBi	20 degrees
12M: 9.4 dBi	17 degrees
10M: 10.4 dBi	15 degrees
6M: 9.7 dBi	8 degrees (Cloverleaf) I

Feedpoint Impedance
27.5 - J422 ohms
72 - J70 ohms
194 + J379 ohms
931 + j 1207 ohms
2334 - j 1141 ohms
419 - j959 ohms
126 - J471 ohms
10 - J241 ohms

The length of the ladder-line is of utmost importance if one wishes to avoid the use of an antenna tuner or make the built-in tuner in a transceiver happy. EZNEC predicts the following necessary lengths of ladder-line for system resonance on the various bands:

7.200 MHz — .001 uf capacitor in parallel at 86 feet = 50 ohms
10.125 MHz — 81 feet or 120 feet = 68 ohms resistive
14.200 MHz — 75 feet or 102 feet = 68 ohms resistive
18.140 MHz — 77 feet or 99 feet = 35 ohms resistive
21.300 MHz — 83 feet or 101 feet = 31 ohms resistive
24.950 MHz — 85 feet or 101 feet = 32 ohms resistive
18.400 MHz — 88 feet or 102 feet = 35 ohms resistive
52.500 MHz — 84 feet or 99 feet = 65 ohms resistive

These lengths are only approximate and the actual length in practice must be varied to achieve a near-perfect match without an antenna tuner or with a built-in antenna tuner.

However, if one wishes to use a fixed feedline length, it appears that 85 feet or 101 feet would be good fixed feedline lengths to use with this antenna and an antenna tuner. A good 1:1 choke/balun is an absolute necessity. Such a choke is described on W6RCA's web page and is positioned between the coax and the 300-ohm ladder-line. A Super-W2DU-type choke can be made with twelve FB-77-1024 ferrite cores and RG-400 Teflon coax by looping the RG-400 through the cores four times each. Calculated impedance for that

particular choke comes in at a whopping 8k ohms.

The 300-ohm SWR is reasonable on all bands except 40M where it is about 30:1. This is not much to worry about as far as losses are concerned but it does mean that not as good a match is possible at the low impedance point (approximately 10 ohms) on the transmission line as occurs on other bands. The remedy for the 40M matching problem is a capacitive stub or actual discrete capacitor. It is estimated that a .001µf capacitor in parallel with the 300-ohm ladder-line about 86 feet from the 44-foot dipole will result in a near perfect match. Of course, an open stub can also be used. An antenna tuner will also work without the capacitor on 40M but at slightly reduced efficiency.

This 40M-6M rotatable dipole was modeled using EZNEC, an antenna modeling program available from Roy Lewallen, W7EL. Please feel free to visit his web site and download the free demo version of ELNEC: <http://www.teleport.com/~w7el>.

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How are you doing in the contest?

Chuck Imsande, W6YLJ
10-10 19636



Y2K 10-10 programs update

The interest in the 10-10 Y2K programs continues high. A number of members have now accomplished the 2,000 contacts in the year 2000. Many of those who have accomplished the 2K in Y2K are now working hard to make 2,000 contacts only with other 10-10 members. Mike, N5MT #24949, has over 2,100 mixed contacts (those with both a 10-10 number and those without a 10-10 number) and is well on his way with over 950 contacts with 10-10 members only. His goal is to work 100 DX 10-10 countries during the year 2000. At this writing, Mike has 78 10-10 countries worked so far. Looks like this is a very achievable goal! Mike usually hangs around 28.555, so if you have not worked him this year, look for N5MT around 28.555 and help him make his 2,000 member contacts in Y2K.

If you are working on the 2nd edition of the 2K in Y2K challenge — that is, working 2,000 10-10 members — Jim Hardy, K4HAV #17605, has added this additional feature to the WIN1010 Daily Log Program. WIN1010 now has a routine that will pick out all of the unique 10-10 numbers and sort in order and make a display that can be printed out into the required log. It just gets easier all the time! If you want to get the official 10-10 computer program for all of your 10-10 logging requirements visit Jim's web page by going to the link on the 10-10 web site: www.ten-ten.org.

If you are working for either of the 2K in Y2K awards, remember the intent of making 2,000 contacts in 2000 was just a "FUN" undertaking to have more folks active on 10 Meters. Good luck and let me know how you are doing by e-mail at: w6ylj@arrl.net. As all logs are to be held until after close of the contests on 31 December 2000, I would like to know how all are doing. We will publish a listing of all total claimed contacts in this column and in the *10-10 International News* future additions.

2000 new members in 2000

Our Data Manager, Gerry, WA6POZ #21274, reports that new applications are coming in at a record rate. As of the date of this writing, almost 650 new members

have been assigned 10-10 numbers. The highest number issued at the time of this writing was 71267. The challenge to see how many times your call and number can be listed on a new member application has created a lot of activity. After entering the first 429 new applications into the computer program, here are the top 10 leaders:

# of times Listed	Call	10-10 #
33	VP2VF	63440
29	WB4FBS	48461
27	K5GAY	11825
27	KC0CMZ	70882
19	WN9P	41483
19	WA5JDU	3017
18	VE5BCS	42027
18	VE6DSG	67300
17	WV7C	22954
17	W6YLJ	19636

In addition, there are 19 members listed 10 or more times. It is not too late for you to get into the top of the list. The way to get your call and number listed on new member applications is to make contacts, and particularly help those non-members that need information on how to join 10-10.

President's Award

The annual President's Award was approved by the Board of Directors in 1996. This gave the President the authority to select an individual 10-10 member whom he or she felt most exemplified those qualities which we, as an organization promote. The President has made his selection for this year, and the award goes to a most deserving and loyal member of 10-10.

In April 1972, a young man from California, Morrie Goldman, W6EHM, received his 10-10 number — 4189. From this point on, and for almost 28 years, this gentleman has not only served 10-10 in many capacities, but has added greatly to the growth of the organization. Always willing to assist in any manner, he is to be commended for his years of loyalty and service. He continues to serve 10-10 as the Historian, Scholarship Manager and Station Trustee of the 10-10 Club Station, W6OI.

Here is a brief 10-10 history of Morrie Goldman, W6EHM #4189:

April 1992 — Received his number — 4189

May 1973-October 1974 — Manager Call Areas 6, 7 and 8

October 1974-December 1975 — Manager Call Area 6

January 1975-December 1978 — Served as President

September 1975-April 1976 — Served as Interim Treasurer

November 1995 — Appointed Trustee of W6OI

January 1979-December 1988 — Served as Director

January 1989-December 1990 — Served as Vice President January 1991

— Appointed Scholarship Manager

April 1991 — Appointed Historian

As you can note from the above history, Morrie has served 10-10 almost continuously since receiving his number in 1972, and still serves 10-10 in three important positions today. There is no one more deserving of the Presidents Award than Morrie Goldman, W6EHM #4189.

10-10 Net report

10-10 holds two nets each day, except Sunday, at 1800Z. One net is held on 28.380 and the other net is held on 28.800. Members and non-members are invited to check into either or both of the 10-10 nets. And, remember that the Net Control Stations are located around the country as well as one in Canada and one in the British Virgin Islands. So, based on propagation, you should be able to check into a 10-10 net almost any day, except there is never a net on

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10-10 International News

Sunday.

Bill Marple, AA6ZW #62075, Net Manager, reports that the net check-ins for the year 1999 totaled 11,623. Of that total, 745 were non-10-10 members. The high month was November 1999 with 1,894 check-ins. The low month was August with only 504 check-ins. This gives you an indication of the activity that occurs on the daily 10-10 nets. Our 10-10 Net Control Stations deserve a big "thank you" for keeping our 10-10 nets running in a smooth and organized manner.

10-10 web site

Just a reminder that everything you will want to know about 10-10 is listed on the 10-10 web site. The address is www.ten-ten.org. Check the web site for answers to most of your questions about the 10-10 organization, QSO Parties, Awards, and just about anything else. A new feature of the web site is the posting of 10-10 Silent Keys each month. Silent Key Manager John Miller, WØIKT #37983, has begun this monthly posting in order for members to view a more current list than the quarterly report that appears in each issue of the 10-10 International News. The monthly reports will be assembled and printed in the quarterly News as before, but the monthly web site postings will provide a more timely notice of our SKs. Should you become aware of a 10-10 member becoming a Silent Key, please send all information to: John Miller, WØIKT #37983, 10-10 Silent Key Manager, 401 Tiffany Drive, Anderson, SC 29625-2567.

Information about 10-10?

If you would like information about 10-10, and how you can become a member and receive your very own unique 10-10 number. Send \$2.00 and an address label for the return of your information package to: 10-10 International Net, Inc., Attention: Information Package, 643 N. 98th Street - PMB #142, Omaha, NE 68114-2342. No SASE please as the information package requires a 9 x 12 envelope. You will receive a copy of the Information Brochure, which contains everything you want to know about the 10-10 organization, a listing of all 10-10 Chapters, their day, time, and frequency of net operation and an application form. Also enclosed will be a copy of the QSO Party Information Brochure and a copy of the latest issue of the 10-10

International News, the 32 page 10-10 quarterly magazine.

If your membership in 10-10 has expired and you would like to renew your dues, send your dues (\$10.00/year or \$25.00 for 3 years) to: 10-10 International Net, Inc., Attention: Dues Renewal, 643 N. 98th Street PMB #142, Omaha, NE 68114-2342. You will become an "ACTIVE" member again and receive all of the benefits of 10-10 including the quarterly 10-10

International News. And please do not forget to include a donation to the Scholarship Fund along with your dues renewal.

Remember 10-10 numbers are issued for life and your originally issued number is always yours. If you have lost, or forgotten, your 10-10 number, send a #10 SASE to the above marked to: Attention: 10-10 Number, and your original 10-10 number will be sent back to you.

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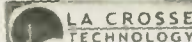
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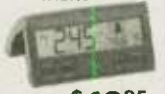
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Cuddling up to MFJ's new 'Cub' transceiver

MFJ Enterprise's new 2-watt superhet QRP transceiver kit went together without a hitch in about an hour on a Sunday afternoon.

Peering down on a printed circuit board with more than 130 parts, homebrewers might wonder just how that's possible. After all, just sorting components for a project of this caliber can take the better part of a day.

In a breakthrough in home building innovation, the MFJ "Cub" transceiver combines two parts technologies to make the job of building a sophisticated CW transceiver a real snap. And it happens in practically the blink of an eye.

About 85 surface mount parts come already soldered to the "Cub's" printed circuit board, compliments of MFJ. It is left to the kit builder to complete the job by mounting about 50 conventional through-hole parts. For neophytes it couldn't be made much simpler.

The finished product is a great little QRP transceiver capable of about 2-watts output. The QSK is smooth and seamless. The radio's superhet receiver hears about everything my Kenwood TS-140 hears, and there's enough audio to comfortably drive a speaker. The receiver was designed for CW, so the three-crystal bandpass filter and audio shaping is about as good as it gets for the kind of conditions CW subbands from 80 through 15 Meters can deal.

Furthermore, it's quiet. The "Cub's" receiver has the clarity of a direct conversion system with all the benefits of the superhetrodyne. Covering about 60 kHz of the 40-meter band in the KI6SN version, the "Cub" is a great little QRP transceiver.

It's another example of MFJ's commitment to producing quality products for the low power enthusiast in both the high-frequency (HF) and very high-frequency (VHF) spectrum.

For such a little package, the MFJ "Cub" delivers in QRO fashion. Coming



MFJ Enterprise's easy-to-build "Cub" QRP transceiver kit combines both surface mount and hole-through technologies.

in single band versions covering either 80, 40, 30, 20, 17 or 15 Meters, it's a perfect transceiver for the frequent flier, the backpacker, or the radio operator who prefers transceivers that leave a small footprint on the operating desk. The rig is 3.75 inches wide, 1.5 inches high, and 4.5 inches deep.

And drawing only about 40 milliamperes on receive, and 380 on transmit, the "Cub" is ideal for gel-cell battery operation.

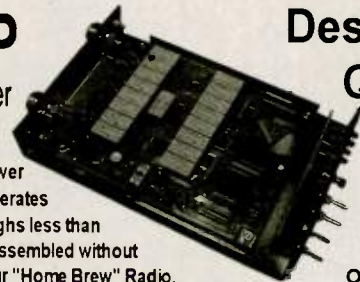
Opening the package from MFJ, the builder finds the "Cub's" enclosure and three plastic baggies filled with either parts or hardware. There are also two instruction manuals — one for building

and testing, another for operating.

Bag No. 1 has a handful of generic parts common to each of the transceivers in "Cub" series: board mounted trimmer potentiometer and capacitors, a 2N5109 final transistor with heat sink, MV2104 varactor tuning diode, a slug-tuned coil in a metal can, ON/OFF switch, red "Power On" LED, front panel audio and tuning potentiometers and jacks for headphones, keyer, 12 volts-DC, and antenna.

Bag No. 2 has parts that are specific to the "Cub" for the band you've chosen to operate. At KI6SN, that was 40 Meters. Inside were a handful of capacitors, a couple of RF chokes, several more slug-

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tuned coils-in-a-can, a couple of toroids and five crystals.

Bag No. 3 contains knobs for the front-panel controls and hardware to mount the PC board inside the "Cub's" cream-colored and beautifully labeled enclosure.

The 43-page building and testing manual takes the builder step-by-step through to completion. You install a part, then check off a box in the manual. It's practically foolproof.

Pictorials of all the builder-mounted parts take the guesswork out of what's what for first timers. There is also a parts placement diagram and a full schematic. If you're at all confused by the parts outlines on the silk-screened, plated-through PC board, just refer to the manual's drawings. You have to go out of your way to make a mistake with the "Cub."

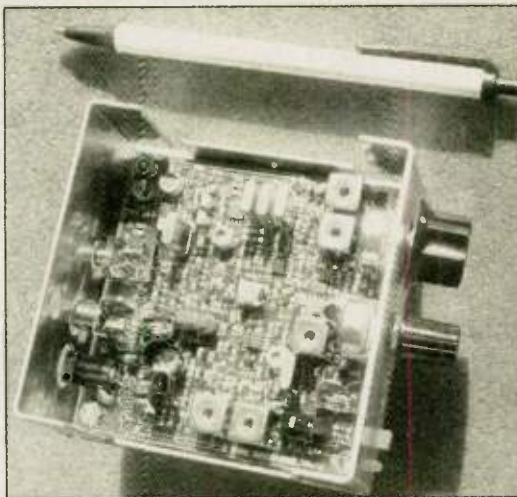
Once all of the parts are in place — and you'll be amazed by how quickly that happens — MFJ's "Cub" manual walks the builder through a no-nonsense testing and alignment procedure. The only accessories you'll need for this exercise are a 50-ohm dummy load, power meter (or a 5mm LED for power indication), a key or keyer, a well-regulated 12-volt DC power source and a calibrated receiver or frequency meter. You'll be peaking coils, adjusting the "Cub's" BFO and VFO frequencies, its transmit offset, and its power output.

Some builders have reported a slight drift in the transceiver's VFO on warm-up. I noticed it, too. But it takes only a few minutes to settle down. On-air reports for tone and signal quality have been very good.

With the drift factor, however, it's wise to let the rig sit for a while before attempting your initial alignment procedure. Jump in too hastily and you'll find yourself trying to align a moving target. I found that out the hard way.

Also, the instructions caution not to overdrive the rig's final transistor. You're instructed to increase the power output, by adjusting a board-mounted potentiometer, "only to the point where output begins to level off. Turning past this point overdrives the transmit mixer, resulting in unwanted mixer spurs and 'garbage' to the signal." In the interest of science, I pushed the output into "overdrive." MFJ isn't kidding. It's pretty ugly sounding beyond that "level off" point.

Shortly after completing alignment,



and with the "Cub" PC board literally hanging from the cable going to my Z-Match tuner, I heard Roger Hazen, W6JQG, in Visalia, CA, sending CQ. A short call brought a quick response from him and a 30-minute QSO ensued. At first he reported a slight amount of drift from the MFJ "Cub," but several minutes into the QSO it was steady-as-she-goes. The CW note was good and solid, he said. At 100 watts, W6JQG was pounding into Riverside, 599. He gave the "Cub" a 579 — a most respectable RST report for QRP levels. Several other contacts following the one with Roger proved early on that the MFJ "Cub" is a solid performer.

If you're interested in purchasing an

MFJ "Cub" for your QRP shack, there are a couple of ways to obtain the kit.

You can order directly from MFJ Enterprises by calling toll free: 800/647-1800. The company's mailing address is Box 494, Miss. State, MS 39762. Retail price is \$99.95 plus \$6 shipping. The company's web site is: www.mfjenterprises.com.

Through a special bulk order arrangement with QRP Amateur Radio Club International, the kit can be purchased at a 15 percent discount: \$85 plus \$5 shipping and handling. Because QRP ARCI submits multiple orders for the "Cub," it may take a bit longer to receive your kit at the reduced rate.

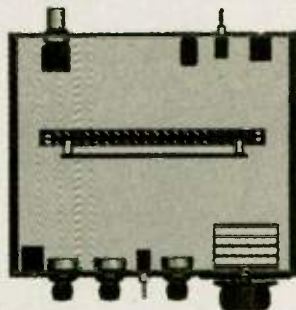
To order through QRP ARCI, send a check or money order to Mark Milburn, KQØI, 117 E. Philip St., Des Moines, IA 50315. You can also order through the club on line using a credit card. QRP ARCI's Internet address is: www.qrparci.org.

Additionally, if you'd like to compare notes, ideas or modifications with other "Cub" owners, QRP ARCI invites you to join the specially established QRPCUB Internet mailing list. Full details are on the club website.

For the first time homebrewer, MFJ's little "Cub" is a great way to get started.

— Richard Fisher, KI6SN can be reached at: 1940 Wetherly Way, Riverside, CA 92506; KI6SN@aol.com.

The Sierra



Basic kit \$215

w/6 bands \$369

Call or write for catalog



The Sierra is the only compact, low-current, multiband QRP transceiver available. It uses plug-in modules to cover all HF bands. There's no chassis wiring—all components, controls and connectors are mounted on a single board. The superhet receiver has 5 poles of crystal filtering, RIT, and AGC, yet only draws 35mA! Power out is 2 to 3 watts, with fast QSK and no relays. The prototype Sierra is featured on the cover of the 1996 ARRL Handbook, and lab test results can be found in the June, 1996 issue of QST.

New KC2 LCD Counter/Keyer/S-Meter/Wattmeter \$75

The KC2 is our newest QRP accessory, packing a 4-digit freq. counter, memory keyer, bar-graph S-meter and digital wattmeter into a 1"H x 3"W module! It's the ultimate add-on accessory for the Sierra and other QRP rigs. Draws only 7mA.

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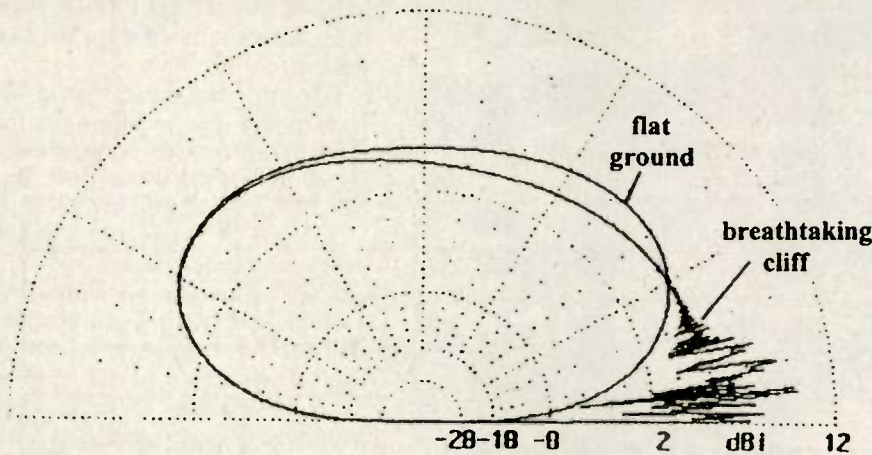


Figure 1 Elevation pattern of 20m Inv-Vee at 27 feet.

QRPing to the extreme

One of the locals here in Ft. Wayne, Mike Stein, WB9NOO, passed along an interesting article that appeared in the FDIM QRP Symposium Proceedings. (FDIM stands for Four Days In May, which refers to the QRP Amateur Radio Club International get-together each year at Dayton.)

The title of the article is "QRP Contesting in the Wilderness," and it's by Russ Carpenter, AA7QU. His passion is operating in the wilderness with lightweight radios and using terrain to

significantly improve the performance of antennas.

It all started when Russ packed up his QRP rig, a seven amp-hour gel cell, his keyer and paddles, a loop for transmitting and receiving, 10 feet of steel mast, food, water, and other stuff. This added up to 78 pounds in his backpack, and he hiked up Carpenter Mountain in Oregon to an abandoned lookout station. After making 19 QSOs in five hours, he scored the aesthetics as excellent due to the fantastic view, but he scored the radio portion as miserable.

This adventure set the stage for looking at this problem in a more scientific

way so as to make the next hike more successful. He used several software packages to look at antenna patterns over flat ground and over irregular mountainous terrain, and to look at the resulting signal coverage.

His first order of business was to determine which launch angles were most important for coverage of the continental U.S. from Oregon for his typical operating scenario of daytime operation on 20 and 15 Meters. To do this, he used the VOA-AREA propagation software developed by the Voice of America. This software can be downloaded, without charge, from <ftp://ftp.voa.gov/pub/software/voacap>. (This software will be the topic of a future column.)

The conclusion reached from this analysis was that the elevation angles around 10 degrees were the most important, with radiation above 25 degrees essentially wasted. So the decision came down to either carrying a 90 foot tower along to get an antenna way up high or figuring out how to use the mountainous terrain to gain an advantage with an antenna at low height. Since Russ decided to carry a simple and efficient inverted-vee with a 27 foot portable mast, the second alternative was the one to work on.

This was done using the terrain analysis software TA from K6STI (K6STI is no longer in the software business, so the ARRL software YT developed by N6BV and available in the recent

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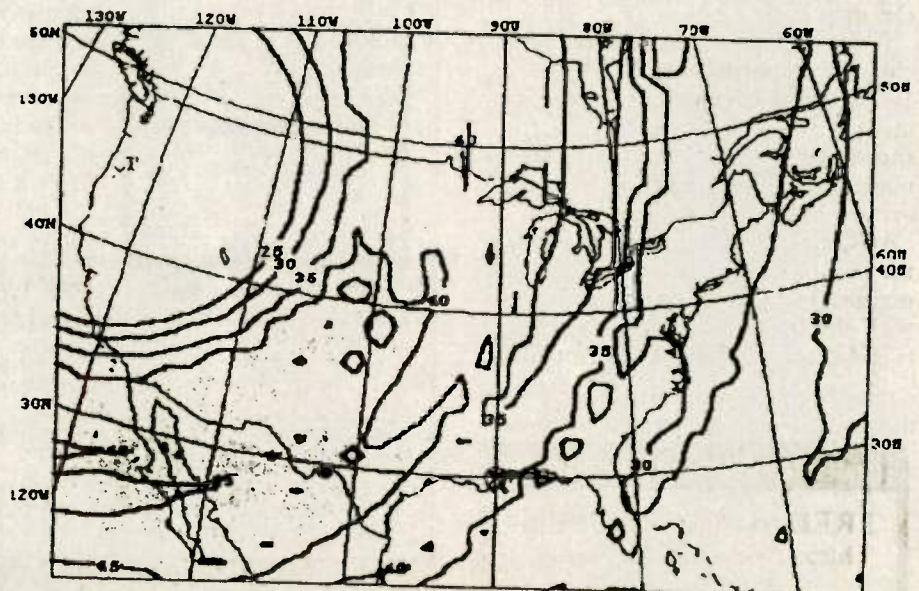


Figure 2 SNR for 5w on 20m with Inv-Vee at 27 feet.

SSN for Cycle 23

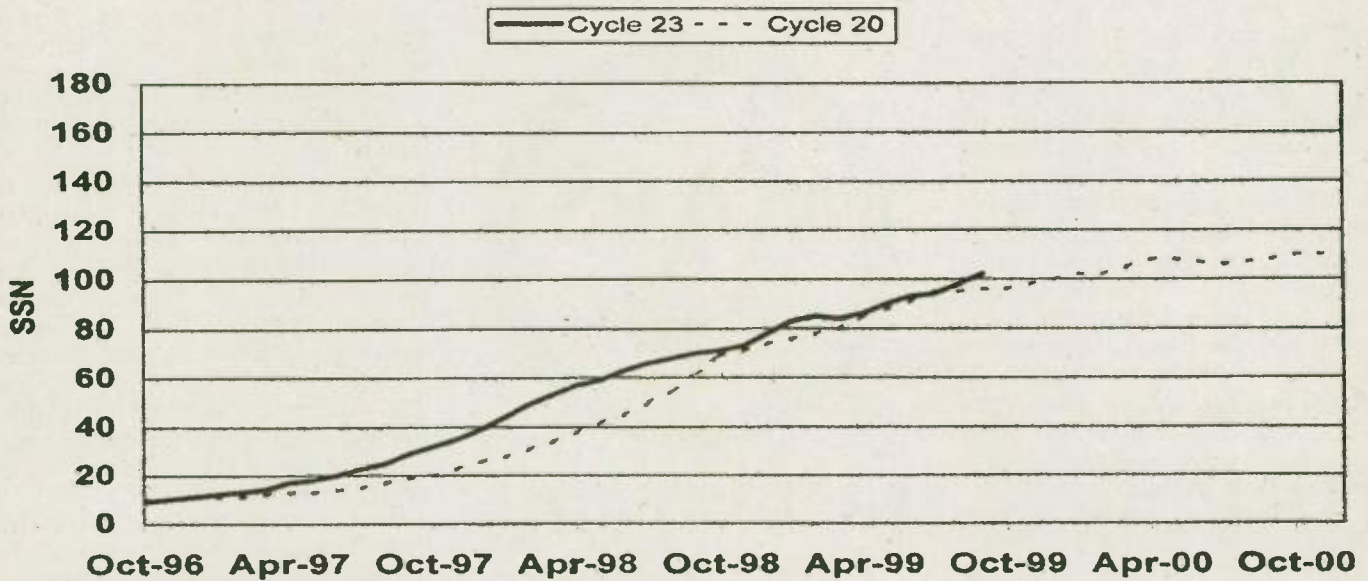


Figure 3 Progress of Solar Cycle 23

Antenna Book will have to be used in the future). Russ looked at the inverted-vee at 27 feet in conjunction with four different actual mountain sites in Oregon that fell off to the East — a breathtaking cliff, a wimpy cliff, a gentle slope, and nasty mountain terrain. From this work, the breathtaking cliff appears to give the best results. Figure 1 shows the elevation pattern of the inverted-vee at 27 feet. Also included for comparison is the pattern over flat ground, which clearly shows the benefit of the breathtaking cliff terrain. The breathtaking cliff is about 10dB better in the 10 degree elevation angle range.

Next the pattern with the breathtaking cliff was imported into VOA-AREA, and a signal coverage plot was made using a five watt power level. Figure 2 shows this as contour lines of signal-to-noise ratios (SNR) in dB. VOA-AREA defines 44dB SNR as GOOD, 34dB as FAIR, and 24dB as POOR. Checking the plot (it's tough to read some of the numbers) says the inverted-vee at 27 feet with the breathtaking cliff is GOOD to FAIR from about 110W longitude

all the way to the Atlantic. Not bad coverage for five watts and a portable antenna.

Maybe this sheds some light on why some QRP operations are heads above others — some forethought and planning to put out a good signal. And that's the whole point of this month's column — the use of readily available antenna and propagation software to take some of the guesswork out of the planning.

This month's column includes a plot of the progress of Cycle 23. Figure 3 shows that the latest SSN data is 102 for September 1999. It looks like Cycle 23 is running just a bit higher than Cycle 20, so it shouldn't be hard to guesstimate where the SSN is for June 2000 — around 110. That's the value you want to plug into your propagation prediction program (that equates to a

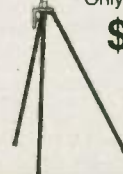
smoothed solar flux of 155).

— Carl Luetzelschwab, K9LA, can be reached at: 1227 Pion Rd., Ft. Wayne, IN 46845 or you can e-mail him at: k9la@gte.net.

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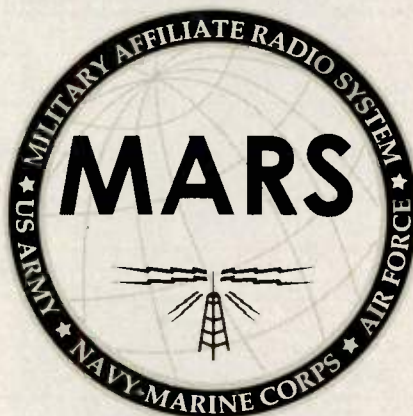
Home of Army MARS — Fort Huachuca

On 13 May 2000, Amateur Radio operators and their military counterparts responded to the Armed Forces Day communications exercise which honors American military personnel both active and retired. It is the one activity in which we can all participate with pride. This year, the radio communications date was moved to one week earlier than in years past so as not to conflict with the Dayton Hamvention. The Secretary of Defense declared the entire week of 13 to 20 May to be Armed Forces Week. This year, too, was special in that it was the fiftieth year in which the Amateur community was invited and encouraged to participate. There was an earlier year of recognition, which was limited in scope. Thus, it depends upon the literature being read and its viewpoint whether you will read fifty or fifty-one as the anniversary of the activity. Either way, this is a special day for all of us with the blood running red, white, and blue in our veins.

It was my pleasure to visit the MARS station AAA9USC at Fort Huachuca. I am a genius at getting lost but with that forest of antennas, I knew where the station was. I have five acres where I live and that forest would fit just fine, but I did not get any offers to share them.

The three towers of 120, 80, and 60 feet make my 20-foot poles look really anemic. One looks up at the tops of those towers to see two large log periodic antennas and a massive beam antenna. Dipoles and folded dipoles and inverted vees and another with loops that I did not recognize were in profusion. The new Spira-Cone antenna looked to me like the arms of the nets that shrimp boats use. This new type of antenna was tested during the Western Area Guard Frequency Test and worked very well. This station is set up for emergency communications and traffic handling with stations all over the world.

The station, itself, looks small being dwarfed by the massive antenna farm that surrounds it. The stacks of Harris transceivers are in operation and several are dedicated to specific types of operation such as packet, Clover, pactor and other digital modes. Amplifiers are in use to guarantee the effective quality of operation no matter what the propagation might be. All those antennas feed into the station through a panel of con-



nnectors that resemble an old-fashioned telephone switchboard because of the number of antennas involved. There is nothing old fashioned about that panel and its use. Two voice mode transceivers are also set up for whatever voice contacts need to be made. This is why the station is often referred to as the Army MARS 911. It can be reached via all of the known and recognized communications modes on a 7-day-per-week, 24-hour-per-day (7/24) basis.

Dedicated and very knowledgeable individuals man the station. It was my pleasure to meet them and to interact with them as they proudly showed me their station.

The nerve center of the Army MARS program is located in another building on Fort Huachuca. Here I was able to meet all of the Army MARS directorate and the Army Lt. Colonel under whose aegis this most valuable program functions. Many of the MARS members were also able to meet him at the Daytona joint MARS meeting at which he spoke very enthusiastically about the value and the interaction of the Army and its fine Army MARS program.

In addition to serving the Army, Army MARS also has important roles to play with such agencies as FEMA.

The value of MARS service to FEMA was reflected in the remarks of the FEMA representative, Mr. Paul Reid, when he participated in the Chief's Command Net on 10 March 2000. His remarks reflected the widespread participation of MARS members in the FEMA National Emergency Coordination Nets that are tested quarterly.

"First of all, I would like to thank the Army MARS membership for their continuing support of the National Emer-

gency Coordination Net, or NECN as it is commonly known.

"As you know, the NECN is the command-and-control backup for the Federal Response Plan. The Federal Response Plan is the plan approved by the White House all Federal agencies follow when responding to a disaster.

"In order to ensure that the NECN is ready to support the Federal Response Plan, it is tested each quarter. The June exercise, scheduled to coincide with the start of hurricane season is open to check in by each Federal station desiring to participate. "The remaining three exercises limit MARS and Civil Air Patrol check-ins to net control stations. This is done to make it easier for the other Federal stations to check in as most perform this as an additional duty and must return to their other duties as soon as possible.

"During this past exercise, Army MARS had 538 stations participating, with 50 of those being direct check-ins.

During an actual emergency, the activation messages that the FEMA Communications Center sends out will contain instructions governing check-ins. Generally speaking, we are looking for check-ins from stations in the immediate affected areas, plus net control stations from adjoining states. We do not need lists of stations you have below the net control stations, but those stations may be needed to help distribute traffic. If the activation is for a hurricane in Florida, we do not need the net control station from California or other distant states to check in. During many emergencies, we will designate working frequencies and have the most critical stations move to those frequencies. These working frequencies are generally between 3 to 17 MHz.

"In conclusion, I want to again thank the Army MARS members for their hard work and dedication and ask for their continued support."

Mr. Reid can be assured that MARS will continue to support the FEMA efforts when an emergency or disaster occurs. By serving FEMA and other relief organizations, MARS members are also serving friends and neighbors.

Army MARS continues to serve... Proud, Professional, and Ready.

— Lorraine S. Matthew, N4ZCF,
MARS Call AAA9PR, can be reached by
email at: Lorimatt@aol.com.

18 dB is a minor difference?

In a recent column about dipole antennas Kurt explained that signals off the ends of a dipole at low angles will be 18 dB down from those off the dipole's side. But, he said, "Don't worry. Considering the fading that takes place on shortwave signals 18 dB makes a minor difference."

One reader complained that Kurt was losing his mind. How could he say such a thing?

Easy. If your signal is S9 and it drops to S6 (18 dB) the fellow at the other end will hear no difference. Why? The audio output of a good receiver (the one Kurt uses) drops 3 dB if the signal drops 60 dB. A little drop of 18 dB is not noticeable if signals are strong to start with. (And if there is no competition, he might add.)

The reader has a good point though, and we should look at the situation from his viewpoint. If your signal is weak to start with, if it drops 18 dB it may well vanish completely.

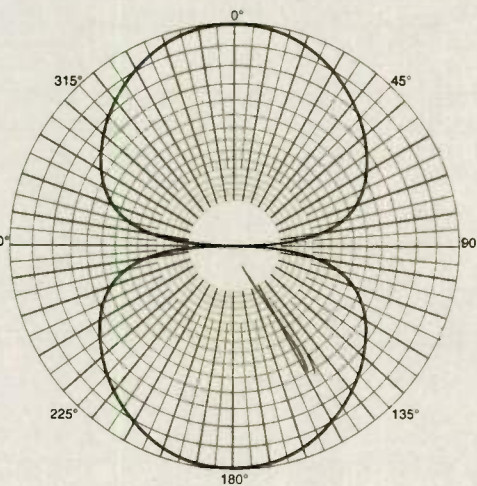
Also, if your signal is a good, clean S6 but the other station answering the CQ is S9 then he's the one who'll get the QSO. This is where the AGC works against you. When your signal is the only one, the AGC adjusts you to a comfortable audio volume. But when the S9 signal comes on it adjusts him to a comfortable level by dropping the receiver gain 18 dB. This drops you down. Anyone who works contests knows that a big signal makes it easier to get contacts.

Let Kurt put it this way: QRP works, but high power gets out better. You can work DX off the ends of your dipole but you'll do better off the sides.

Fabulous new antenna

Dave, KZ1O, brought Kurt's attention to a newly patented antenna that may revolutionize Amateur Radio. It is small in size, greatly reduces propagation losses and sends signals many times the speed of light.

The antenna is less than one foot in length and will work indoors without danger of RF exposure to those in the household because the power is transmitted into another dimension. The station at the other end must use the same type antenna. This will slow its penetration into the amateur scene but no more so than the startup of packet,



for example. You can't work a station on packet unless he also has a packet setup.

How it works

This antenna sounds too good to be true and it would be if it followed conventional propagation methods. But it doesn't do that.

The antenna has two powerful electromagnets set so their fields are in opposition. This produces a plane of strong magnetic force. This plane is heated by a halogen lamp at 10,000° Fahrenheit. Wrapped around the lamp are two accelerator coils, one at +2000 volts, the other at -2000 volts.

Right on the magnetic plane is the actual antenna, a quarterwave coil that pokes a small hole into another dimension (hyperspace). In this space the transmission can exceed the speed of light by many times.

The station at the other end also needs to produce an injection point to receive hyperspace signals.

The antenna is small enough to set on your operating table. It works fine indoors; no need to have any outside wires, cables, or towers. Also, if you have plants growing indoors they will flourish if you use the antenna regularly. The injection point "allows energy from another dimension to influence plant growth."

Does this antenna really work? That depends on whether or not the hyperspace it uses actually exists. Kurt knows all about hyperspace having been an avid

reader of Astounding Science Fiction for many years. Hyperspace solves the problem of space travel. The stars are so far away that a spaceship traveling at the speed of light would take much longer to get to one than the lifespan of the crew. In hyperspace the ship can get there almost instantly.

Radio signals also will travel fast enough to eliminate the delay we now have in satellite transmission and other problems caused by signal delay such as selective fading, ghosting of TV images, digital signal dropouts, etc.

For full details on this antenna see U.S. patent 6,025,810. You can get a copy for \$3. Go to the web site: www.uspto.gov.

Up a tree

When testing a new antenna Kurt needs an anchor point or two in the sky to hold it up. There are a number of tall trees handy. The problem is getting a line up over a high branch. He has a favorite small transformer as a weight which is tied to a long piece of string stretched out on the ground. Kurt heaves the transformer skyward hoping it will go over the branch thus pulling the string up.

There are several problems with this approach. Sometimes the string gets caught briefly on a weed. This causes the transformer to miss its target. Also Kurt's throwing arm is not that accurate. This leads to string wrapped around branches and other unwanted results. If you've seen Charlie Brown try to fly a kite you get the flavor of the enterprise.

Lil objects to the language sometimes heard during these projects so when Kurt's birthday came around she bought him a commercial device made for the purpose. It is a plastic holder fitted with a slingshot and a fishing reel. A sinker as used by fishermen, painted bright yellow, is on the end of the fishline. The slingshot shoots it over the tree, it pulls the line over the tree and there you are, all set to pull up the antenna.

If you haven't used a slingshot before, it takes a little getting used to. But this handy gadget works just great. You can go as high as 100 feet if needed. You'll find the device advertised in all the better radio magazines, — *Worldradio*, for example. Or see it on the Internet at www.ezhang.com.

Contest Chart

Dave Goodwin, VE2ZP/VE9CB

Contest	Date & Time	Bands	QSO points	Multipilers	Exchange	Entry Categories	Entries
IARU Region 1 50MHz	1400Z 3 Jun 1400Z 4 Jun	6M CW & 'phone	1pt/km (to convert degrees to km, mult by 112.2)	None	RST Ser# Grid locator	Single op using own equipment, All others	7 weeks OZ1EYN
Telephone Area Codes Contest	1800Z 3 Jun 2359Z 3 Jun	80-10M CW	5pt/QSO 10pt/QSO with Pennsylvania stns 500pt/QSO with N3EPA	Telephone area codes *	RST Name State, telephone area code	QRP (5w), QRPp (1w), portable, homebrew, "newbie" (your first- ever contest) or any combination of these	8 Jul N3EPA or e-mail to n3epa@alou.net
Portugal Day Contest	0000Z 10 Jun 2400Z 10 Jun	80-10M SSB	6pt/CT, CU 3pt/others 0pt/own country	Portuguese districts and DXCC countries worked on each band	RST Ser# CT, CU will send name of District or region	Single Op All Bands only	31 July PO Box 2483 1112 Lisboa PORTUGAL
Australian QRP Day	0700Z 10 Jun 1200Z 10 Jun	160-10M CW	3pt/P2, VK, ZL 1pt/others	None	RST Ser#	Single Operator Only	10 July VK4EV
TOEC Field Contest SSB (Sweden)	1200Z 10 Jun 1200Z 11 Jun	160-10M SSB	1pt/NA 3pt/DX 3pt/any mobile	Total of Maidenhead "Field" locators. The first two letters of your grid square are your "Field".	RST + Grid square (ie. FN25)	Single Op: All band, Multi-op: Single or multi-tx Single op entrants may not use use PacketCluster	1mo. Box 2063, S-831 02 Ostersund Sweden
WW South America CW (Brazil)	1200Z 10 Jun 1800Z 11 Jun	80-10M CW	0pt/VE 2pt/NA 4pt/DX 8pt/South Am.	DXCC + South Am. prefixes on each band Final score is the sum of band- by-band scores	RST Ser#	Single Op: All bands, Single band, QRP Multi-op: Single or multi-tx	30 days Box 282 RioDeJan 20001-970 Brazil
ARRL VHF QSO Party	1800Z 10 Jun 0300Z 12 Jun	50MHz to microwaves	1pt/50 or 144MHz QSO 2pt/220 or 432MHz QSO 3pt/903 or 1296MHz QSO 4pt/above 2304MHz NOTE: do not use 146.52 or any repeaters	Grid squares worked on each band	Grid Square	Single Operator: Multi-band, single band, QRP portable (max 10w out) Rover (single or multi-op, operating from at least 2 grids) Multi-op Limited Multi-op (max four bands)	30 days ARRL or e-mail to JuneVHF@arrl.org
West Virginia QSO Party	1800Z 11 Jun 2400Z 11 Jun	160-10M CW & SSB	1pt/SSB QSO 2pt/CW QSO 25pt for your first QSO with WVARC club station W8WVA	Stns outside WV: WV counties (55) regardless of band WV stns: WV counties, US States, Canadian Provinces and territories, DXCC ragardless of band.	RST QTH	None indicated	15 July WA8WV or email WA8WV@aol.com
All Asia CW (Japan)	0000Z 17 Jun 2359Z 18 Jun	160-10M CW	1pt/20-10m QSO 2pt/80m QSO 3pt/160m QSO Work Asia only	Asian prefixes worked on each band	RST Age (YLs may send 00)	Single op: All bands, Single band Multi-op: Single or Multi-tx	30 July Box 377 Tokyo
SMIRK (6m) QSO Party	0000Z 17 Jun 2359Z 18 Jun	50MHz	2pt/SMIRK member 1pt/others x2 if QSO made above 50.2MHz	Grid squares	Grid SMIRK # (if you have one)	Single operator only	1 Aug W5OZ1 or email contest@smirk.org
ARRL Field Day	1800Z 24 Jun 2100Z 25 Jun	160M to microwaves				Scoring is complicated. See QST for details.	
RAC Canada Day	0000Z 1 Jul 2359Z 1 Jul	160-2M CW & 'phone	10pt/VE 20pt/RAC stns. 2pt/DX	Can. Provinces and Territories (12) worked on each mode on each band.	RST Prov DX and VEO send Ser#	Single Op: All bands, Low Power, Single band Multi-op	31 July 720 Belfast Rd Suite 217 Ottawa ON K1G 0Z5
Venezuela SSB	0000Z 1 Jul 2359Z 2 Jul	160-10M SSB	5pt/DX 3pt/NA 1pt/Own country	VV call areas + DXCC worked on each band	RS Ser#	Single Op: All bands, Single band Multi-op: Single or Multi-tx	30 Sep Box 2285 Caracas 1010-A
Fourth of July QRP Sprint (Michigan QRP Club)	2300Z 4 Jul 0300Z 5 Jul	160-6M CW and SSB	5pt/MI QRP Club Mbr 4pt/DX 2pt/VE or W non- member	US States, Canadian Provinces and Territories, DXCC worked on each band If either your TX or RX were home-made, multiply your score by 1.25. If both were home-brew, multiply by 1.5	RST QTH and MI QRP Club #	A- 0-250mw output B- 250mw-1w output C- 1w to 5w output D- 5w or more output	30 days NBCQA
IARU HF Championship	1200Z 8 Jul 1200Z 9 Jul	160-10M CW & SSB	1pt/ur Zone 3pt/oth NA Zones 5pt/DX	ITU Zones (75) worked on each band + HQ stations	RST ITU Zone	Single Op: All bands, both or one mode, Single band, Low power, QRP	1mo. ARRL or e-mail to Fieldday@arrl.org
CQ WW VHF	1800Z 8 Jul 2100Z 9 Jul	50MHz to microwaves	1pt/50, 144MHz 2pt/220, 432MHz 4pt/902, 1296MHz 6pt/2304MHz + +1pt/CW QSO	Grid squares worked on each band	Grid square	Single Op: fixed, portable, QRP (max. 25w) Rover Multi-op fixed more than 5 transmitters Multi-op fixed four or fewer transmitters Multi-op portable more than 5 transmitters Multi-op portable four or fewer transmitters	31 Aug Box 73 Oklahoma City OK 73101 USA
South-East Asia Net CW	0000Z 15 Jul 2359Z 16 Jul	160-10M CW	1pt/QSO Work SEANET countries only	3 mult pts for SEANET countries: A4 A5 A6 A7 A9 AP BY BY DU EP HL HS JA JD1 JY KH2 P2 S7 VK VQ9 VS6 VU V8 XU XV XW XX9 YB ZK ZL ZM ZL6 ZL9 3B6/7 3B8 3B9 4S 4X 8Q7 9K 9M2 9M6/8 9N 9V		Single Op: All bands, Single band Multi-op, single tx	31 Oct 9M2FK Box 13 10700 Penang MALAYSIA
Colombian Independence Day	0000Z 16 Jul 2359Z 16 Jul	80-10M CW and SSB	5pt/HK 3pt/DX 1pt/NA 0pt/VE	HK Call areas + DXCC countries worked on each band	RST Ser#	Single Op: All bands, Single band Multi-op: Single or Multi-tx	31 Aug Box 584 Santafé de Bogota
South Pacific 160M	0700Z 15 Jul 2330Z 15 Jul	160M CW & SSB	5pt/QSO Work P2, VK, ZL and Pacific Islands only	P2, VK and ZL call areas, DXCC countries in the Pacific Ocean	RST Ser#	Single op SWL	6 weeks ZL1AS littenj@ voyager.co.nz

Addresses: CQ - 25 Newbridge Rd., Hicksville NY, 11801 USA
Bands: The 30, 17 and 12m bands are never used in any contest.

ARRL - 225 Main St. Newington CT, 06111 USA
Please confirm the dates of these events on the internet at

Callsign - Callbook Address

or <http://www.sk3bg.se/contest/>

Hamfests — June

CONNECTICUT

The Newington Amateur Radio League Fleamarket, will be held on 4 June, from 9 a.m. - 1 p.m., at the Newington High School(Newington, CT). Admission: \$5. Tables: \$15 advanced, \$20 at door. Set-up: 8 a.m. Ve exams & Tailgating available. Talk-in: 145.45(-). For more info: Tom Ponte, WB1CZX, 860/666-4539. E-mail: tmonte@aol.com.

ILLINOIS

Six Meter Club of Chicago Hamfest 11 June at DuPage County Fairgrounds, 2015 Manchester Rd. (north of Roosevelt Rd./Rte 38, east of County Farm Rd.), Wheaton, IL. Setup 7 a.m., open 8 a.m. Adm. \$5/adv., \$6/gate. Vendor tables \$15, indoor flea mkt sales \$12. VE exams (p/r). Limited overnight RV parking \$10, (registration required). TI: 146.52, 146.37(+). For info: Joseph Gutwein, WA9RIJ, 7109 Blackburn Ave. Downers Grove, IL 60516. Info phone: 708/442-4961 (24 hrs).

The Sangamon Valley Radio Club Hamfest will be on 3 June, starting at 6 a.m. at the Illinois State Fairgrounds(Springfield, IL). Admission: \$5. Tables: \$5. Door prizes, vendors, flea market, VE exams. Talk-in: 146.685(-). For more info: Ed Gaffney, KA9ETP, 13977 Frazee Rd., Box 14A, Divernon, IL 62530. Phone: 217/628-3697. E-mail: egaffney@family-net.net. Website: <http://www.w9dua.net>.

INDIANA

The Lake County ARC's Dad's Day Hamfest, will be on 18 June, starts at 8 a.m., at the Lake County Fairgrounds(Drown Point, IN) Admission: \$5. Tables: \$6(or \$3 w/your own table). Set-up: 6 a.m. VE testing, food and drinks available. Talk-in: 147.00, 146.52 & 442.075. For more info: James Harney, KF9EX, 2900 W. 61st Place, Mar- rillville, IN 46410. Phone: 219/980-1798. E-mail: kf9ex@arrl.net.

MAINE

The Pine State ARC Hermon Hamfest, on 3 June, at Hermon High School, Admission: \$4(under 12 free). Tables: \$8. Ve exams, tailgating, demos, an auction at 12:15 p.m., refreshments. Talk-in: 146.94, 146.52. For more info: Edward Richardson, K1DTW, 1205 Center Dr., Orrington, ME 04474, 207/825-4417. E-mail: edandglo@earthlink.net or k1dtw@arrl.net

MICHIGAN

Independent Repeater Association Ham-festival 03 June at Hudsonville Fairgrounds near Grand Rapids. Setup 02 June after 7 p.m. or after 6 a.m. 03 June. Open 8 a.m. Adm. \$5, tables \$8, trunk spaces \$6.

Overnight camping available — \$10. VE exams. "Roadkill Chili" potluck Friday evening. TI: 147.16. For info: Kathy 616/698-6627 (4 p.m. - 7 p.m. EST) or web site: www.iserv.net/~w8hvg.

The Chelsea ARC Ham & Antique Radio Swap, on 4 June, at the Chelsea Fairgrounds. Admission: \$4 advanced, \$5 at door.(YL's, XYL's & kids under 12 free) Tables: \$8. Trunk Sale: \$5. Talk-in: 146.980. For more info send a SASE to: Don Wilke, WW8M, 4725 Sylvan Rd., Grass Lake, MI 49240. Phone: 734/475-2359. E-mail: wd8iel@hotmail.com.

The Monroe County Radio Communi- cations Association Hamfest, will be on 18 June. Location: 2 miles west of Monroe on M-50, at Raisinville Rd. Admission: \$6. Table: \$10. Set-up: Sat after 4 p.m. Overnight camping: \$15. For more info: Fred VanDaele, 4 Carl Dr. Monroe, MI 48162. E-mail: ka8ebi@arrl.net. Phone: 734/242-9487(call after 5 p.m.) Website: www.mcrca.org.

MISSOURI

The North Central Missouri Hamfest,

on 10 June, from 8 a.m. - Noon, at Macon Vo-Tech School. Admission: advanced \$2 or 3 for \$5, at door \$3 or 2 for \$5. Swap Tables: \$10, Tailgating: Free w/ Adm. Dealers/Vendors are welcome. VE exams, forums, prizes. Talk-in: 146.805(-). For more info: Dale Bagley, K0KY, P.O. Box 13, Macon, MO, 63552. Phone: 660/385-3629. E-mail: n0pr@arrl.net.

NEBRASKA

Hamboree 22 ARRL Midwest/Dakota Divisions & Iowa State QRP Convention will be on 2-3 June, from Noon - 9 p.m. Fri, 8 a.m. - 4:15 p.m. Sat., at the Marina Inn(South Sioux City, NE). Admission: \$6(for both days). Tables: \$10(general area) \$15(perimeter) free electricity. Friday Night Dinner/Entertainment: \$10. Saturday Night Banquet: \$15. Flea Market, Dealers, VE exams, forums, contests. Talk-in: 146.31/91. For more info: LeRoy Baldwin, w0ofy, 645 S. Mentzer Rd., Robins, IA 52328. Phone: 319/395-7183. E-mail: lgbw0ofy@aol.com.

NEW YORK

Long Island Hamfair/Electronics flea market 11 June at Briarcliffe College, 1055 Stewart Ave., Bethpage, NY. 8:30 a.m. - 1 p.m. Adm. \$6 (under 12 FREE) . Tailgate

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Hamfests

spaces \$15. All kinds of electronic equipment, ARRL info and 50/50 drawing. TI: 146.850(- 136.5). For info: 516/520-9311 (24 hrs) or web site: www.limarc.org.

The **Hall of Science ARC Hamfest** will be held on 4 June, starts, 9 a.m. at the New York Hall of Science (parking lot). Admission: \$5. Tables: \$10. Set-up: 7:30 a.m. Door prizes, food and refreshments, VE exams. Talk-in: 444.200 Repeat, PL 136.5, 146.52 Simplex. For more info: Stephen Greenbaum, WB2KDG 718/898-5599 (call nights only please) E-mail: wb2kdg@bigfoot.com.

Rochester ARA Hamfest, 02/03/04 June at Monroe County Fairgrounds (corner of East Henrietta Rd, RTE 15A and Calkins Road) Henrietta, NY. Adm \$7/adv. \$9 at the gate. VE exams (Amateur and commercial) banquet, commercial exhibitors. Forums — ARRL, ATV, VHF, NTS, Electronic troubleshooting, I-phone, MARS and Radio Coaches. Lots of prizes. TI: 146.88(-). Limited number of RV/Camper spaces with hookups available on site. Info: Rochester Hamfest, 300 White Spruce Blvd., Rochester, NY 14623-1606. Phone: 716/424-7184; fax: 716/424-7130. E-mail: info@rochesterhamfest.org, web site: www.rochesterhamfest.org.

NORTH CAROLINA

The **Forsyth ARC, Inc.** Winston-Salem Classic Hamfest, on 10 June, at Dixie Classic Fairgrounds (Winston-Salem, NC). Admission: \$5. Tables: \$10. Tailgating: \$3. RV

hookups: \$15. VE exams, Lunch available onsite. For more info: Winston-Salem Hamfest, P.O. Box 11361, Winston-Salem, NC 27116-1361. Phone: 336/723-7388. E-mail: W4NC@triad.rr.com.

PENNSYLVANIA

The **Columbia Montour ARC's** Bloomsburg Hamfest & Computer Show/ARRL EPA Section Convention will be held on 10 June, from 8 a.m. - 3 p.m., at the Bloomsburg Fairgrounds. Admission: \$5. Table: \$20. Tailgating: \$5. Mr. Riley Hollingsworth will be speaking. VE exams, forums & food available. Talk-in: 147.255+ PL 203.5 and 146.52 simplex. For more info: George, N3KYZ 570/784-2299. E-mail: n3kyz@epix.net.

TENNESSEE

The **Knoxville Hamfest and ARRL Delta Division Convention** on 11 June, from 9 a.m. - 4 p.m. at the National Guard Armory (3300 Sutherland Ave., Knoxville, TN). Admission: \$5 advanced, \$6 at door. VE exams, forums, clinics, demos, contest, prizes & exhibits. Talk-in: 147.300(+), 224.500(-), 444.575. For more info: Radio Amateur Club of Knoxville, P.O. Box 50514, Knoxville, TN 37950-0514. Website: <http://www.kornnet.org/rack>. E-mail: rack@kornnet.org.

VIRGINIA

Franklin Amateur Radio Repeater Association Picnic and Tailgate Hamfest 10 June at the Bronco Club (Rte 258 to Rte 687/Delaware Rd., 3 mi) 9 a.m. - 3 p.m. Lunch \$5. Bring your tailgate items, tall tales, fellowship, table and lawnchair. TI: 147.30(+). For info: Ralph Atkinson, WB4ANB, 30137 Country Club Rd., Courtland, VA 23837, phone: 757/562-5710.

The **Ole Virginia Hams ARC**, Manassas, VA Hamfest, on 4 June, starting 7 a.m., at the Prince William County Fairgrounds. Admission: \$5. Table: \$30. Tailgating: \$5. Set-up: 2 - 10 p.m. Prizes will be given. For more info: Jack McDermott, N4YIC@arrl.net. Phone: 703/335-9139. Fax: 703/330-7987. Website: <http://www.qsl.net/olevahams>

The **Franklin Amateur Radio Repeater Association Picnic & Tailgate**, on 17 June, from 9 a.m. - 3 p.m. at the Bronco Club. Tickets: \$5. Talk-in: 147.30/90. There will be prizes, tailgating, displays. For more info: Ralph Atkinson, WB4ZNB, 30137 Country Club Rd., Courtland, VA 23837, Phone: 757/562-5710.

W5YI-VEC rebuilding Puerto Rico program

Fred Maia, W5YI, said the W5YI-VEC is starting afresh in Puerto Rico with its Amateur Radio examination program. Maia says he decertified all but one of his program's seven Volunteer Examiner teams there after meeting with some of his VEs last weekend.

"I made a trip to Puerto Rico for a team leader meeting," Maia said Tuesday, adding that he met with about 30 of the more than 100 W5YI-VEC VEs on the Island. "What we ended up doing was telling all seven teams that we were going to start over fresh."

Maia cited a lack of confidence in the integrity of his Amateur Radio testing program in Puerto Rico for his decision to decertify the majority of the W5YI-VEC volunteers there.

For now, the Arecibo Observatory Amateur Radio Club, KP4AO, under the leadership of Bill Genter, KP3O, will be the only W5YI-VEC accredited VE team in Puerto Rico. Maia said the approximately half-dozen accredited VEs associated with the Arecibo club will represent the W5YI-VEC in Puerto Rico. All other VE teams are "null and

void," he said.

Maia said his plan calls for the Arecibo club to approve any VEs in Puerto Rico, announce and coordinate all testing sessions, and receive the paperwork for all testing sessions. In addition, he said, Arecibo VEs will audit test sessions.

"I have the utmost confidence in" the Arecibo Observatory team, he said. He estimated that the W5YI-VEC serves upwards of 100 amateur applicants a year in Puerto Rico.

Genter has invited all ARRL members in Puerto Rico to cooperate in helping the W5YI-VEC to re-establish its Amateur Radio testing program in Puerto Rico.

Maia said he has responded to all FCC inquiries into alleged W5YI-VEC examination irregularities in South Carolina as well in Puerto Rico and the Virgin Islands. While in Puerto Rico, Maia said he also met with ARRL Section Manager Victor Madera, KP4PQ, to brief him on the situation.

For more information, contact Fred Maia, W5YI, at fmaia@texas.net, or Bill Genter, KP3O, at wgenter@asem.net. — *ARRL Letter*

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Information in "New Products" is supplied by the manufacturers to acquaint *Worldradio* readers with new products on the market.

New 30-meter antennas

Cal-Av Labs, Inc. has released its newest antennas, designed specifically for the 30-meter WARC band.

The 2D-30 is a full-size, 2-element driven array on a 12-foot boom for 30 Meters. This antenna is comparable to a 2-element Yagi in gain, and to a 3-element Yagi in front to back ratio. It incorporates an innovative integral-balun feed. No-ice wind survival: 100 mph; Gain 4.5 dBd; front-to-rear 20 dB min. Weight is 54 lbs.; projected area 8.3 sq. ft.; turn radius 25.3 ft. Amateur net \$895. Shipped factory direct FOB Tucson, AZ.

The DIP-30A is a full-size rotatable dipole for 30 Meters. No-ice wind survival: 100 mph. Weight 20.5 lbs., projected area 4.63 sq. ft., turning radius 25.3 ft. Amateur net \$295 Shipped factory direct, FOB Tucson, AZ. Both antennas are available from Cal-Av Labs, Inc, 1802 West Grant Road, Suite 116, Tucson, AZ 85745. E-mail info@cal-av.com. Telephone: 520/624-1300, fax: 520/291-9394. These antennas are also available at any Ham Radio Outlet location.

Finger Tappers™ Keys

Morse express now has a new single lever paddle and straight key made by Jim Richards, KD6VDH.

The straight key is a medium sized key machined from solid brass stock and mounted on a polished hardwood base

with a rubber pad underneath. Connections are made by screw terminals at the back of the key, with the internal wiring concealed in the base. The base measures approximately 2 X 3-1/4 inches, and the weight is 14 ounces — quite heavy for a device of this size. The know is very unusual, with a brass cap and wooden base, and is surprisingly comfortable during extended sending sessions. The trunnion is mounted in full race bearings with adjusting screws.

A close companion to the straight key, the Finger Tappers™ single lever paddle is a classic machined-brass-on-wood design, and a lot of fun to use. Similar in style and materials to the straight key, it has the same base dimensions and weight. Contact spacing can be precisely adjusted for a very light touch, and it can easily be configured as a "cootie key." There are very few single lever paddles made today, and this one is excellent value for the money.

The Finger Tappers™ straight key and paddle are reasonably priced at \$99.95 each. They're available from Morse Express, by calling 800/238-8205 or 303/752-3382 or by visiting their secure web site at: www.MorseX.com.

Screwdriver antenna memory

KO6YD designs is proud to announce its latest product — the Screwdriver Antenna Memory or SAM. The SAM is an enhancement to the class of mobile

antennas know as a "screwdriver." It replaces your current control method, usually an Up/Down switch, with a new control unit that adds a 16 memory tuning feature to the antenna.

Until now, tuning your antenna has been done manually by holding a motor switch while watching the antenna. Many users put a strip of tape or use some other method to mark the "general" location for each band. The SAM will replace these visual markers with an electronic one. This provides mounting options that do not require direct sight of the antenna which makes the SAM ideal for RVs or base stations.

A VFO style tuning knob is used to select memory presets and 'fine tune' the antenna. With the memory feature of the SAM, you can memorize the location of the antenna to one of 16 memories and recall it on command. When you recall a memory, the antenna will return to the previously memorized location. The Jog feature is used to setup the initial memory locations as well as to fine tune the antenna. Using the tuning knob in Jog mode moves the antenna coil in very small increments and makes tuning the antenna as easy as using your radio's VFO knob.

The SAM retails for \$149.95 fully assembled and works with most all screwdriver antennas. For more information contact us at: www.ko6yd.com, e-mail info@ko6yd.com, or write to KO6YD Designs, P.O. Box 1090, Elverta, CA 95626. Telephone: 888/83-KO6YD.

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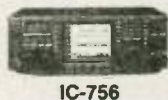
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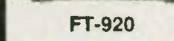
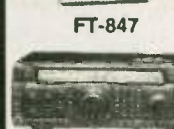


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Grundig sought the opinions of shortwave listeners and serious radio enthusiasts for what they wanted in the ultimate Grundig shortwave radio. "The answers came back loud and clear", said E.A. Hozour, President of Lectronix, the exclusive North American Distributor of Grundig products. "For instance, the analog-type tuning knob allows you to scan any band with no audible muting so you can hear everything that's out there. You are in control, not the microprocessor. Turn the knob and you feel you are tuning the world", he said.

The Satellit 800 Millennium features automatic gain control (ACG) in fast

and slow, to help keep volume at a constant level. Synchronous detection of AM/Shortwave signals works automatically to help eliminate distortion due to fading signals, and to minimize adjacent frequency interference.

In addition to continuous tuning of the AM and shortwave bands from 100 kHz to 30 MHz, the Satellit 800 Millennium tunes the VHF aircraft band (118-137 MHz) and FM from 87-108 MHz. FM stereo is enjoyed with the included headphones.

The Satellit can operate using six "D" cell batteries, any 9-volt power source or the multi-voltage AC adaptor supplied with the radio.

The radio is 20 and 1/2" wide, 9 and 1/2" high and 8" deep. It weighs 14 pounds.

The Grundig Satellit 800 Millennium radio is available in limited quantities and comes with a one-year warranty. Suggested retail price is \$699.95 (\$895.95 Canadian) from Lectronix, Inc., 3520 Haven Ave. Unit L, Redwood City, CA 94063-4605. Telephone 800/872-2228 (Canada 800/637-1648).

Gliderport will warn pilots

The operators of a Southern California Gliderport will cooperate with the FCC in a crackdown on unlicensed pilots who use Amateur Radio frequencies to communicate. With the operators of the Torey Pines Glider Port cooperating with the FCC, it should minimize, if not eliminate, the problem in this particular geographic area. — FCC, Newswire

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VE Exams

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.

p/r pref=pre-register preferred but w/i OK
p/r=pre-register only—no w/i

w/i=walk-in only
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6/12/00	Montgomery	Steve, K4NM 334/271-9603	w/i	6/04/00	Yonkers	Emily, AC2V 914/237-5589	w/i
Arizona				6/10/00	Old Westbury	Al, W2QZ 516/623-6449	w/i
6/10/00	Tucson	Joe, K7OPX 520/886-7217	w/i only	North Carolina			
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New York PRB-1 effort gets companion Senate bill

A companion PRB-1 bill, S.7324, has been introduced in the New York State Senate by Senator Dale M. Volker of Buffalo. The Senate measure mirrors the assembly bill. A.9947, submitted earlier. ARRL Hudson Director Frank Fallon, N2FF, urges amateurs to write their state senators and assembly representatives in support of A.9947 and S.7324. Proponents are hoping for a hearing in the Local Government Committee. A directory of senators and representatives is available at www.assembly.state.ny.us and www.senate.state.ny.us. Sample letters and links to the state legislators are also accessible at www.arrrludson.org. — N2FF, *The Hudson Loop*, ARRL Letter

Rhode Island PRB-1 bill in committee

The Rhode Island PRB-1 bill, S-2304, has been moved to the General Assembly's Corporation Committee. Hank Grilk, WA2CCN, of Lincoln, is urging Ocean State amateurs to write their state senators and representatives urging support for the measure. The bill's sponsor, Sen Jonathan F. Oster, is stressing Amateur Radio's history of emergency

communications. The bill, as submitted, has a minimum 50-foot tower height. Grilk is attempting to muster support for a 75-foot minimum. Rhode Island amateurs may contact Grilk at: hgrilk@worldnet.att.net or write him at 1 West Butterfly Way, Lincoln, RI 02865. — ARRL Letter

Technician numbers continue to grow

The number of code-free Technician Class amateurs being license holders continues to grow. Based on a comparison census from April of 1998, the number of No Code Technicians has increased by another 21,000.

All other license classes, except the Extra, are on a rather rapid decline with many amateurs just not bothering to renew their licenses.

There are 34,323 amateurs in the FCC database whose licenses have expired within the past two years. Their grace period has just about run out and there is no sign of interest in any of them renewing. In the simplest terms, when these licenses get deleted from the FCC records, 5% of the currently licensed Hams will be gone. Put another way, as we enter the time of a restructured United States Amateur Radio service, we are already 5% behind. — W5YI Report, *Newline*

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Rick McCusker, WF6O

Amateur Radio's annual get-away-from-it-all event is rapidly approaching. It's just about time for Field Day!

This annual event has taken on all the aspects of a full-blown contest, but it's not a contest at all. This is the chance to get out, away from that comfortable recliner at the home shack, and swat some insects, eat lousy food, tell whoppers and stay up for 24 hours. Not only that, it's your chance to see if your friend's brand new HF rig can really take a key-down tuning cycle of one hour.

There are lots of other activities, too. You can see how many forget where the guy wires are and trip over them in the dark. You could start a pool and see who is the first one of your group to suffer an injury (non-bleeding injuries don't count). You can wait until the last possible split second to jump in the car and run down the road to the gas station, only to find they changed their hours and the bathroom is locked.

But seriously, now is the time to take to review your plans and set aside at least two critical items the club is depending on. Of course, one of the kids will move them,

and you'll spend several frantic hours locating them. Doesn't really matter, though. You will forget SOMETHING and have to make the trip home to get it. And this will be the year the club decided to REALLY get out in the field, and you are at least three hours from home. (Extra points are awarded by your club if you can't find your car keys.)

Here's a helpful hint for those of you who will really be out in the field along with all the critters. Get a box of those sheets you throw in your dryer to make your clothes all nice and soft. Put a sheet in your shirt pocket, and another one in your waist band. Turns out mosquitoes don't care for the smell and will look elsewhere for a meal. But don't tell the operator on the CW station about this. It's fun to watch a CW operator send with one hand and swat bugs with the other (make sure you put the lantern REAL close to this position — most CW operators have poor vision and need all the help they can get). You should also make sure that there is adequate light for the voice operators. (It's fun to watch them swallow bugs.)

As a public service to our readers, here are a few things you may want to bring: Tent/camper/RV, 100 ft. of coax with

connectors, rain gear dipole or beam, jacket, mast or tower, sleeping bag, nylon guys, coffee mug (BIG one), guy anchors, clothing, generator, transceiver, fuel for 36 hours, speaker, oil for generator, headphones, power distribution system, CW key or keyer, 3-wire AC extension cords, microphone, fire extinguishers, coax jumpers, grounding rods, IC cables tools, battery operated clock, desk lamp or lantern (bug attractor), fuses/tubes, Volt/Ohm meter, antenna tuner, Watt/SWR meter, antenna analyzer, FCC license, food, water, pencils/pens, coffee/soft drinks, paper Field Day logs/dupe sheets (for the computer challenged), first aid kit, insect repellent (won't work, anyway), tables/chairs, soldering gun (leave solder at home), knife (sharp one), plastic forks/knives/spoons, paper plates cups, rubber bands, sunblock lotion, a really good first aid kit, health insurance card, insurance forms, phone number for nearest "Life Flight" provider, camera (send photos to *Worldradio!*) and any other equipment that may be unique to your location.

Make sure you listen for the WR6WR call sign. We will be on the air — possibly from a top secret location. We hope to work you on the bands!



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