



NEWSFRONT

Worldradio

Some information has been supplied to *Worldradio*
Newsfront courtesy of *Newsline*.

France simplifies reciprocal permit

France no longer requires a temporary operating permit for visits of up to 90 days on French soil, and there is no longer any charge. Formerly, applicants had to pay a fee of 100-francs (around \$18) and wait a few weeks for a license. Now, no special notification is necessary. The only "catch" is that operators are supposed to identify using both the required French prefix as well as a /P suffix (eg, FP/W1AW/P), making for a cumbersome call sign! — *Gerard Valadier, N2BFL, ARRL Letter*

Amateur may challenge FCC charges

A Florida amateur who was recently fined by the FCC now has an attorney and the lawyer seems to be getting ready to take on the local police force and FCC. He also does not seem to like the way the press is reporting on his client.

The attorney for Palm Beach amateur Jeffrey Guss, KF4MWT, questions the validity of the charges against his client. In a letter to the *CGC Communicator* newsletter, and posted to the CGC web site, lawyer John J. McVeigh of Columbia, Maryland, cites what he calls troubling aspects in the case against Guss.

Guss was fined \$2500 by the FCC for malicious interference to a business radio frequency. McVeigh says one of the police officers who took a major role in directing enforcement action against Guss was apparently upset because of interference caused to the officer's own home electronics.

McVeigh says he's not accusing the FCC of acting in bad faith, but he says

he fears the Commission is mistaken about the case. McVeigh suggests that "some third party has created circumstances which would lead the FCC to think that Mr Guss is their man."

As previously reported, Guss was accused after the Commission's Tampa office responded to complaints about foul language and unauthorized transmissions. Agents tracked those transmissions to Guss' home. That was one of two incidents that brought the FCC to Guss. The second incident, which occurred later that year, involved malicious interference to an amateur repeater used by a volunteer police force.

Investigators tracked those signals to a mobile station. When they closed in on the truck they say signals were coming from, they spotted Guss riding in the rear bed. McVeigh's letter makes no comment about the specific incidents investigators say point to Jeffrey Guss as the source of the offending transmissions.

What action he plans on behalf of KF4MWT has not yet been revealed by attorney McVeigh. — *CGC Communicator, Newsline*

FCC shift in Amateur Radio enforcement

The Federal Communications Commission announced a change in the handling of enforcement actions concerning the Amateur Radio Service. As of 01 September, the Compliance and Information bureau is assuming the duties of policing the activities of the nation's 750,000 plus Amateurs. Up until now, Amateur Radio rules enforcement has been the purview of the Wireless Telecommunications Bureau and its predecessors.

The change is the result of internal arrangement between the Compli-

ance and Information Bureau and the Wireless Telecommunications Bureau. All investigation, evaluation and processing of Amateur Radio related enforcement matters has been transferred to the CIB.

What this means in the real world of enforcing the Part 97 rules is unclear. Officially, the FCC seems to view the move as nothing more than an internal bookkeeping shift. But some insight as to what it really might mean may be found in the words of the FCC's Joe Monie. Speaking at an FCC Forum at the Radio Expo in Chicago. Monie said the Wireless Telecommunications Bureau will no longer handle complaints of interference. He says this will make the Compliance And Information Bureau responsible for that function.

Monie also seemed to have a warning for rules violators. He said to look for stepped up enforcement to the best of the bureau's ability based on the resources and funding available. — *FCC, Newsline, RAIN*

Spectrum protection bill treading water

It appears certain action on HR 3572, better known as the Amateur Radio Spectrum Protection Act of 1998, will be postponed at least until next year, when a new Congress will be in place. Even so, the ARRL and League members have continued to press for consideration of the measure during the current session. The bill has 74 co-sponsors.

New additions to the list of cosponsors for HR 3572 include Representatives Neil Abercrombie of Hawaii, Carolyn Kilpatrick of Michigan, Carolyn McCarthy of New York, Sam Farr of California, Owen Pickett of Virginia, Charles Stenhold and Gene

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Green of Texas, and Rod Blagojevich of Illinois. — *Steve Mansfield, N1MZA, ARRL Letter*

W6AQ honored for LAPD TV show

An Amateur Radio operator has been honored for a television program he produces that depicts the day to day experiences of members of the Los Angeles Police Department. The National Association of Chiefs of Police has honored the Los Angeles Police Department along with the hit television program "LAPD: Life on the Beat." This show is produced by Dave Bell, W6AQ.

Actor John Phillip Law, who is chairman of the group's "Michael the Archangel Award Advisory Committee," presented the award to Dave Bell to honor the series. Also named was Los Angeles Police Department Deputy Chief David Gascon, who played a major part in the development of the show.

The presentation was made 22 September during the Police Commission meeting.

The series, now in its fourth year, presents the difficulties and stresses officers face each day, without overdramatization. It was selected for the honor by a poll of the National Association of Chiefs of Police governing board. — *Newsline*

New SARL Morse code policy

South Africa is the latest nation to join the call to give more Hams access to the high frequency bands by revising international law and their own national regulations regarding the Morse code requirement.

Leading the challenge is the South Africa Radio League (SARL). Graham Kemp, VK4BB, reported that at the council meeting held 03 October 1998, the SARL Council unanimously agreed on a new initiative to make the HF bands more accessible to Amateurs by addressing the Morse Code requirement for the Amateur Service, and by encouraging schoolchildren to become Amateurs through a new license.

SARL President Chris Turner, ZS6GM, says the major factor presently impeding access to the HF bands is the 12wpm Morse Code requirement. It is the opinion of the SARL that even though the IARU supports the continuation of regulation S25.5, there exists no good argument in favor of retaining Morse Code

as the only qualifier for Amateurs to have unrestricted access to the HF bands. In line with the views expressed by the majority of the League's members, the SARL will support initiatives of a number of other IARU member societies such as the RSGB in overhauling the qualifications for an unrestricted Amateur license. Morse Code remains one of the most important forms of Amateur communications, particularly under emergency and/or weak signal conditions. It should therefore be afforded protection in terms of continued exclusive frequency allocations.

The SARL believes the first step in the overhauling process should be the immediate reduction in the Morse Code speed requirement from the present 12 wpm to 5 wpm, which still permits compliance with ITU radio regulation S25.5.

Because the CEPT 1 license requires a proficiency in Morse at 12wpm, Amateurs wishing to avail themselves of the CEPT arrangement will need to pass a 12wpm Morse test. The League intends to request SATRA, the South African radio regulator, to change the radio regulations to introduce a new interim class of unrestricted HF license, based on a 5wpm qualification.

The Amateur Radio Service has an extremely important role to play in the education of engineers and technologists in the field of telecommunications. It is therefore vital that the Amateur service attracts young people. To this end, the League, after consultation with its members,

the regulatory authorities and educationalists is in the process of developing a practical "hands on" student amateur license, with a minimal 5wpm Morse Code exam, which is aimed at schools and school-going young people. In order to encourage ongoing development, the League will request SATRA to modify the regulations to permit student licensees full access to all HF bands but with limited RF power output.

The South Africa Radio League says that a draft of the proposed new Student license will be made available for comment within the next few weeks. — *SARL, Q-News, Newsline*

WORLD RADIO

December 1998 Year 28, Issue 6

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A sampling of the QSL cards from stations contacting WR6WR, the Worldradio club station.

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Worldradio

December 1998 Year 28, Issue 6

TM

Published monthly by
Worldradio, Inc., 2120 28th St., Sacramento, CA
95818 USA; 916/457-3655.

Subscription Department: **Worldradio**, 1901
Royal Oaks Dr., Ste 190, Sacramento, CA 95815;
800/366-9192.

Periodicals postage paid at Sacramento, CA & ad-
ditional offices.

POSTMASTER: Send address changes to
Worldradio, Inc., P.O. Box 189490, Sacramento, CA
95818 USA.

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Worldradio Club call: WR6WR

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STAFF: Publisher — Armond Noble, N6WR

Associate Publisher — Glen Rudesill, KF6OBS

Editor — Rick McCusker, KO6DJ

Associate Editor — Norm Brooks, K6FO

Advertising Director — Helen Noble

Advertising Manager — Brenda Evans

Graphics Director/Advertising — Dianne Dunning

Graphics/Layout/Web — Ashley Guy, KF6SXE

Circulation Manager — Marcia Watson

Proofreader/comma placement — Krystle Perigan

Publisher's Microphone

Searchlights paint the sky, the
white limos arrive, hundreds of
photographers' flashbulbs illu-
minate the glitterati. It's Academy
Awards night!

In an event unparalleled in Acad-
emy history, one person has been
nominated for: Best Screenplay, Best
Cinematography, Best Director, Best
Actor, as well as Best Picture. And,
to add to the momentous nature of the
nominations all were unanimous,
there were no other nominees!

As the winner reaches the podium
to accept his five awards, he says: "I
already have one Oscar from three
years ago, so, could I have a **World-
radio** Lifetime Subscription instead,
please?"

The latest to become **Worldradio**
SuperBoosters (Lifetime Subscrib-
ers) are:

- **Curtis Finkelstein, N2WWM**
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- **Brian Kirby, KD4FMN**
Lacey's Spring, AL
- **Jim Keesler, K8EFX**
Kalamazoo, MI
- **Arthur York, WA5FTJ**
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- **Vincent Chinn, W6EE**
San Francisco, CA
- **Mike Phillips, WB6RHW**
Winston, OR
- **David Charter, W1YRM**
Piti, GU

The cinema genius mentioned
above wishes to share with you the
opening scene of his upcoming film.

DAY: EXTERIOR

The magical Genie (Ben Kingsley)
says to two men:

"I can offer you the most extraordi-
nary activity. You may speak with oth-
ers from every continent. You will find
this endeavor to be exciting, educa-
tional, fulfilling and you will make
great friends. You must fulfill just one
small requirement, and that is, learn-
ing the Morse Code."

First Man (Harrison Ford) stand-
ing ramrod tall and with a steely glare
says: "Give me the pencil!"

Second Man (Myron G. Krebbs)
pulls on his hair and says: "Do I gotta,
do I gotta?"

There are those who have written
regarding our defense of a rigorous
CW examination as a prerequisite for
licensing and said we were stuck in
the past.

I kind of liked the past. High school
graduates could read their diplomas,
people didn't make obscene gestures
to each other in traffic, there were TV
shows worth watching and the radio
stations played music.

In the past the history books in
schools played up achievement. Tho-
mas Edison, the Wright Brothers,
explorers, scientists and others had
their proper and earned place in the
studies. Try to find Madam Curie in
a high school history textbook today.

This seems to be the "anti-hero" era.
We don't want children's psyches to
be damaged so we have baseball
games in which they don't keep score.
(Not great preparation for the rigors

of real life.)

I've read (in this very magazine)
that there are those who "hated CW."
Why do they "hate" it? Is it because it
is a requirement? Is it because it is
slightly difficult to master?

That may be its very great virtue.
The question is: Does someone have
the desire to be an Amateur Radio
Operator so strongly (and reap all of
its many rewards) that they will ex-
ert effort? If the answer is "no," it
hasn't been much of a loss. Let's not
cheapen Amateur Radio just to gain
those who don't/won't value it highly.

From certain quarters we hear that
we need a greater number of ama-
teurs. We never hear how many more
we need.

The reasoning is that if we make it
much easier, there will be mass en-
rollment in Amateur Radio.

There is also a way to bring an end
to bank robberies. Pass out money
upon pleasant request.

Granted, CW is not easy. Nothing
good is easy. Nothing worthwhile
comes without effort.

But, that is what set the Amateur
Radio Operator apart from others.
He/She took the difficult path. No
whining. The goal was attacked with
vigor and fervor.

One League official wrote how the
amateur is being left behind techni-
cally. No, among those employed in
electronics there are Hams at the top
who have made serious contributions
to the defense of our country. (I won't
name them so the KGB doesn't search
them out.) I will tell you that they will
be operating in the DX contests.

You'll find them in the lower 25 kHz
of the band. — Armond



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[†]Smallest HT as of Jan. 1998

How to organize and run communications for a public service event

FRANK J. PIPER, K18GW

It's no secret that emergency and public service communications are the main reasons Amateur Radio exists. From natural disasters to a community event, Amateur Radio can play an important role in logistics and public safety.

It's also common sense to the Amateur Radio operator that before going to work a public service event, one needs to go through a checklist of equipment: Are the batteries charged? Do I have the proper antenna? Where is that speaker mic anyway? Do I need a headset?

But, before we go headfirst into an event, do we have a PLAN? I often picture a group of amateur operators riding over the horizon, with HT's strapped to their belts like six-shooters, marching up to the people in charge, and saying "Howdy, hear ya need some communicators, where do ya want us?" Then watch the group fiddle for about 20 minutes figuring who is going where, if they need to use a repeater, and then finding out not everyone can operate on the same band. Lack of planning makes us look ill prepared, and this non-preparedness shows.

Our ARES group has worked a total of seventy-six (76) public service events and drills in the last year, along with assisting the Red Cross with emergency communications during the flooding of Southern Ohio in the spring of '97. Some of the events covered by us were the Tour of the Scioto River Valley bike tour (TOSRV), the Columbus Marathon, and the 1997 Port Columbus Airport Disaster Drill. With this typical schedule each year, one can see why we make planning just as important

as charged HT battery packs!

We have developed a set of guidelines that can be used on any public service event, from a 5K Run to a two-day bike tour, to a full-blown marathon. We would like to share these with the rest of the amateur community:

Assign a coordinator

Our group worked 76 events last year. We did not punish one person with the burden of organizing everything. Try to find someone who is familiar with the event being worked (i.e. if it is a bike tour, see if someone in your group is active in cycling. This will make their assignment interesting.). The coordinator will be the "face" person for your group, and will meet and work directly with the director of the event.

Meet the organizers and get details

Confirm day, time, and location. Remember that some directors may have never worked with Amateur Radio before. Give them a through explanation of what Amateur Radio is, and how we can help them. Focus on logistic support, and participant safety. Obtain a map or layout of the event, and ask the director what areas would they like to have communication coverage. Will there be medical coverage? What type of reports do the organizers want during the event? If it's a race, they may want numbers of the leaders, or the times as they pass a mile mark. Will you need to provide an "open mic" so mile timers can get synchronized starts from the gun? The more you know what is expected of your group, the better you can plan ahead!

Get with your group and plan

From your details above, determine the number of communicators required, who will be the Net Control

Station (NCS). Our group always runs formal directed nets, so an NCS is always necessary. Will there need to be more than one Net (i.e. General event net, Administrative Net, Medical Net)? The NCS should have some experience in the type of event being worked, if possible. Always have someone monitoring at their home in case phone calls need to be made, or the availability of an on-site cell phone. Make sure the NCS has a "plot board" available for use.

Visit the site ahead of time

At least ten to twelve days prior to the event go out and do a physical survey of the area to be worked. Look for possible traffic, terrain, or confusing trouble spots. Take a fellow amateur and place them where the Net Control Station will be, and then travel to each place where a communicator will be. Doing this will help determine if simplex operation will work, or if a repeater is required. Unless your group has its own repeater, you may need to approach a local club who has a machine. Explain to them that you are providing a needed public service. Most clubs will not object, and may even be able to provide some volunteers!

Distribute information to your team

A packet should be sent or a personal contact made to each communicator the week of the event confirming information needed for the event. The packet should consist of a note explaining the event, including a meeting point, a map if appropriate; a chart showing the other communicators times to be "on-station", and projected dismissal time. A phone number to contact the coordinator in case the communicator cannot attend is a good idea. Back-up communicators are always a good policy, it's better to have too many than too few.

Get the picture?

Are you the next Ansel Adams? Henri Cartier-Bresson? Eugene Smith? Or even close? Or working at it? Or just like to take pictures?

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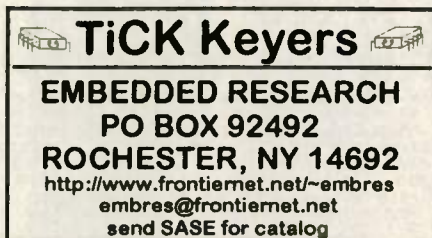
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Never tell communicators that they are not needed!

The big day

The event coordinator should be on location earlier than anyone else to touch base with the event organizers to see if there are any last minute changes. Be professional, after all you are a diplomat of the Amateur Radio Service! Be sure your NCS is aware of all requirements the organizers are asking for. Run your nets formal and directed.

Debrief and document your event

Should a critique meeting be held by the event organizers and you are invited to attend, try to do so or send a representative from your group. Write up a report to give to your group, or publish in your newsletter, if applicable. The write up should con-

sist of: A list of communicators, a description of the event, weather conditions (if pertinent), any problems and solutions in case the event is expected to be held again in the future, and any special requests from the event organizers. These reports will aid you and others when the event is held again, and you are asked to help. Our group publishes a monthly bulletin, which consists of such reports.

In each of our public service events, we follow this same procedure with fantastic results. We realize that an actual emergency situation is quite different from a planned public service event. You are not given the luxury of having meetings and weeks to plan ahead in a real emergency. But, if you work your public service events using these guidelines, you will start to see characteristics in the way of communication and terrain, the equipment capability of your fel-

low amateurs, and expertise in your net controllers. This is information you need in your back pocket when called upon by your community to provide emergency communications. Then you and your team can ride over the horizon, with HT's strapped to your belts, march up and say, "We're Amateur Radio operators, how can we help?" 73!

Frank J. Piper, KB8ZUF, Assistant Emergency Coordinator, Franklin County, Ohio Events Manager, Central Ohio ARES (Franklin County ARES)

A tribute to a great friend

**J.M. "OLD HUCK"
HUCKABEE, AA5BU**

On 19 January 1964, I was living in Lexington, Kentucky, calling CQ on 14.010. My call at the time was W4PPY, and there was an immediate reply.

We talked for the next fifteen minutes. He told me his name was Lloyd, and he would like a QSL. I asked my new friend for his address, telling him I did not have a Call Book. I had a young wife and two small children and just did not have an extra \$5.00

for a Call Book in those days. He said, "Never mind, I'll send you a QSL first." His call was W6KG.

In about 10 days a package arrived in the mail with his previous year Call Book and QSL card. Lloyd explained that he always passed his previous year books to a "Ham friend in need." This came at a time that was a great blessing to my Amateur Radio activity.

Then I learned of the fame of Lloyd and Iris Colvin, and have followed news of this great couple of friends for the past 34 years.

That Call Book listed the call as:
Lloyd Colvin W6KG
111 Purdue Ave.
Berkeley 8, Calif.
100,000 QSOs since 1929
50,000 QSLs filed alphabetically

It was of great sadness a few years back when *Worldradio* reported Lloyds' death. And again, last spring *Worldradio* reported the death of Iris Colvin, W6QL. These were two of the Greater Friends to the World of Amateur Radio.

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ARRL President on restructuring

Rod Stafford, W6ROD, President of the American Radio Relay League defends and explains the League's proposal to restructure Amateur Radio in a letter that he is sending out in answer to queries from concerned Hams. Stafford says Hams have been slipping father and father behind the technology power curve and that others outside of Amateur Radio are taking note of that.

Stafford points to the primary modes used by Hams. He notes that SSB, CW and FM have each been around for more than half a century. Stafford says that we have to change peoples' perception of Ham radio being a pursuit involving seventy year old communications techniques.

Regarding the Morse code, Stafford says that there is no move on the part of the ARRL to eliminate it. Rather the League wants to put it into proper perspective as we move into the new century. Stafford says that he believes that the Morse will be around for a

very long time. But the ARRL leader also says that as an examination element CW carries much more weight than it should at the present time.

Stafford also says that Ham radio sits on some very valuable radio real estate that we essentially use for hobby purposes. He says that in recent years it has become very difficult to justify our retaining and defending our spectrum from commercial interests. These are companies who make very good arguments as to why they shouldn't be permitted to use our spectrum for endeavors that will generate jobs and utilize cutting edge communications technology. These organizations says Stafford are willing to put the spectrum to use for commercial rather than hobby purposes.

Stafford also cites some of the same alarming slow growth statistics that we have presented on *Newsline* several times in the past. He says that one need only look at the numbers to realize that the average age of most active Hams is up near 60. Also that there is an under two percent annual growth rate in the service. The ARRL leader says the argument that Amateur Radio needs to retain spectrum for growth is unconvincing to the FCC

and other interests who take the time to read the numbers.

Rod Stafford says that taking these factors into consideration, Amateur Radio is now viewed as a group of aging radio hobbyists. We are also viewed as hobbyists who use less than state of the art communications technology. This, says W6ROD, makes us vulnerable to spectrum challenges from other sectors of the communications industry.

President Stafford says the changes being proposed by the ARRL are not a complete solution to any of these problems but that they are a start. He says Hams still have to make an effort to move to more advanced communication technology and to do so quickly. — *Newsline*

ORACLE, NCI affiliate

ORACLE (Organization Requesting Alternatives by Code-Less Examinations Incorporated) has announced its affiliation with the United States based society called No-Code International. The alliance is on the basis of each organization having the same main objective. That being to get rid of mandatory Morse code testing in Amateur Radio, and doing so worldwide.

Amateur Radio Call Signs

The following shows the last call sign in each group to be assigned for each VEC Region under the sequential call system as of 5 October 1998.

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 1-888/225-5322.

Radio District	Group A Am Extra	Group B Advanced	Group C Tech./Gen.	Group D Novice
0	AB0HY	KI0OE	++	KC0EGA
1	AA1UC	KE1KJ	++	KB1DHK
2	AB2FS	KG2PD	++	KC2EDP
3	AA3RQ	KF3CD	++	KB3DBD
4	AF4MD	KU4VF	++	KG4AIC
5	AC5RN	KM5SX	++	KD5FHZ
6	AD6GX	KQ6YB	++	KF6TCN
7	AB7ZF	KK7PY	++	KD7CVI
8	AB8DJ	KI8GW	++	KC8LAI
9	AA9WO	KG9OQ	++	KB9TMJ
N. Mariana Is	NH0F	AH0BA	KH0HJ	WH0ABJ
Guam	++	AH2DH	KH2TW	WH2ANX
Hawaii	NH7P	AH6PO	KH7JZ	WH6DEY
American Samoa	AH8R	AH8AH	KH8DM	WH8ABF
Alaska	AL0M	AL7RH	KL0QE	WL7CUX
Virgin Islands	++	KP2CO	NP2KF	WP2AIJ
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++All call signs in this group have been issued in this district.

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Leaders of both organizations believe that the closer relationship will lead to sharing of information for carrying out various international lobbying projects. ORACLE has been active since 1995 in influencing International Telecommunications Union member administrations to adopt its code free position. It claims successes in widely exposing what it terms as the flawed arguments about questionable internationally mandate practices in Amateur Radio rulemaking.

ORACLE and No-Code International both say that they have no problem with the actual use of Morse code by Hams. This, they say, is a free choice for individuals. But both groups also believe that Morse testing is a license requirement that is, in their words, "objectionable."

ORACLE and No-Code International firmly believe that Morse testing is being used as a hazing ritual that Hams are put through to gain to access HF amateur bands. ORACLE and NCI say that this hazing has to come to an end. Both groups support considerable modernization of Amateur Radio rules, worldwide. — *Newsline*

Human exposure to RF radiation (Tnx ARN #1098 9/10/98)

Do people living near high powered broadcast transmitters develop cancer at a higher rate than the rest of us? According to one scientific report, cancer among residents of the Look-out Mountain area west of Denver Colorado was not higher statistically for the decade from 1985 to 1995 than would have been expected based on the ages and numbers of men and women who live there.

The report was commissioned by the Colorado Department of Public Health and Environment. Its statistical analysis can be found at: http://www.state.co.us/gov_dir/cdphe_dir/release/061698.html — *Newsline*

FCC corrects its restructuring document

In many cases, the text of WT Docket 98-143 did not match the appendices. In other cases the proposed rules change made no sense. Now the FCC has issued some corrections and clarifications to the proposal.

The Errata was issued to conform the proposed rules to the proposals discussed in the text of the Notice. In some instances the NPRM included sections of rules that the agency did not propose to change. These have been deleted.

In Bulletin 65 ARRL called attention to two significant changes incorporated in the Errata:

A major change from the original rulemaking proposal was to effectively reinstate the language in Section 97.505(a)(10) — the provisions for a physician's certification that an applicant is unable to pass a 13 or 20 wpm telegraphy examination. In the

NPRM text, the FCC invited comment on this issue and on an earlier proposal, RM-9196. The ARRL had asked the FCC to require anyone applying for an exemption pursuant to a doctor's certification to first attempt the higher speed test before getting exam credit.

The Errata also clarify the Commission's intention to retain the current 365 day time limit for a Certificate of Successful Completion of Examination (CSCE) to remain valid. — *Newsline*

League asks FCC to hold the line on conducted emissions

ARRL Bulletin 73 on 17 September announced that ARRL has asked the FCC to hold the line on current conducted emission limits below 30 MHz from unlicensed consumer electronic and industrial, scientific, and medical devices operating under Parts 15 and 18 of the Commission's rules. Interfering devices include such common household appliances as computers, TV sets, and microwave ovens. Conducted emissions result from RF voltages imposed on the a.c. power line, which can, in turn, act as an antenna. In general, the current conducted emission limit is 250 uV.

In comments filed in response to a Notice of Inquiry on conducted emission limits below 30 MHz in ET Docket 98-80, the League said the proliferation of Part 15 and 18 devices over the past decade as resulted in what it called "a marked increase in RF noise from conducted emissions generally." The ARRL said it "wholeheartedly agrees" with a tentative FCC conclusion that some limitations continue to be necessary to control interference to licensed radio services in the HF range.

The League said that current Part 15 and 18 limitations are "not sufficient" to prevent interference to Hams from conducted emissions. The League said it would be "most inappropriate" to consider relaxing the limits "unless and until the consumer electronics industry is provably able to properly respond to the interference problems."

The League concluded that because most interference from Part 15 and 18 devices to licensed HF services results from conducted emissions, "it is especially important that the Commission retain what minimal protection exists from the present regulations."

The League has already called on

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The League has already called on the FCC to not relax line-conducted emission limitations at 2.4 GHz and has recommended a 300-meter distance limitation from residential areas if the FCC adopts the relaxed conducted and radiated emission limits it proposed in a separate proceeding (WT Docket 98-42). That proceeding focused on updating regulations for Part 18 RF lighting devices. — *ARRL B73*

AAA says LMCC "backing off" 70 cm request

An official of the American Automobile Association says the Land Mobile Communications Council is backing away from its request that the FCC reallocate the 420 to 430 MHz and 440 to 450 MHz bands away from the federal government and over to the Private Mobile Radio Service.

The AAA's Gary Ruark says he doubts the FCC will ever agree to the request in the face of strong support for continued Amateur Radio presence on the band.

In a 31 August letter to San Diego Section Emergency Coordinator David Doan, KC6YSO, Ruark, said that there is strong support for Ham radio from several organizations. This includes the Association of Public Safety Communications Officials International and the National Telecommunications & Information Administration. Ruark says that this support has caused the LMCC to back off its demand to reallocate the 70 cm

subbands. Because of this, Ruark says it is doubtful that the FCC would ever agree to that portion of the LMCC petition addressing sharing with Amateur Radio operators.

The AAA is an LMCC member. Amateur Radio has a secondary allocation in these bands. — *Newsline*

New vanity paper filing address

Effective 14 September, there's a new address at Mellon Bank for vanity callsign paper application filers only. Those are the people who submit a paper Form 610V and FCC Fee Remittance Form 159 and vanity fee using the U.S. Postal Service. The new address is: FCC Wireless Bureau Applications, P.O. Box 358130, Pittsburgh, Pennsylvania, 15251-5130

Remember, that address is only for those filing on a paper Form 610. The FCC says that Electronic Form 610V Vanity Callsign filers should continue to send Form 159 with the vanity fee to: FCC Amateur Vanity, P.O. Box 358994, Pittsburgh, Pennsylvania, 15251-5994

Don't worry if you missed those addresses. You can find them in the printed edition of this week's report at: www.arnewline.org

Also this reminder. The vanity call sign filing fee dropped from \$50 to \$13 for applications filed on or after 14 September 1998. — *Newsline*

(Ed. note. This is the last Rules and Regulations column by Jack Kelleher. Jack will continue to write the QCWA

column. With the speed of electronic news availability nowadays your club newsletter is getting the news to you faster than we can. The Rules and Regulations column will shift focus, and will continue with David Splitt, KE3VV, taking over next month. David will be explaining the rules and recent proposals that affect Amateur Radio. — KO6DJ)

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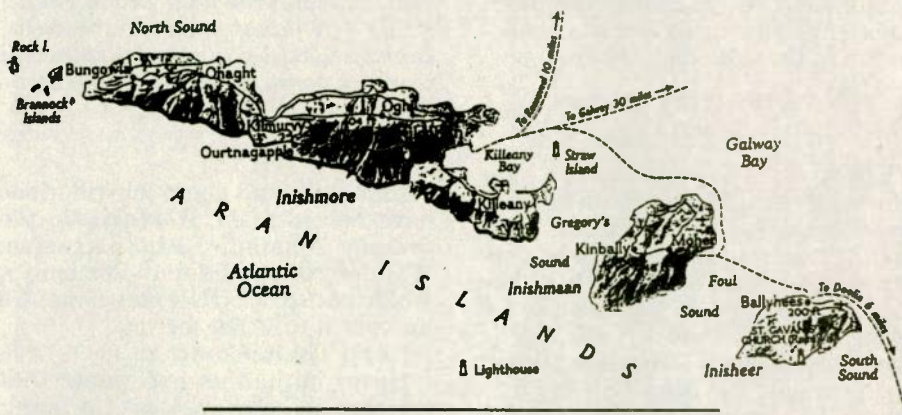
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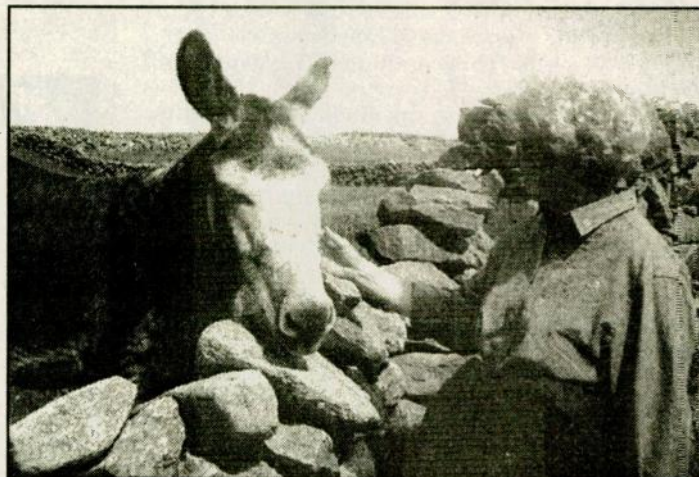
This was my fifth IOTA mini-DXPedition and it's about time I give credit where credit is due. My XYL, Glenys, is a real trooper. This last trek to the Aran Islands, IOTA-006, was the greatest challenge and the most successful. It started with a ten day bus tour of Ireland and, when the tour was over, we took our amateur gear and went to the Island of Inishmaan, the middle of the three Aran Islands off the coast of Ireland, for two weeks (12-26 July 1998).

Glenys and I did ZF8, Little Cayman, before it had 110 volts AC, and we had to take all of our own food because there were no stores on the Island. Glenys was great on that trip and we had a wonderful time. I had unlimited 12 volts DC, courtesy of photovoltaic cells on the roof.

The next trip was to KL7 land, Dutch Harbor, Alaska, to com-

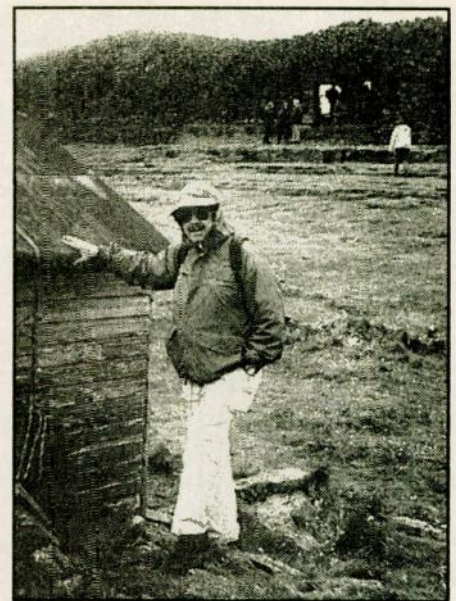
memorate the 50th anniversary of the island being bombed during WWII. The next trip was also to Alaska, but to the remote Pribilof Islands in the Bering Sea, halfway between Siberia and the mainland of Alaska.

The joy of a mini-DXPedition to an island that belongs to America is be-



Glenys getting to know one of the many donkeys on the island.

ing able to ship Amateur Radio gear via the U.S. Postal Service. That makes things a lot easier. Damage to Amateur Radio gear in transit is one of my biggest concerns. Both



The wind on the island often blows so hard that the islanders tie large rocks to keep the roof from blowing off.

times I have gone through Miami International Airport I have had gear damaged. The first time the Miami elephant sat on my Butter-nut vertical and the second time the Miami elephant slammed the case containing my amplifier so hard it drove the cooling fan in the back clear through, so the AMP was inoperable.

This time I spent a lot of time trying to outfox Murphy. You know Murphy (if anything can go wrong, it will). So this trip there was a lot of redundancy, because there are no *Radio Shack* stores on the island.

When I got the idea for IOTA-EU-006, I was pleased to find that electrical service in Ireland is 220 volts AC. I was a little concerned

when I discovered there are no trees on the island. How do you hang a G5RV if there are no trees? I had to ship nine fiberglass tubes, each four feet long, via the post office surface mail so they would be there before I got there.

We had so much luggage the young customs officer inquired if we were immigrating. We had a grand total of 11 pieces of luggage including a golf bag protection case. Golf bag protection cases are wonderful for transporting my beam. I have a two-element Hy-gain TH-2 MK-3 with a 15-foot mast that fits nicely into the fiberglass case, and on some major air-

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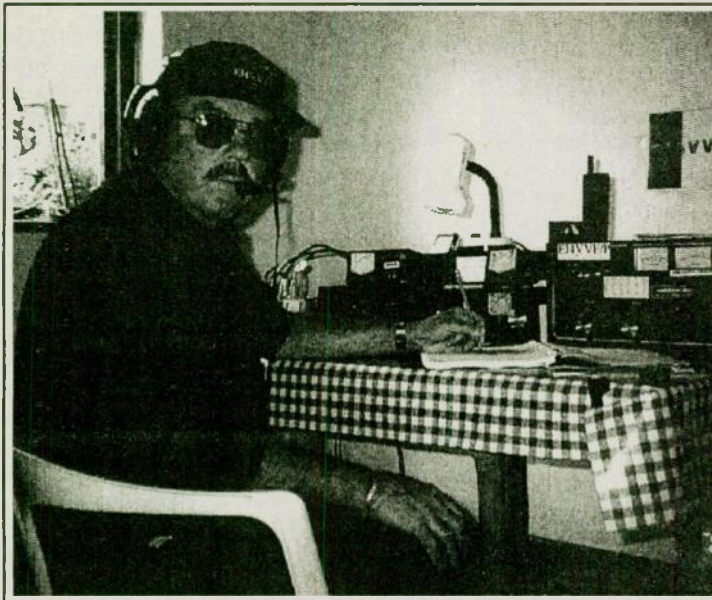
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Tom Quilanan, WØGLG, at the operating position of EV4VVF/P EU-006 IOTA, Inishmaan Island (Aran Islands) Ireland for a two week mini-DXpedition.

lines golf bags fly free. Besides the beam, my vertical fits in the bag as well. The case has wheels and a pull handle and airlines are used to seeing them.

The ad for the cottage on the island said it was small and simple, but somehow that description just didn't cover it. Girl Scout that she is, my XYL, Glenys, made the place livable and even comfortable. She walked the entire island, found out the location of the post office as well as the factory where the famous Aran wool sweaters were made by the islanders. She also discovered where the bed and breakfasts were that also served supper. When I thought she needed a break, I would suggest we eat out. She kept the teapot hot and full and never complained when the alarm went off at 0300 local so I could be on 14.260 at a reasonable hour for North America. She helped me put up the mast for the G5RV, really hard for one person to do, but easy for two.

She never complained when I taped cable to the floor when using a 220 wall socket in the kitchen. I will admit the continuous bad weather had its effect on our moods. The wind blew at 25 knots 90 percent of the time, and rain fell from the sky at least three times a day. Sometimes the rain came in sheets, sometimes it fell horizontally. Everything was always damp, bread went moldy. The

place had an abundance of creepy crawlers, and she kept a clean kitchen. She read a lot and was always the first to spot a rainbow. After a particularly hard rain, she pointed out the guys for the beam were loose and needed to be tightened. Shopping for food on the island was a daily event, you impulse-bought because if you thought it over and came back, it was most likely gone.

When it came time to pack up, the tally was 3,367 QSOs mainly on 20 Meters with about 300 on 40 Meters, the remainder on 75 phone. When we arrived back home in Colorado, we had a shoebox full of QSL cards waiting for us. I had a wonderful IOTA mini-DXpedition and I could not have done it alone. The success is due in great part to having a fine business XYL Thanks "Glenys."

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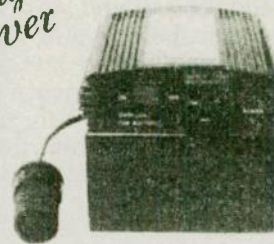
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100°	38°	30°	-01°
95°	35°	25°	-04°
90°	32°	20°	-07°
85°	29°	15°	-09°
75°	24°	10°	-12°
70°	21°	5°	-20°
65°	18°	0°	-18°
60°	16°	-5°	-20°
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Let's compare.....

RICK McCUSKER, KO6DJ

Let's compare our hobby with another. Hams are always complaining about the cost of modern equipment to enjoy this wonderful hobby of ours. Numerous examples have been published in *Worldradio* and other Amateur Radio publications about the cost of equipment and the value of the dollar. When compared with the value of the dollar from years ago, our costs have not become the exorbitant out-of-reach monster some Hams say is the case. In fact, the cost of equipment is relatively the same as 30 years ago.



guide. A student attending ground school for a private pilot license will spend \$150.00 for the course. Study materials are another \$150.00.

Next, you actually get in an airplane and learn to fly. You must fly with an instructor because the FAA frowns upon a student drilling himself into the ground. Add another \$540.00 to have the instructor fly with you. Before you can leave the ground you must have instruction in pre-flight and post-flight procedures. The cost? \$405.00.

The average student with zero flight time will take about 50 hours to learn the art of flying with sufficient prowess to pass a flight check.

A natural-born flyer can do it in 35 hours. The cost? \$1,820.00 for 35 hours,



Your choice: About \$500 for used radio equipment... or \$47,000 for a used Cessna 172.

What about another hobby? I have always been interested in flying, so I decided to compare the cost of outfitting a Ham operator and obtaining a private pilot's license.

In order to get a private pilot's license, it is mandatory for a student to attend an FAA-certified flight school. You have to pass certain courses and subjects to move on in the process. Do we as Hams have to attend an FCC approved school? No, most of us take a class that's free, all that's needed is a copy of the study

and add another \$52.00 an hour if you're not "Top Gun" caliber when you walk in the door.

Now that you have completed the course and you have your brand new private pilot's license in hand, wouldn't it be nice to be able to fly anytime you get the urge, no matter what the weather? In order to do that, you have to have an Instrument rating. Well, let's see what the cost is for the rating. \$2,380.00 gets you 35 hours of instruction time in a Cessna 172. It has to have the right instruments for you to train! Another \$1,050.00 and the instructor gets to occupy the seat next to you. Don't forget the 20 hours of pre-flight and post-flight briefings, all for a measly

\$600.00. Add in the additional books and supplies for another \$110.00, along with the Instrument ground school for an additional \$150.00.

Sure would be nice to have your own little airplane to take the wife and kids out for a ride once in a while, wouldn't it? Airplanes, cheap ones that are barely air-worthy, start at around \$20,000. Too much money? You can rent a Cessna 152 for only \$52.00 an hour!

What about maintaining a license? Private pilots must have a certain number of hours in the log book, and get a flight physical in order to keep their license. All we do is send in a 610 form every ten years, with the cost being postage. And coming soon, FCC form 605, electronic submission for license renewal. (I guess we have to add the cost of a computer to the hobby, right?)

Don't forget about keeping up with the latest in the hobby. In order to keep in step with the latest advances

in either pastime, a very good source is a magazine with content dedicated to the hobby. A one year subscription to *In Flight USA*, a very informative magazine on general aviation, is \$24.95 per year. The cost of a one year subscription to *Worldradio*? \$15.00!

So what does it all boil down to? You will spend about \$4,000-\$5,000 to get a piece of paper that says you are a pilot. Compare that to \$25.00-\$50.00 for study guides and the current \$6.35 fee at a VE test. Throw in another \$200-\$300 for a modest station, or \$1,500-\$3,000 to have a really nice station, and you are not even close to what a private pilot will spend.

Ham radio sure looks better now, doesn't it?

The figures in this story were supplied by Executive Flyers, Inc. of Sacramento, CA.

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Another look at restructuring...

RICK M^CUSKER, KO6DJ

Several years ago, the Federal Aviation Administration was alarmed at the decrease in the number of private pilots in the U.S., so three years ago, after extensive studies, the FAA decided to make it easier to get a pilot's license by "restructuring" the license system.

Before "restructuring" there was just the basic private pilot's license. To make it easier, the FAA established two new license classifications, the "student" pilot license and the "recreational" license. These two classifications enable someone to experience the joy of flying, at less cost than a private pilot's license.

The "student" license enables a pilot to rent an aircraft and go flying without having a flight instructor aboard. But there are restrictions. You


can't carry passengers with you. (Kind of like calling "CQ" and everybody else has the rig turned off, isn't it?) And it's only going to cost you \$52.00 an hour to rent the airplane!

The "recreational" license allows you to carry passengers, but you are restricted to no farther than 50 miles from your training base, and you can't go anywhere that aircraft radio is needed. This license can't be used in an urban or suburban area, because you have to communicate with the air traffic control center using the aircraft radio. What it means is this license is perfect for the farmer or rancher out in the Central Plains to check up on the cattle, the fences or the crops, but not for much else.

The FAA had hoped there would be thousands of new pilots attracted to flying under these new license classes. In reality, these licenses have

been issued to an extremely small percentage of new pilots, due to the restrictions.

And don't forget the costs involved in getting either of these licenses. A beginner will still have to go through ground school, flight instruction with a certified instructor and a flight physical from an FAA-certified physician. Add this to classroom and actual flight instruction and you will spend about \$1,500 to \$1,800 for the "student" license, and about \$2,500 to \$3,000 for a "recreational" license. (You didn't forget about the \$52 an hour to rent an airplane, or the \$20,000 to buy one, did you?)

This is the second step in the "restructuring" the private pilot's license. There will be a step three, and the FAA is taking comments from the public on what step three should be. (Does all this sound familiar?) 

VECs ask for few Amateur Radio license classes; 5 wpm top code speed

The National Conference of VECs agree with the FCC's assessment that the role of Morse code in modern communications is decreasing. By majority vote, the VEC's filed formal comments on 01 October which look toward a restructured Amateur Service containing a total of three license classes conferred by only four license examinations. They would correspond to the Technician, General and Amateur Extra Class.

The VECs believe the Technician Plus Class should be abolished, but licensees would retain credit for the 5 words-per-minute Morse code examination. The Novice and Advanced Class would be phased out. Those classes could be indefinitely renewed or modified, but no new Novice and Advanced Class licenses would be granted. Five wpm would be the highest Morse code speed required. A feature of the proposal is that no amateurs would lose privileges.

The VECs envision that the Technician Class license examination would contain 50 questions based on the combined Element 2 and 3(A) question pools. The privileges would be the same as the existing Technician Class. The General Class license would also contain 50 questions from the current Element 3(B) question

pool with a 5 word-per-minute Morse code examination. The Extra Class license exam is proposed to be 100 questions which would be constructed from the current Element 4(A) and 4(B) pools. This new written examination would be known as Element 4. There would be no further Morse code examination.

A single five wpm telegraphy examination meets the international treaty requirement and would eliminate the need to grant medical credit to disabled amateurs for the higher code speed examinations. The VECs said "We see no justification for 13 and 20 words-per-minute code testing ... or 12 WPM as suggested by the American Radio Relay League." The ARRL-VEC asked to be excluded from participation in the NCVEC comments since the League will be filing their own comments.

The fourteen VEC organizations act

as the administrative liaison (or coordinator) between the Federal Communications Commission who grant Amateur Service licenses and the volunteer examiners who prepare and administer the required license examinations in the Amateur Service. Over the past 15 years, more than one million applicants have been examined by the VEC System. A copy of the 35-page VEC filing may be found by searching the FCC's Electronic Comment Filing System located on the Web at: www.fcc.gov/e-file/ecfs.html and entering the proceeding number: 98-143. — *W5YI Report*

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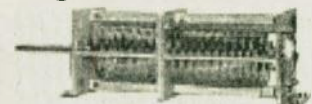
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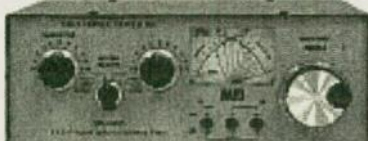
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World Radio History

WORLD RADIO, December 1998 17

The 9th ARDF World Championships

MARVIN JOHNSTON, KE6HTS

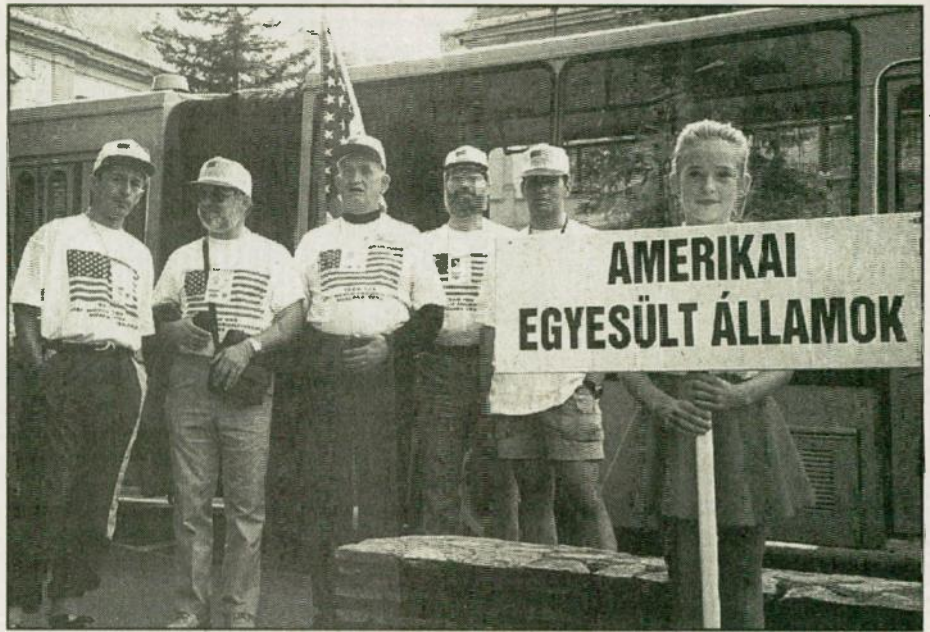
Earlier this year, I was talking with Joe Moell, KØOV, about Amateur Radio Direction Finding, and he asked if I might be interested in competing at the 9th ARDF World Championships. This seemed like a tremendous opportunity, so I asked my wife, Barbara, KE6OTF, what she thought about it. Her immediate response was "You should go!" While contemplating the answer, I told Dennis Schwendtner, WB6OBB, about it, and he said, "When are we going?" At that point, the only team member certain to go was Dale Hunt, WB6BYU, the team captain. Making a long story short, Dennis and I talked Barbara into going and the rest is history. This is a condensation of the log I kept on the trip.

Tuesday, 01 Sept. 1998

The words "9th ARDF World Championships" finally began to take on some meaning when our team arrived in Nyiregyhaza, Hungary, and we saw the various teams assembling for the competition. It was rather impressive knowing we were now in the company of the best ARDF people in the world. This would be the first time the USA had ever been represented at the World Championships and it was quite a humbling experience.

The expenses of attending were the responsibility of each team member. However, the ARRL provided support with a grant to help with some of the expenses.

ARDF (Amateur Radio Direction Finding) is a sport popular in Europe and Asia, but has not yet caught on in the U.S. The idea is to find a specified number of transmitters (usually 5) in a one or two mile square area, and the winner is determined by whoever finds them in the shortest time. This is accomplished by using DF equipment in conjunction with a map and compass to locate the various transmitters, and then running or walking to the transmitters. Competi-



The USA ARDF Team at the opening ceremonies. From left, Gyuri Nagy, HA3PA; Marvin Johnston, KE6HTS; Dennis Schwendtner, WB6OBB; Dale Hunt, WB6BYU; Jack Laufflin, KC7CGK.

tors are allowed a maximum of 120 minutes to complete the course from their assigned starting time, and returning after that time results in disqualification. This year, there were over 30 countries represented with over 245 competitors present.

The U.S. team consisted of Dale Hunt, WB6BYU, team captain, Jack Laughlin, KC7CGK, Gyuri Nagy, HA3PA, and myself. Dennis Schwendtner, WB6OBB, went as the team trainer and my wife, Barbara Johnston, KE6OTF, went as the team photographer. Gyuri was a welcome and fortunate addition to the team. He had previously competed in and won several championships and as well as having been a trainer for the Hungarian team in previous years.

Wednesday, 02 Sept.

Today was pretty much free with some informal practice scheduled for the team members ... except for Dale. Lucky soul that he was, he was able to keep his schedule filled with meetings.

At 10:00 a.m., two practice transmitters were turned on for 2 Meters, and two for 80 Meters. The practice area was right beside the teachers college, and we were given orienteering maps for the area. We spent several hours running/walking around and taking bearings on the transmitters before heading back to lunch.

I had previously made arrangements with Jim Henry, KE6WGO to email photos and a progress report of the event so it could be put on the Santa Barbara ARC web page. After about an hour and a half trying to get the information sent, I gave up as the Internet connection there was just too slow.

Heading back to the room, I found everyone getting ready for the opening ceremonies that would take place in Nyiregyhaza that evening. We all put on our USA ARDF Team T-shirts, hats, and headed for the busses that would take us into the city. The busses then left complete with a police escort.

Arriving near the center where the ceremonies would take place, we found some young girls carrying signs identifying the country for each of the competing teams. Each team carried its national flag on a staff but at the last minute, we found we did not have a staff. Dennis came to the rescue and we used his white cane! At the appointed moment, the procession

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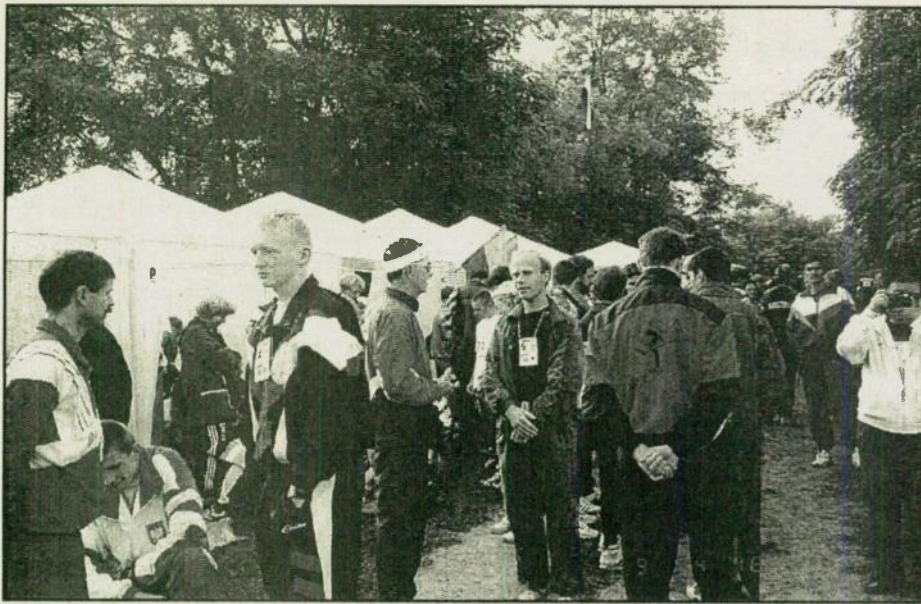
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The competitors at the 80 Meter start area.

headed into the square that was already filled with townspeople.

The ceremonies opened with some short speeches. The mayor of Nyiregyhaza gave the opening speech, followed by the introduction of the event organizers. When the speeches and introductions were over, the entertainment started with a group of majorettes who gave a really good show. This was followed by folk dancing and modern dancing which concluded the opening ceremonies.

Thursday, 03 Sept.

Today was the 2 Meter competition and the busses left a few minutes after 7:00 a.m. for the competition site. An hour later, we arrived and piled out of the busses to walk over to the actual starting site. The whole area was roped off, and once inside the starting area, competitors were not allowed to leave. Each competitor had previously been assigned both a start time, and a number that was attached with safety pins to their shirt, both front and back. The DF equipment for each competitor was put into a special area on racks, and could only be retrieved when the competitors were called to the starting box.

As the start time approached, competitors began to warm-up and the short road soon had many people running up and down the road.

Ten minutes before the assigned start time, the competitors retrieved their equipment and received the orienteering map for the competition area along with the score card.

Five minutes before the assigned start time, the competitors were called into the start area where they checked their equipment, studied the

maps, and got ready to begin. There were two starting corridors, one to the left for the Women and Seniors divisions, and one straight ahead for the Juniors, Old Timers, and Veterans.

At the appointed time, the competitors started onto the course. Since all start times were five minutes apart and only one competitor of any given class could start at the same time, it would be about five hours before everyone had left. The time limit for this competition was 130 minutes.

As the competitors took off, they were cheered and given a rousing

sendoff by their respective teams. Meanwhile, others were keeping a sharp eye on the running competitors hoping to get advance information on the location of the hidden transmitters. This of course had been anticipated, and the starting corridors were long enough that the competitors were out of site by the time the end of the corridor was reached and they could turn on their equipment.

The usual strategy seemed to be to get bearings on all five transmitters during the first five minute period, and decide from the bearings, signal strength, and map the fastest route between the transmitters. Part of finding the fastest route was to decide from the maps when to go cross country and when to stay on the roads. Those starting later in the day had somewhat of an advantage since there were tracks and trampled grass to show where previous competitors had been.

Out on the course, each transmitter was clearly marked with an orange and white Orienteering control flag visible from at least 10 Meters away. The flag was mounted to a 2 x 4 which also had two punches attached for competitors to punch their control cards. Usually about five meters or so away, two members of the jury were seated where they would record the competitor number and the time. This information was then radioed to the finish line where a score board was set up showing the

The 80M tents used to hold the competitors DF equipment.



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status of all competitors.

At the finish line, there was a transmitter on a different frequency for competitors to home in on if they happened to lose track of where they were on the map. The finish corridor was about 100 Meters long with a group of people at the entrance making a great deal of noise, and cheering on the competitors as they entered the corridor. After crossing the finish line, officials took the score card from the competitors.

The competitors time for each transmitter was posted on a big board and was usually current to within a minute or two. This way, it was easy to see the progress of each competitor. Overall scoring was done by computer and the standings were displayed on a computer monitor.

Shortly after the last competitor crossed the finish line, those remaining at the finish boarded the bus for the trip back to Nyiregyhaza.

Friday, 04 Sept.

Friday was a cultural day and turned out to be five hours at a local open air museum, a small Hungarian village from the turn of the century. The entire museum was closed to the public for the time we were there, and tour guides were available who spoke several different languages. A number of shops were on display where things such as hats, shoes, wine barrels, wheels were made. A number of typical houses were on display along with the school house and church. A free tour by horse drawn carriage was also available, as was horseback riding. About 12:30, an excellent lunch was served that included goulash soup and BBQ pork along with potatoes, rolls, and salads.

After lunch was finished about 2:00 or so, a folk dancing and music program was given. At 3:00, the busses loaded and headed back to the dorms. We were then free until dinner.

Saturday, 05 Sept.

Arriving by bus at the competition site about 7:45 a.m., we quickly found a place to camp out and await our



Marvin Johnston, KE6HTS, out on the 80 Meter course.

starting time. Gyuri felt really happy that he received a starting time of 3:05 since that would put him almost last, and that meant many trails of previous competitors would be visible thus giving him hints about the transmitter locations.

The starting sequence for the 8M contest turned out to be identical to

the 2 Meter competition held earlier in the week. This time though, I brought along a camera with film (digital cameras were not allowed at the start or on the course) and managed to get a few pictures of the starting area.

Barb and Dennis again waited at the finish line taking pictures as the U.S. team crossed the finish line. The finish turned out to be on the grounds of a school and were quite pleasant. As it was for the 2 Meter competition, there were scoreboards set up as well as video monitors showing the results as they became available.

The closing ceremonies were held that evening in the college sports center where we were staying. It was rather interesting to see who the winning individuals and teams were. As with the 2 Meter competition, the winners were mostly Russian, Ukrainian, and Hungarian.

Being able to attend and compete in this event was a very rewarding experience. The people we met there were very friendly and willing to help however they could. One of the comments made was that for the first time, this was truly a World Championship event. While the USA team did not place, we did learn a great deal and expect to do much better in the next ARDF World Championships to be held in China.

Amateurs active in Mexico City floods

Amateur Radio was on the scene as flash flooding hit Mexico City 29 September. Five people died and thousands were left homeless after mudslides unleashed by weeks of heavy rain buried homes in the Mexican capital.

The storms and mudslides knocked out utilities and telephone service to the affected parts of the city. News reports say that Amateur Radio operators stepped in to provide lines of communications for search and rescue groups and relief authorities. They also worked at warning the people of the dangers in the area. — *VHF Reflector, Newsline*

Hamfest: Drugs found in old radio

Fairfield County, Ohio, sheriff's detective John Baumgardt and his 19-year-old son went to a Hamfest in nearby Springfield. They purchased four pieces of stereo equipment and when they returned to their home in Lancaster they discovered that only three of the four pieces of merchandise were in working order.

But that's not all they discovered. When they opened the case of a dead dual cassette tape recorder they discovered that the printed circuit board had been removed and replaced with three brick-shaped objects wrapped in duct tape. Detective Baumgardt knew immediately he had uncovered a stash of contraband.

Narcotics officers were called. They say the three bricks of cocaine have an estimated street value of about \$400,000. Police also have the radio's serial number and are tracking down its previous owner. The man at the Hamfest who sold the equipment said the pieces came from a pawn shop. — *WB5ITT, Newsline*

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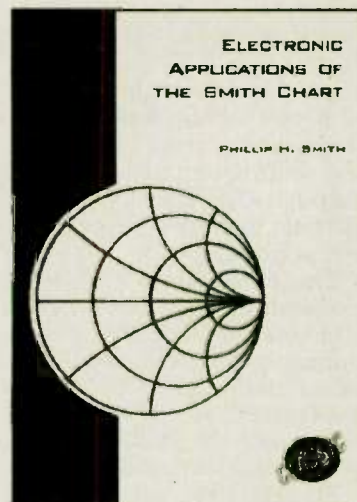
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by Phillip H. Smith

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).

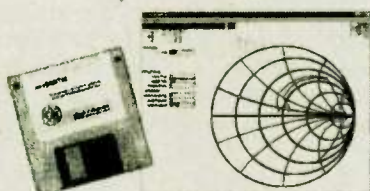


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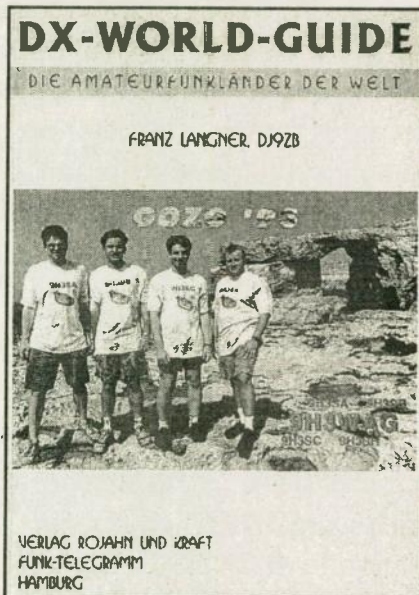


Book Reviews

DX-World-Guide

The 1998 edition of the *DX-World-Guide* by Franz Langner, DJ9ZB, is now available. This guide book will make an excellent addition for the avid DXer or the casual operators bookshelf as a ready-reference to DX, worldwide.

Each page has a wealth of information, packed into an easy to understand format, located at the top of each page. The pages are alphabetically listed by the call sign prefix. The prefix page has the area in kilometers of the country, the capital, location in latitude/longitude, call sign prefix, ITU callsign block allocation, old prefixes, WAZ and ITU Zone numbers, UTC time, Radio Society, and the name and address of the licensing authority. A representative QSL card is in the center of each page, and a map of the country is located at the bottom, with latitude and longitude lines of reference. At the back of the



book is a valuable and complete list of QSL bureaus with addresses for every QSL bureau in the world! At the

front, there are WAZ and ITU zone maps, laid out for easy reference. This book is a must-have reference for HF work. I highly recommend it.

The *DX — World — Guide* is available for \$25.00US or \$40.00DM from: Joachim Kraft, DL8HCZ, Gruetzmuehlenweg 23, D-22339, Hamburg, Germany.

Joachim can also be reached at DL8HCZ@DBØHB or at FUNK-TELEGRAMM@t-online.de telephone: ++49 40 538 31 86.

Payment can be made by Eurocheque, cash, or checks drawn on U.S. financial institutions. The book will be sent via Airmail to addresses outside of Europe. — Rick McCusker, KO6DJ

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Tom (W6ORG) & Mary Ann (WB6YSS)



For Morse lovers only

In the October 1998 issue of *Worldradio*, we told you about the "Morsum Magnificat" magazine getting a new lease on life, with a new publisher taking over the helm. "MM" is back, and better than ever! Filled with 60 pages of information, "MM" covers everything from the use of Morse code and equipment in the earliest days of radio, to reviews of equipment available today. Each issue covers a wide variety of Morse code subjects, and would be a welcome addition to any lover of the dits and dahs. "MM" is published in the U.K. and is available by airmail subscription, anywhere in the world. Cost of a subscription is 17.00 pounds. (U.S. dollar equivalent is \$28.90, depending on the exchange rate). A sample

copy is available for \$5.00, U.S. To order a sample copy or to subscribe, mail to: Zyg Nilski, G3OKD, The Poplars, Wistanswick, Market Drayton, Shropshire TF9 2BA, England.

The publisher can also be reached at telephone number: +44 1630 638306, or fax number: +44 1630 638051. Additional information is available at: www.morsum.demon.co.uk or by Email at: zyg@morsum.demon.co.uk — Rick McCusker, KO6DJ

The Story of the West Coast Radio Service 1906-1956

In 1902, radio station "PW" was established in Victoria, British Columbia, by the United Wireless Company of the United States. This station was the first of many stations built on the west coast of Canada.

The Story of the West Coast Radio

Jerry's Hams

A group of Amateurs in West Virginia raised nearly \$400 during the Jerry Lewis Muscular Dystrophy Labor Day Telethon. According to Mike Horn, KB8GDF, members of Southern Appalachian Wireless Society decided to sponsor what they called their "Up All Night Net" to raise money for "Jerry's Kids." The net on the Mingo County 145.33 MHz continued well into the morning with many Hams from Southern West Virginia, Eastern Kentucky, Ohio and Virginia taking part. The monies pledged will go to help fight this debilitating disease. — KB8GDF, *Newsline*

First digital ATV test a success

Amateur Radio now has its feet planted in the world of digital video. Professor Uwe Kraus, DJ8DW, and his Amateur Radio group succeeded in transmitting the first moving color pictures with sound using a digital amateur television link.

The 09 September transmission was made over a distance of 100 km with 2 MHz bandwidth on 434 MHz. The transmitter was located near the city of Cologne. It sent 44 seconds of a car race from a video-CD using directional antennas to a receiver at Someren in the Netherlands. Unlike analog television, the digital video

Service 1906-1956, by Larry L. Reid, gives the reader a concise history of early marine radio stations, and a look at some of the colorful characters that manned them. It was lonely at some of these stations, leading to a little bizarre behavior. The period covered is 1906-1956, when the stations were under private ownership. In 1957 the stations were taken over by the Canadian Department of Transport.

This book would be a welcome addition to the library of anyone interested in early radio history or the maritime service.

The book retails for \$14.00 but is being offered free of charge by the Society for the Preservation of Antique Radio in Canada (SPARC). All you have to do is become a member of SPARC. A one-year membership (\$12.00) gets you a copy of the book.

For more information, contact: Al Miller, VE7KC, 162 Corry Place, Penticton, B.C. V2A 3S1, Canada. E-mail: almillervip.net. — Rick McCusker, KO6DJ

was received clearly in spite of rainy conditions along the signal path. — VHF Reflector, *Newsline*

K1AKE honored

James Moran, K1AKE, of Concord, Massachusetts, has been elected to the prestigious National Academy of Sciences. Moran is a radio astronomer at the Harvard-Smithsonian Center for Astrophysics and a professor at Harvard University. He was one of 60 new members announced last 28 April. Moran is best known for his application of the techniques of Very Long Baseline Interferometry to the study of astronomical masers. — ARRL, *Newsline*

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World Radio History

My 20 Years of RV Adventures; Help! Full-Time — Part-Time?

Everett Gracey, WA6CBA, well known in the Amateur Radio field as a manufacturing entrepreneur, shares his experiences with RV purchasing and traveling (he used it as a home base for his business when he traveled to conventions and to see dealers). Amateurs approaching retirement who may be attracted to "the RV life" as an adjunct to their hobby could profit by Ev's experiences.

Ev itemizes things to look for when purchasing an RV, and suggests renting one for a few months to see if it's really what you want to do. He relates a horror story with one vehicle he had built for him, and his experience with that is a learning experience for anyone.

The 5.5" x 8.25" 56-page book, is priced at \$9.95 (ISBN 0-9665842-1-X) and can be purchased through Barnes & Noble Books, <http://www.barnesandnoble.com> or Amazon at <http://www.amazon.com> — Helen Noble

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SPECIAL EVENTS

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WHITMAN SE

The Whitman ARC will operate WA1NPO on 28-29 November, from 1400-2100Z both days to commemorate the first successful settlement in the new world, overlooking Cape Cod Bay. Suggested frequencies are: 3.970, 14.270, 18.140, 21.370, 24.970, and 28.370. A special QSL card will be sent to those Hams and SWLs sending a SASE. Also, a handsome 7 1/2 x 10, special certificate with the May-

flower II in the background is available for the event. All replies must be sent to: Whitman ARC, P.O. Box 48, Whitman, MA 02382.

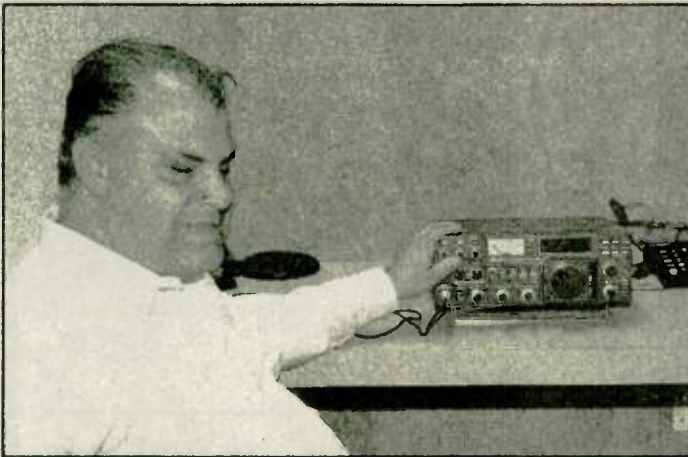
CHRISTMAS IN BELEN

KC5OUR will be operating from 1400Z, 19 December 1998 until 2400Z, 27 December. Our event will be celebrating the Christmas season from Belen, NM (Belen is the Spanish word for Bethlehem). We will be

joining other stations from other Bethlehem towns around the world. QSL card provided for SASE. QSL to KC5OUR. Contact person is N5PR: pridley@anr.net.

USS ARIZONA

East Valley ARG, WA7USA will operate 6-7 December, from 1500-2400Z, to commemorate the battleship, USS Arizona. Frequencies will be: 14.240 and 21.340. Stations contacted may request a certificate by sending a QSL card and a 9 x 12 SASE to EVARG, 3264 E. Carol Ave., Mesa, AZ 85204-3245.



Armand Bakalian, WB2ZEI.

New station on the air

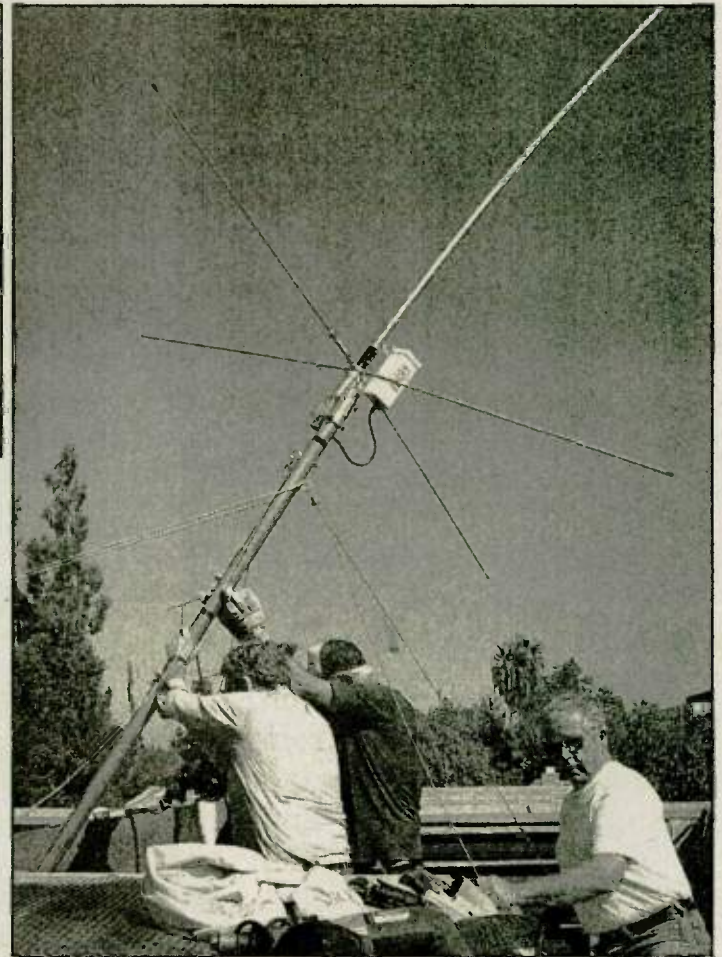
RICK M^cCUSKER, KO6DJ

The Sacramento Society for the Blind now has an Amateur Radio station on the air. Members of the River City ARCS recently installed a Hy-Gain DX-77 vertical antenna, donated by Armond Noble, N6WR, publisher of *Worldradio*, on the roof of the society's building in downtown Sacramento.

The antenna is 25 feet above the ground, in the air conditioning alcove in the center of the roof. Greg Mason, KE6YMZ, couldn't wait for the first

contact. He made contact with Ron Sanders, WD4LTF, from Anniston, Alabama. Ron was "booming" in on 28.305 and after several minutes of conversing with Greg, Ron mentioned he is also blind.

According to Armand Bakalian, WB2ZEI, on the staff at the Society for the Blind, this is just the start of the Amateur



Al Auringer, WH6BK, Chuck Freas, Jr., W6BGG and Bob Balthrope, KD6WTY of the River City ARCS raising the DX77.

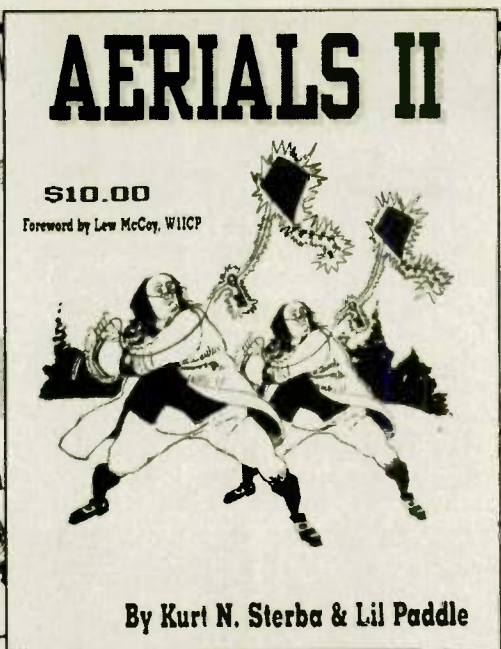
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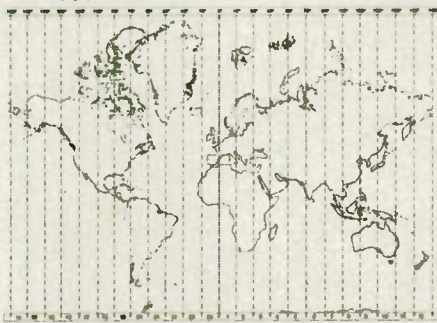
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Awards



Contact All Time Zones

To help commemorate 25 years of *Worldradio*, we announced an award known as "Contact All Time Zones" (CATZ).

• Rules

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

The world is divided into 24 time zones. Each time zone is 15 degrees wide. For the sake of this award, half-hourly zones and out-of-zone artificial time changes will be ignored.

This award is based on the true 15

degrees each, world map 24 time zones.

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

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

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

• Application

The applying radio operator must

be in possession of 24 QSL cards, one from each of the time zones.

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

There is a fee of \$5 to cover the cost and mailing of the 8 x 10 certificate (mailed unfolded).

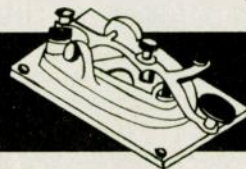
It is not necessary to mail your QSL cards to *Worldradio*. Send a statement signed by two other licensed radio amateurs (General Class or above) that they have inspected and verified the required QSL cards.

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.



Silent Keys



ROBERT "BOB" TOWNSEND, K6OHE

Bob Townsend, K6OHE, 72, died of cancer in Santa Rosa, California 06 May 1998. During the early 1950s, Bob was a projectionist at the Sebastiani Theatre in Sonoma, California. He earned his Ham license after his interest in Amateur Radio was sparked by his elmer, Frank Jones (SK) of Sonoma. In the 1950's, Bob was a freelance photographer for the Sonoma *Index-Tribune*, a local newspaper. His first love had always been law enforcement, and he was hired as a Deputy Sheriff in 1958. He was with the Sonoma County Sheriff's Department for 23 years, retiring as a sergeant in the person-

nel department in 1981. — Mrs. Shirley Townsend

HAROLD PARKS, WB2BNH

Harold "Hal" Parks, WB2BNH recently passed away. Hal was Vice-President of the Westchester FM Repeater Association in Yonkers, New York. He was a member of the yonkers Amateur Radio Club and served as a Volunteer Examiner. Hal was an avid sportsman who enjoyed frequent hunting and fishing trips. — Mark Grossman, K2CON

Memorial station

A fitting tribute to a fallen Ham has been created by rover operator Tim Marek, K7XC. Marek says that he is creating a "memorial rover station" to honor the memory of the late Jennifer Nugent, N7TUA, in a Reno Nevada hospital.

Marek says that the N7TUA Memorial Rover Station will consist of all of Nugent's 10 Meter, 6 Meter, 2 Meter, and 432 MHz gear mounted in a rack complete with amplifiers. It will be made available to serious interested parties for use only as a rover station in the various VHF and above contests. Those interested in either supporting or using the memorial station can contact Tim at K7XC@vhf.reno.nv.us. — K7XC, *Newsline*

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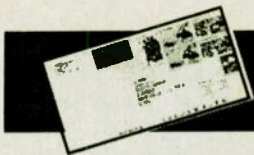
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Off the air

ARRL President is wrong

Rod Staffords' comments in *Worldradio*, October 1998, page two regarding Amateur Radio paints a dark picture for the future of Ham radio. I would expect a more upbeat attitude from him as the President of the ARRL.

His concern about the slow growth of Ham radio is justified, but it is not unique to Ham radio. About 20 years ago, organizations such as the Masons, Elks, Rotary and Kiwanis began to see a decline in membership. Moreover, the average age of the membership is in the mid-60s'. Currently their average membership is down 20-30%.

Various reasons have been given for this decline. Organizations have tried many different ideas and approaches to turn the tide. Some have had limited success but most have failed. The good old days are gone, and we must realize that attitudes have changed as well. Today, everyone has more choices for hobbies and entertainment than they did 20 years ago. Thus, they are less interested in joining groups and organizations.

Today's lifestyle requires two paychecks to make ends meet. People do not consider new interests until the house and car are paid for, and the children are grown. As a result, we see organizations with an aging membership.

Another factor is the attitude of potential new members. They want to know what the organization can do for them. Instead, they should be asking themselves, "If I join the group, what can I contribute to further the interests of the group?" Unfortunately, the group itself starts "dumbing down" the requirements, (ie: no code) in an effort to gain new members and thus weakens the group further. Our challenge should be to make the group attractive enough to join without weakening the group. Even within the group it is difficult to get individuals involved in the groups activities.

His comments about Hams not leading in developing technology is not correct. Developing new technology today requires expensive equipment which Hams can't afford. Ham workbench experimentation has largely been replaced by indus-

try. Few Hams take the cover off a radio anymore. Instead, they just send equipment to the factory for repairs. Hams are busy working in industrial and commercial research and development laboratories developing new ideas. Hams do come up with new ideas, but for the most part industry gets the credit.

Radio equipment with the latest technology is readily available to anyone who can afford it. Most of us can't afford to put several thousand dollars into a new radio, so we settle for used equipment. New companies are constantly entering the radio market with new products. Industry would not make the investment in research and development unless they can see a market for their products several years down the road. With all the new products introduced each year, industry sees a far brighter future than the doom and gloomers.

The current frequency compensation bill working its way through the Congress will go a long way toward preventing industry attempts at grabbing our frequencies. Should it become law, the FCC does not have the manpower to search for replacement spectrum to compensate for any Ham losses. Thus, industry would be less inclined to go after our frequencies.

Instead of bemoaning the fate of Amateur Radio, Mr. Stafford should start offering some new ideas. Other organizations have tried new ideas with limited success. He just might come up with the magic solution.

**Roger R. Schroeder, WB7DIW
TUCSON, AZ.**

For the proposal

I am not a licensed Ham, only studying to take the exam soon in the hopes of getting a ticket and on the air with CW. I just received a sample copy of *Worldradio*, and

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promptly subscribed.

I wanted to comment on the ARRL proposal to restructure the licensing. Since I have no way of leaving a comment on your webpage, writing was about my only option.

My total support goes for this proposal, not to make it any easier to obtain a license, nor cheapen what others have had to do before me, but to stimulate growth in Amateur Radio. Cheaper phone rates, cell phones, Email and other technology has really hurt Amateur Radio. Even the FCC wants to rekindle interest, and my feeling is that this proposal would really help.

**William L. Wignall
OTTUMWA, IA.**

Hams in Iran

I read the article "A Reassuring Voice on the Radio" article by Ken Neubeck, WB2AMU, in the November issue of *Worldradio*. Being a Iranian-American and a former Iranian Amateur Radio operator, EP2KL, I was very much interested in the article. My kudos to Vern Hardy, ex-EP2VH, and the Grumman Amateur Radio Club for a job well done!


There were less than a handful of Iranians who were Hams in Iran during the Shah's time. The rest of the Amateur Radio community were foreign nationals residing and working in Iran.

There are now only three Hams permitted to have EP call signs and to operate from Iran. however, things are about to change in the Amateur Radio world in Iran. More information on the latest Amateur Radio licensing news in Iran is at: www.vtt.fi/ket/staff/komppa/ep.htm

**Khalil Ladjevardi, K6FCC, ex EP2KL
LOS ANGELES, CA**

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Station Appearance

Send Worldradio a picture of your shack and the staff will choose a winner to receive a free one-year subscription to Worldradio! Stations will be judged by neatness (wires tucked away, etc.) and accessibility of equipment. Monetary value of equipment is not a consideration.

Bill Sexton, N1IN

Bill's five-foot tabletop actually harbors four separate "stations," each with its own function and independent antenna system, and all within easy reach of the single operator. And sometimes, during MARS and SHARES exercises, all four rigs may be in simultaneous use by the operator.

The tier on the right is the Amateur Radio station. A TS-870 transceiver on the bottom shelf with an Alpha 91B linear and MFJ tuner above, in frequent use for DX. On the top of the tuner is a scanner. To the left over the logbooks are an external speaker, clock and rotator control for stacked A3S and A3WS, with power and SWR meter on the top shelf.

Further to the left is a second HF "station" dedicated to phone and digital operation on government and military frequencies. A modified TS-690s with KAM, DSP-9+ and accessories underneath, Ameritron ALS 600 amplifier and an MFJ tuner.

At the far left, visible beneath the swivel-mounted computer monitor are two VHF rigs. A TR751A for voice, and an Alinco DR-1200 with rf concepts linear for packet. There is also a rotator control for a 2 Meter beam.

The whole desk is mounted on a pair of appliance rollers. This mounting allows easy access for cable work. The 11 antenna and control cables enter the house through a plastic fitting designed for laundry dryer vents. Just outside there is an array of Alpha Delta surge protectors. Bronze scrubbing pads plug the vacant space around the cables to keep out the varmints.



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JAMES HICKS, WA3DUH

The tree supporting my 80 Meter antenna had to be cut down. After a year or so, I put up another antenna in a different tree. It would only tune up on phone, and wouldn't tune up on CW. My son, James, WA3DUM, said, "You made a mistake Dad, the antenna's too short." My brother-in-law told me he would come and help me work on the antenna. We put an aluminum ladder up into the tree where the dipole

is fastened to the coax. I went up the ladder, brought down the wire and measured it to get the exact length. It was three feet short. Unbeknownst to us, the wire was hooked in the ladder. We left the ladder set up into the tree while we fastened some wire to each end of the dipole. It still would not tune up. I cut a foot off the wire and tried again, with the same results. I made another cut, removing more wire, and it still wouldn't tune up. We all went outside and I was looking at the wire when my brother-in-law asked, "Jim, will it hurt anything if the wire is touching the ladder?" My answer? "WHAT!?!?" We unhooked the wire and moved the ladder. Lo and behold, it would load up. So, now it was back to the drawing board. I added the three feet of wire I had removed from each end of the antenna and, perfection! Next time I won't have the same problem. I'll use a ladder made of wood.

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TRANSMISSION LINE TRANSFORMERS, by Jerry Sevick, W2FMI

This book stands alone in its coverage of the subject of broadband transmission line transformers. Many configurations of Ruthroff and Guanella types of transformers are described in complete detail, including core selection, conductor types, winding instructions and complete measured performance. Balanced-to-unbalanced (balun) and unbalanced-to-unbalanced (unun) types are included, for matching low and high impedances to an operating impedance of 50 or 75 ohms. — \$34.00 (CA residents add \$2.64 tax).

TRANSCIVER SYSTEM DESIGN FOR DIGITAL COMMUNICATIONS, by Scott R. Bullock

This system-level approach to transceiver system design covers digital communications, building on principles required for military applications and translating those concepts for widely used commercial applications. Topics include: link budget, receiver and transmitter specifications, modulation, spread spectrum, multipath and error probability, jamming resistance, and tracking and navigation applications. — \$54.00 (CA residents add \$4.19 tax).

ADVANCED DIGITAL COMMUNICATIONS, by Kamilo Feher, editor

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W-100-N

Two additional DXers recently completed the requirements to apply for the *Worldradio Worked 100 Nations Award*:

541. Roberto Enrique Otero, LU7DS,
16 Sep 1998

542. Bill Knaus, WA8NPX, 16 Sep 1998

CATZ

No applications for this award were received or processed during the month of September.

Togo (57)

Eleven DXers will activate 5V7A from Togo, in west Africa, using seven one-kilowatt stations and 17 antennas. This will be the third consecutive 5V7A entry to the annual *CQ Worldwide DX Contest* by the *Voodoo Contest Group* at the end of November. During the contest weekend some 15,000 CW contacts are expected.

The group plans a few days of activity before and after the contests and will be active on the bands, including the WARC bands, using their own personal calls. These team members include: Roger Western, G3SXW/5V7A/9G5SX, Steve Wilson, G3VMW/5V7VM/9G5SW, Bob Henderson, G3ZEM/5V7ZM/9G5ZM, Fred Handscombe, G4BWP, Cris Henderson, G4FAM/5V7FA/9G5CH, Andy Chadwick, G4ZVJ/5V7VJ/9G5VJ, Rob Ferguson, GM3YTS/5V7RF/9G5RF, Vince Thompson, K5VT/5V7VT/9G5VT, Jim Mani, K7CE/5V7JL/9G5JL, Mike Fulcher, KC7V/5V7MF/9G5MF, and Lee Finkel, KY7M. Two of the operators were not received their calls.

There is a possibility that the team

may operate from nearby Ghana using the calls assigned to them above. All contacts made with the above calls will be handled by the individual operators except 5V7A. Contacts with 5V7A will be handled via Tom Wylie, GM4FDM.

Eritrea (E3)

Bruce Richards, WD4NGB, reports he has been planning a DXpedition to Eritrea for the last several months and is sponsored by the *Space A DXpedition Group*. The operation will include ten to twelve operators to operate three stations, 24 hours a day. The tentative date for this operation was given as 03-18 November, and should be on right now.

Mayotte (FH)

The Ohio/Penn DX Bulletin reports that Bruno Padey, TK5PB, is scheduled to operate from Mayotte (AF-027) 12-25 November 1998. He plans to be active from a few different islands in this group and will operate SSB only.

Marquesas Islands (FO)

The ARRL Awards Committee has accepted a recommendation of the DX Advisory Committee to add the Marquesas Islands to the *DXCC Countries List*. The effective date will be 2359 UTC on 31 March 1998, the

same as for the recent Temotu Islands addition mentioned in the last issue.

The same also applies for the Austral Islands, which was the third of the new entity DXpeditions in April.

Wallis and Fortuna (FW)

Cedric Baechler, HB9HFN, notes that he will be operating from Wallis and Fortuna (FW) this coming winter, between 23 February and 08 March 1999. Cedric says that his operation will be mostly CW and all bands 10 through 160 Meters. He will be by himself and if anyone is interested in accompanying him contact him at e-mail address: cedric.baechler@com.mcnet.ch. Former operations by Cedric include A35FN and 5WØFN.

Thailand (HS)

Meet Ong-Art "Tom" Khaocharee, HS1GUW, of Thailand, who has an impressive station and collection of awards displayed in his shack. This operator was a recent recipient of the *Worldradio Worked 100 Nations Award*.

And for your information, Tom provided us with a map showing the call area breakdown of his country.

St. Paul & St. Peter Rocks (PYØS)

The Natal DX Group will mount another DXpedition to St. Paul & St. Peter Rocks during the first week in March. The team will consist of four DXers: Randy Hollier, WX5L; Karl Leite, PS7KM; Tino de L Andrade, PT7AA; and one other operator yet to be announced.

This will be an all-band affair with all modes, emphasis on RTTY, 6 Meters and the low bands (80 and 160 Meters). They will sign with ZYØSP on SSB and RTTY and ZYØSZ on CW.

They will leave Natal around the end of February with the operation to commence four days later. The planned budget will be \$11,000, with 70 percent of that allocated to the boat rental. They are presently requesting financial assistance. Funds may be sent to Randy, WX5L, or Karl, PS7KM.

The DXpedition was originally scheduled for January, but due to two other DXpeditions that month this one was postponed for two months.

Christmas Island (VK9X)

The Daily DX notes that Charlie Summers Jr., WØYG, and George Taft, W8UVZ, plan to operate from Christmas Island (OC-002) and Cocos (Keeling) Island (OC-003) from 06-20 February 1999. They will spend

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IOTA

Paul Richards, VK3AJJ, reports that he made some 6,200 contacts during his stay of three and one-half days of operation in August from Gabo Island (OC-196). All QSL requests should be sent to Paul direct and not his QSL manager.

Here is a selection of IOTA island groups that were on the bands during the month of September.


AF-019 IG9/IZ0AEH	Lampedusa Is.	27-29 Sep
AF-030 ZD9/ZS1B	Gough Island	29-30 Sep
AN-006 EM1LV	Galindez Island	13-29 Sep
AS-005 R0/US3IU	Dickson Island	15 Sep
AS-012 JA6LCJ/6	Amakusa Archipelago	12 Sep
AS-012 JA6JPS/6	Amakusa Archipelago	12 Sep
AS-015 9M2TO	Penang Island	15 Sep
AS-023 JA5QJD/6	Amami Archipelago	13-15 Sep
AS-023 JA5AUC/6	Amami Archipelago	12-15 Sep
AS-024 JS6LIH	Yaeyama Islands	30 Sep
AS-024 JN1EVG/6	Yaeyama Islands	13-14 Sep
AS-024 JS6PMR	Yonaguni Island	10 Sep
AS-028 UA0QMU	Kotelney Island	11-29 Sep
AS-045 6K0ZS/5	Ullung Island	10-12 Sep
AS-045 HL5FUA	Ullung Island	12-18 Sep
AS-053 HS0VIK4MRH	Phuket Island	14-17 Sep
AS-069 UA0IAS/0	Ioma Island	08-29 Sep
AS-079 JA5CKD/6	Miyako Island	11 Sep
AS-117 J13DST/3	Awajishima	13-14 Sep
AS-136 BD4ED	Changxing Island	08 Sep
EU-008 GM4ZQP/P	Isle of Mull	17 Sep
EU-009 GM0UKI/P	South Ronaldsay Is.	16 Sep
EU-009 GM4FDM/P	Sanday Island	28 Sep
EU-009 GM0IFM/P	Orkney Islands	13-15 Sep
EU-012 GM4CHX	Shetland Islands	18 Sep
EU-012 GM3SKN	Shetland Islands	11 Sep
EU-016 9A4RV	Brac Island	10 Sep
EU-016 9M2GF	Brac Island	15 Sep
EU-017 ID9/I5FRD	Eolie Islands	14-16 Sep
EU-017 ID9/I4WCK	Eolie Islands	17 Sep
EU-017 ID9/OM2DX	Vulcano Island	10 Sep
EU-030 OZ/DL1SUH/P	Bornholm Island	13-17 Sep
EU-030 OZ/DL5NUA/P	Bornholm Island	09 Sep

EU-031 IC8WIC	Capri Island	29 Sep
EU-031 IC8OZM	Campania Region	17-29 Sep
EU-031 IC8/IK8TWX	Campania Region	10 Sep
EU-032 F5BJW/P	Oleron Island	25 Sep
EU-034 ES0NW	Hiiumaa Island	17 Sep
EU-042 DK0EME	Hallig Oland Is.	17-18 Sep
EU-042 DJ3XG/P	Hallig Groede Is.	10-14 Sep
EU-046 LA1CI	Ringvassoey Island	14-17 Sep
EU-049 SV8/ON4BB	Samos Island	25-28 Sep
EU-049 SV8/ON5JE	Samos Island	26-29 Sep
EU-049 SV8/HA9AX/P	Thassos Island	26 Sep
EU-049 SV8/ON4BB	Samos Island	27 Sep
EU-051 IE9/IN3XUG	Ustica Island	12-16 Sep
EU-055 LA4CM	Karmoy Island	29 Sep
EU-057 DL1KZA	Rugen Island	18 Sep
EU-071 TF7/LX1NO	Westan Island	25-27 Sep
EU-075 SV8/IK3GES/P	Salamina Island	09 Sep
EU-075 SV8SM3CVM/P	Hydra Island	26-27 Sep
EU-084 SM0OIC/5	Roslagen Island	09-17 Sep
EU-096 OH1SR	Korpo Island	09 Sep
EU-100 TK/DJ5MX	Cerbicales Island	10-11 Sep
EU-105 F6CBL/P	Batz Island	09-14 Sep
EU-120 GB4LI	Lundy Island	16 Sep
EU-123 GM0EY/P	Arran Island	27 Sep
EU-123 GM3UTQ/P	Sanda Island	28-29 Sep
EU-124 GW0GHG	Anglesey Island	10 Sep
EU-125 OZ/DK7OM/P	Roeme Island	08-10 Sep
EU-132 SP5PB/1	Wolin Island	14-17 Sep
EU-133 R1ASP	Kotlin Island	08-30 Sep
EU-136 9A/S52DG/P	Krk Island	08-10 Sep
EU-136 9A/S52LD/P	Krk Island	08-10 Sep
EU-164 TK/DJ5MX	Corsica Coastal	25-30 Sep
EU-169 ZA0IB	Sazan Island	08-14 Sep
EU-169 ZA0IS	Sazan Island	11-27 Sep
NA-036 VE7IM	Vancouver Island	17 Sep
NA-041 KL7IFP	Alexander Archipelago	17 Sep
NA-047 VE8TA	Baffin Island	13-18 Sep
NA-048 C6AFV	Bimini Islands	15 Sep
NA-051 VE7TLL	Queen Charlotte Is.	13 Sep
NA-072 3E1DX	Contadora Island	27 Sep
NA-075 VE7BLC	Gulf Islands	10-29 Sep
NA-080 C6A/DL8OBF	Abaco Island	15-17 Sep
NA-080 C6A/DJ3TZ	Little Bahama Bank	15-16 Sep
NA-128 VE2MA/P	Ile aux Grues	18 Sep
NA-173 W2NTP/VE8	Long Island	15 Sep
OC-011 V63KU	Truk Islands	08-18 Sep
OC-046 F05BI	Tahiti Island	14 Sep
OC-059 V63AO	Kosrae Island	09-17 Sep
OC-059 V63CV	Kosrae Island	14 Sep
OC-060 3D2DX	Rotuma Island	09-18 Sep
OC-067 F05NL	Raiatea Island	16-18 Sep
OC-070 YC8VIP	Ambon Island	09-29 Sep
OC-075 YC5XIP	Batam Island	14-15 Sep
OC-075 YC5TML	Batam Island	15 Sep

OC-075 YC5YCT	Batam Island	27 Sep
OC-130 DU8DJ	Mindanao Island	13-18 Sep
OC-137 VK4GP	Bribie Island	18 Sep
OC-137 VK4LV	Bribie Island	08-13 Sep
OC-143 YC6DEM	Sumatra Island	15-25 Sep
OC-143 YC6HDF	Sumatra Island	15 Sep
OC-143 YC5RQT	Sumatra Island	27 Sep
OC-146 YC8NLF	Sulawesi Island	11 Sep
OC-147 YC9YKI	Yapen Island	25-27 Sep
OC-148 YC9AKF	Timor Island	26 Sep
OC-148 YC9MKF	Timor Island	12-30 Sep
OC-151 YC9LQA	Flores Island	11 Sep
OC-156 3D2DA	Tavewa Island	08 Sep
OC-210 YC8RRK	Sangihe Island	14-25 Sep
OC-210 YC8TXW	Sangihe Island	09-30 Sep
SA-008 LU6XQI	Terra del Fuego	26-28 Sep
SA-008 LU8XW	Redonda Island	10-26 Sep
SA-008 LU3KW	Terra del Fuego	17-27 Sep
SA-012 YV7JA	Margarita Island	29-30 Sep
SA-012 YV7A	Margarita Island	08 Sep
SA-016 PR8AA	Sao Luis Island	10 Sep
SA-026 PP5JD	Sao Catarina Island	29 Sep
SA-027 PW5L	Sao Francisco Island	13 Sep
SA-027 PU5U	Sao Francisco Is.	11-18 Sep

Conventions

Don Boudreau, W5FKX, has announced the dates for next summer's New Orleans International DX Convention so mark your calendars for this famous event. It will again be at the Royal Sonesta Hotel on Bourbon Street in the French Quarter and the date this time is 26 and 27 August 1999. To keep up on the latest information on this check with the Delta DX Association website at <http://www.gnofn.org/~w5ru>.



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UG21D N plug for RG8,213,214	3.30
UG83B N jack to PL259 adapter, teflon	6.50
UG146A SO239 to N plug adapter, teflon	5.75
UG255 SO239 to BNC plug adapter	4.75
SO239AM UHF chassis mt receptacle, Amphenol	1.50
UG89C BNC plug	2.09
RG58,223,142	2.09

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1140 RG214/U dbl silver shld mil spec	1.85
1705 RG142B/U dbl silver shld, teflon ins	1.50
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1410 RG58/U mil type 50 ohm 95% shield	.12

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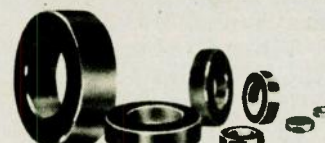


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DX-World-Guide

Franz Langner, DJ9ZB, whom many Dxers will recognize, has come up with a new edition of his *DX-World-Guide*. As in the earlier edition, the Second Edition has 353 pages with a page devoted to each DXCC country, that includes the information for area, location in coordinates and grid, the ITU call assignment, the WAZ zone number, and the licensing administration. Also included are pertinent notes and selected QSL cards, photos or maps.

The size is the typical handbook style and suitable for placing on a bookshelf for easy reference. The price of this little gem is \$25 (cash only) and available from the publisher, Joe Kraft, DL8HCZ, Gruetzmuehlenweg 23, D-22339 Hamburg, Germany. Another price of \$17 plus postage was quoted and available from Rojahn and Kraft Verlag, P.O. Box 620367, D-22403 Hamburg, Germany. The latter source has an e-mail address at funk-telegramm@t-online.de. Or you may order directly from Franz Langner, DJ9ZB.

Antique QSL Department

Here is another selection of antique QSL cards from Leo Haijsman, W4KA, which we hope is a good selection for this month.

The first card provided by Leo is from French Morocco. The call CN8EO was assigned to Donald G. Callaway, who was in the U.S. Navy and stationed there. The date of this contact was 15 December 1949 and was for a 20 Meter PHONE contact.

<p>FRENCH MOROCCO DONALD G. CALLAWAY Navy 214, F. P. O., New York, N. Y., U.S. A.</p> <p>CN8EO</p> <p>RADIO <u>W4KA</u> CONFIRMING QSO OF DEC 15 1949 AT <u>2353</u> GCT UR <u>14 MC</u> FREQ SIGS R.E. <u>3 9 T</u> PSE QSL OM. TNX. 73 DON</p>	
<p>KR6CO</p> <p>APO 239, SAN FRANCISCO, CALIFORNIA Lt. O. C. Fought, W5QKO</p> <p>TO <u>W4KA</u> QSO OF <u>12</u> 1951 ON <u>20</u> UR FREQ <u>14 MC</u> XMIT: <u>BC-610</u> RCVR: <u>SUPER PRO.</u> ANT: <u>3 E BEAM</u> POWER: <u>100</u> W.</p> <p>Tnk for QSO - Pse QSL - Ollie</p> <p>OKINAWA</p>	
<p>OMAN</p> <p>MP4TDM</p> <p>EMIRATE OF RAS AL KHAIMAH</p>	
<p>GEORGETOWN, BRITISH GUIANA</p> <p>VP3LF</p> <p>RADIO <u>W4KA</u> WKO HR <u>24</u> <u>Handwritten</u> ST <u>Handwritten</u> EST YOUR SIGS RST <u>45</u> S.S. CONDX <u>Handwritten</u> FREQ <u>14 MC</u> XMITTER <u>Handwritten</u> RCVR <u>Handwritten</u> ANT <u>Handwritten</u> RECEIVER <u>Handwritten</u> REMARKS <u>Handwritten</u> PSE QSL OM. 73 LOUIS FONSECA <u>Handwritten</u> 33 ROSS ST.</p>	

PHONE was AM rather than the normal SSB.

The second card is with KR6CO of Okinawa, also another military assignment station operated by a Lt O.C. Fought, W5QKO. Notice the operator was using a BC-610 and a Super Pro and fed into a Rhombic. The date of the contact was 24 April 1951

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and this too was a PHONE contact on 20 Meters. A little more than 20 years later Okinawa would become a deleted country when the U.S. returned it to Japan.

MP4TDM was the call of W.S. Rees, operating from Oman (Emirate of Ras Al Khaimah). Leo noted on the back of the card that this one is now United Arab Emirates (A6). Leo worked this one back on 28 September 1972 on 10 Meters using two-way SSB. The QSL manager for this station was Vern, K1DRN.

The last card is with VP3LF of Georgetown, in British Guiana, whom Leo worked on 24 March 1951 on 20 Meter PHONE. Louis Fonseca was the operator and was using a home built 60-watt transmitter and an old Hammarlund HQ129X receiver. A year ago we used another card from British Guiana, VP3CW, also submitted by Leo. This country is now known as Belize (V3).

None of the above operators appear to be active today as they cannot be found in the database. The name of W.S. Rees does not contain enough information to make a successful search.

Outgoing QSL Bureau

Due to the proposed postal increases the cost per pound of QSL cards sent via the ARRL Outgoing QSL Bureau will increase from \$4.00 per pound to \$6.00 per pound. The rate for quantities of 10 cards will remain at \$1.00.

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DX Prediction — December 1998

Maximum usable frequency from West Coast, Central U.S. and East Coast (courtesy of Engineering Systems Inc., Box 939, Vienna, VA 22183). 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 = 122. 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	(16)	11	*17	*11	*17
10	(16)	11	*17	(11)	16
12	27	11	*16	(11)	23
14	34	*14	*28	19	*35
16	*37	(14)	24	17	*39
18	*36	(14)	(22)	13	*40
20	*30	(13)	29	(12)	*40
22	*25	22	33	(11)	*36
24	*21	(18)	31	11	*26
2	*19	(13)	22	11	*21
4	*18	(12)	20	11	*19
6	17	(12)	18	11	*18

WEST COAST

UTC	AFRI	ASIA	OCEA	EURO	SO AM
10	(13)	*14	*17	(11)	17
12	(13)	*14	*17	(11)	16
14	(21)	*13	*16	(11)	*31
16	(26)	*14	*24	(15)	*38
18	28	14	(21)	(12)	*40
20	28	13	28	(12)	*40
22	24	*27	33	(11)	*38
24	*21	*29	*37	(11)	*32
2	*16	24	32	11	*22
4	*15	*17	22	11	*20
6	(14)	16	20	11	*18
8	(13)	*15	*18	*11	*17

EAST COAST

UTC	AFRI	ASIA	OCEA	EURO	SO AM
7	16	*11	(17)	*11	*17
9	16	11	*17	11	*16
11	28	11	*16	17	*24
13	*35	12	*30	*21	*35
15	*38	(11)	26	*20	*38
17	*38	(11)	(21)	15	*40
19	*33	(11)	(26)	13	*40
21	*28	(18)	31	*12	*36
23	*21	(18)	31	*11	*26
1	*19	(13)	22	*11	*21
3	*18	(12)	19	*11	*19
5	*17	(12)	(18)	*11	*18

cents per card, which includes sorting, packaging and mailing to the bureaus of other IARU member societies.

There are two full-time employees at Newington to handle the more than two million QSL cards that show up most years.

At \$6.00 per pound this is still a bargain for ARRL members that use this system. Based on present costs, it costs your League more than \$9.00 per pound to process and mail your cards, so even with the increase the service will still be subsidized by the rest of the membership, just as the DXCC program itself.

QSL Information

We received a note on the QSL card of Jeff St. Pierre, N1HCL/P, requesting information on Mike Smith, VE9AA, who operated CY9AA during his 1997 DXpedition to St. Paul Island, and has not received a card after two to three requests. Mike has turned over the logs to Dennis Motschenbacher, K7BV. His address, according to Buckmaster, is 4357 Appollonia Way, Carson City, NV 89704. Rather than submit another card try an e-mail to Dennis at n7bv@aol.com.

Dennis also reported that he has answered all requests, with the exception of those that did not cross-

check with the log information, did not include an s.a.e., bulk multi-station/call sign in one envelope or other unusual requests. Hopefully, this will be completed by the time you read this.

However, if you sent your request via the VE9 QSL Bureau it is suggested that you resend your request to Dennis either direct or via the 7th U.S. call area QSL Bureau. Very few cards had been received by Mike Smith, VE9AA, via this bureau.

Thanks go to the following contributors for this month's column: DJ9ZB, G3XTT, HB9HFN, HS1GUW, PAØJR, PS7KM, N1HCL/P, K3ZO, W4KA, WD4NGB, W5FKX, K5UR, K7BV, KC7V, NN8Y, NE8Z, Western Washington DX Club (WAØRJY), Northern Arizona DX Club (W7YS), American Radio Relay League (NC1L), WebCluster (OH2AQ), 425 DX News (11JQJ), The OPDX Bulletin (KB8NW), The Low Band Monitor (KØCS), Island / DX News (N5VL),

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World Radio History

The Daily DX (W3UR), QRZ DX (N4AA), and DX News Sheet (G4BUE).

During the recent DX convention in New Orleans Rick Roderick, K5UR, the Delta Division ARRL Director, related an item that appeared in *QST* many years ago involving two DXers during the war in the Pacific. He kindly sent me a copy. The item, "An Unusual Story," was written by Dr. J. Michael Biasi, W4NXD, and involved an American G.I. who happened to be a pre-war DXer who came upon a Japanese radio operator on a deserted island. As he was about to jump him he noticed a copy of *QST* in his hand. You may want to check this one out. See page 53 of the December 1967 issue of *QST*. That little story touched me now just as it did when I read it over 30 years ago. Have a good month of DXing! De John N6JM

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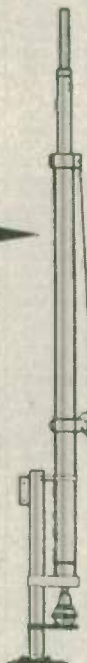
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Roy Harding would not have liked it. Not one bit. And he would have called to let you know he didn't like it. He was that way. But I'm getting ahead of myself. I'm going to relate something I overheard last week but caution you to use this for its training value. The fact that people care enough to get involved speaks volumes because they did their best. As we work through the event, realize these operators had only good intentions in mind. What they lacked was experience.

Several weeks ago I had one of those rare days when I could actually stay home and try to dig through the accumulated stuff in the shack. Between family activities, church, Scouts, Amateur Radio, public service, employment, etc., I'm finding available "goof off" time slots to be rare. So here I am, actually listening to the radios in the shack, and enjoying life.

Along comes a call from a portable operator hiking in one of our beautiful nearby canyons. From experience I know this location is where the terrain is rough and the elevation about 9,800 feet. The portable operator had come upon a hiking accident and wanted to report the incident. The signal was good into the repeater which covers a significant portion of populated Utah — in other words, many could have responded to the call for help.

Almost before the transmission ended, someone keyed the repeater to take the call and a number of details were relayed before the portable station (the one reporting the incident) signed off. Now here's where it gets interesting.

The second station has accepted the responsibility to notify the sheriff's office, which is a good thing. The second station is mobile and chooses to make the report via autopatch, which is a bad thing. To use the autopatch, the station had to switch frequencies within the band.

The call was made to the sheriff's dispatch and all the details the sta-

tion had obtained were relayed. The station explained that the autopatch was time limited and he needed to go. He could not tell the dispatcher a number to call to get additional information (because it was an autopatch, calls can't be returned to the mobile station). The dispatcher asked a number of other questions that the mobile operator didn't have answers to, but said he'd get them and call her back.

Now go with me to the sheriff's frequency on the radio to my left. The dispatcher calls the canyon patrol and relays there is an injured hiker and that they're making their way down to the paved road. The injuries don't seem life threatening and specific assistance was NOT requested. The deputy now, on the air, asks if there was no need for assistance why was the department called. He asks for more information. He wants to know how far up the trail they are. He asks if the victim is male or female, a weight, specifics on the type of injury, and wants to know what gear and training those with the injured party have.

Now the dispatcher has to tell the deputy the call came in "on Amateur Radio" and "I can't call them back." Can you envision the dilemma of the deputy? What does he do with the limited knowledge available? If he chooses to accept that no assistance is needed and the injured hiker is in critical need of help, that would be a

bad thing. On the other hand, if he calls out the search and rescue team and they're not needed, he places them at risk for a rescue response through traffic and takes them away from homes and jobs.

Meanwhile, back on the Amateur side of things, the mobile station is trying to re-establish contact with the portable station in the canyon who reported the incident. There is no response. The mobile station has an excellent signal into the repeater, but now a third station (also mobile) joins the fray and suggests that maybe the portable is not hearing the first mobile so the second mobile now tries — through the same repeater and also with no response. And neither make a return call to the sheriff dispatcher to let them know that they can't make contact.

The deputy, being close to the trailhead, heads to the trail and decides to hike up to look for others with information (possibly hikers also coming out to get help having passed the injured party). He also puts the SAR team on standby, indicating to them to be ready to roll quickly. Fortunately the deputy does find others with additional information and learns that the injured party is making his way down the mountain and should be to the road within 20 minutes. The deputy calls off the SAR team but stays at the trailhead to ensure the injured party makes it out OK.

What could have happened to make this scenario better? Wellman's first law of answering a radio call is to let a base station handle it if at all possible. I've been out in the wilds where another mobile was the only link but a base station is better. The base station has a telephone AND can stay on the radio frequency to gather further information. If you're mobile and no one responds, please respond, but then make a call to see if a base station is there to help — be proactive. Sometimes you need to ask for a specific need to be met to motivate someone to get involved.

The second law is that you keep the reporting party on the radio, if at all possible, until the sheriff (or other agency) has all their questions asked. I agree if the call is a mayday and the plane is headed for the ground, it may be difficult even though the pilot would love to comply and stay in the air, on the radio. If the station must exit stage left immediately, get all the information you can and take careful notes.

The third law is that ONLY stations that can contribute to the event should join into the event. If the re-

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peater output is perhaps not reaching the canyon trail and someone had a beam and could point it correctly and then use repeater reverse, I would say go for it. But another call through the same repeater just doesn't add to efficiency unless the first mobile was on a fringe area or needed to hand the event off to someone else.

In other words, if you can't contribute, simply listen. What would have been a better scenario? The mobile could have listened for a moment longer to allow a base station to respond or could have put out a call for a base station to handle the call. The portable station should have been requested to stay where they were and on frequency until all of the sheriff dispatcher and deputy calls were answered. The dispatcher needed a callback number and with all the Amateur stations potentially in this coverage area, one should have been near a phone to act as callback contact.

Until all questions were answered, the station handling the call should have asked that the repeater use be limited until the emergency was handled. As it happened, other stations (not having heard the original call) kept the repeater busy and perhaps that is why the first portable station didn't stick around, he might have felt the situation was taken care of.

As the event developed, there was confusion as to the call sign and name of the portable station reporting the injury — so this made it difficult if not impossible to get additional information later in the day. What would have happened, for example, had a hiker been reported missing? The sheriff's office might have thought the earlier injury incident could be related and needed to talk to the portable station. But who was he? What was his call sign? Could we find him if needed?

As a final point, when you take a call (and I hope you do get involved) think as if you were the responding party, in this case the on-scene deputy. What kind of information would make your response go well? If you were called to render medical assistance, what things would you need to know? For example if the victim is 100 pounds or 300 pounds makes a big difference in an off-mountain carry. If the victim experienced any trauma, he or she might be disoriented and unable to find the correct trail to the road. If the incident happens in the late afternoon, there is a real chance of hypothermia

at mountain elevations (yes even in summer!).

Now for some training ideas. In your next meeting, simulate some calls. Use simplex and pretend you're reporting various emergencies such as heart attacks, car crashes, burglary in progress, water line break, a building fire, a house fire, a pregnancy ready to deliver, an air crash, etc. Have one person simulate the event, another person take the call and have everyone else act as the responding agency and think of what they need by way of information. Then switch roles. Let everyone play. If you play in a safe environment it's easier to make mistakes or be a little embarrassed. If you miss a key element, you're not endangering a life. Besides, role-playing is a good way to learn.

A second suggestion is to get an experienced dispatcher or law enforcement officer to come role-play at your meeting (after you've done some initial role-play as suggested above.) Have these professionals help hone your information gathering skills. Have them tell you what it means to have a correct address or what delays mean in terms of human life. Have them answer your simulated call. And, if they're willing, put them in the role of a panicked individual — most times they're excellent because they've seen or heard enough to make them good players in this type of a training situation.

Lastly, get out and encourage newly licensed Amateur Radio operators to attend your ARES or public service group. Plan training so they learn and gain experience. It's often the "old" hands that attend ARES but maybe that's because we're not doing a good job of inviting and keeping (by meeting their needs) new members.

But let me close my story and tell you about Roy Harding. He was known to many of us in Casper, Wyoming as KRE1877 and he could generally be found on channel 11. That's right, he was a Citizens Radio operator in the 1960s. And he was as crusty as crusty gets. He was as cranky as cranky gets. But he was always there and if you'd listen he'd teach. I spent many an hour in his mobile home outside of Casper. He was a retired

electrician and he'd tell stories. He had been into radio from before many of us knew radio existed.

Roy didn't want to join the REACT group when it formed and he didn't want to get an Amateur Radio license. He was content with his Johnson Messenger and the five crystallized channels it contained. He made sure his radio operated at peak efficiency and dutifully checked the SWR and audio quality regularly. If anything, he operated to the exacting letter of the FCC rules. (This was in the days the FCC issued CB licenses. You had to be at least 16 and the cost was \$20.)

If you ran out of gas or needed a battery jump, Roy was there. If you needed someone to call the police, Roy was there. He was an example of unselfish service to others. If you took a call, he'd more often than not (if he liked you) call you to critique how you did. I looked forward to his calls because I always learned. He was crusty and cranky but he was never profane and if you did well he said so. His calls were of the helpful kind, not the kind to belittle or make fun of. You always felt that Roy was helping you be better, that you could do better. And because of Roy a number of new radio operators, CB radio operators, did better and learned the joy of service. A police dispatcher once told me that I was almost as good as Roy in getting information when handling a call. It was a high compliment.

Roy and his wife were headed home one evening and were struck head-on by a drunk driver. It didn't kill Roy or his wife but left them disabled to where they required extensive medical care and they moved to a retirement home. Fortunately Roy was able to teach many of us and I think that legacy continues.

I would challenge you "veterans" out there to take care of the newly licensed operators. Be patient. Be kind. Be helpful. If they seek to learn, be there. Allow them to learn by standing by as they take calls or get involved. Be an example. Amateur Radio is what it is today because of what was passed on by others and through the example of others. Become a legend in your own time by helping others to learn the joy of service.

Until next month, best wishes for you and your family. May you have a joyous holiday season and learn the best gift is not necessarily that bright new radio but the gift of caring. Let others know you appreciate them. Take time to say thanks to those that taught you and were patient as you. Tell them thanks by passing on the legacy of service.

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WORLD RADIO, December 1998 37



The Club Huddle

Mike Flaherty
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“Thanks for the memory...” is how Ruth Kwarta, KA9RZG, of the **Wheaton Community Radio Amateurs Club** reported on the 1998 WCRA Christmas party in *Hamletter*. Her story appeared over a front page montage of pictures of the event which featured a visit from Santa.

The holiday season is a good time to step away from all the usual club activities for a day or an evening. A holiday social can range from a major production like a dance to a simple gathering for conversation with friends.

The **Gulf Coast Amateur Radio Club** invited members to bring a spouse, girlfriend, or boyfriend (the prez sez “well maybe not both...”) to last December’s club meeting for Christmas refreshments following a short meeting.

Calling it a holiday party, the **Great Falls Area Amateur Radio Club** went with a mid-January date for its member get-together. The party featured a buffet dinner and entertainment by the Young Peoples Choir.

Tony Ramos, KF6CXL, of the **Yuba Sutter Amateur Radio Club**, gets a Club Huddle award in the most surprised Ham at a Christmas dinner category. His *Valley Ham News* column thanks club members for allowing him the opportunity to let his jaw hit the floor. Seems Ron Murdock, W6KJ, caught the diners’ attention and called Tony to the front of the hall. Ron introduced Tony and handed him the club gavel, saying “it’s all yours now”. Tony, in total shock at learning he was elected president, could only say “I’ve been had!”.

The president of the **Radio Club of Tacoma**, Roger Terwilliger, WA7ANJ, used his beginning of the year column in *The Logger’s Bark* to extend gratitude to past board members for their efforts and thanked

them for a job well done. “They managed to make it look easy most of the time.” The new year is an excellent time for club officers to thank those who keep the club’s gears turning throughout the year.

Terwilliger listed publicity, “newbies”, and involvement as important concerns for him as a club leader. Roger believes Amateurs have an obligation to

present Amateur Radio in a positive manner to the community. He wants to see quality expansion in the ranks of Amateur Radio.

Roger’s last item concerns members getting to know their club and how it works. He sums up by saying “it’s your club, too; we’re only trustees”.

While a meeting notice in a newsletter lets members know the time and place, it’s the promise of an interesting program which gets them to the meeting. Here are some recent programs which meet the criteria.

Someone who agrees is **Anne Arundel Radio Club** president Dick McKelvie, KE3HQ. He writes the cleverly titled column “A Message from HQ” in the *Ham Arundel News*. He states “our meetings have been very well attended this year” and he “attributes this to the fine programs” offered during the year. Dick praised program coordinator John Cummings, N3ZCE, for his effort to bring such fine programs to the members.

McKelvie cited, as an example, the superb Amateur Radio-oriented travel presentation by Rich Boyd, KE3Q. Rich visited the United Arab Emirates to work on the installation of four towers, complete with antennas and feedline. He also set up the Amateur radios and worked the stations during his stay.

The **Las Vegas Radio Amateur Club** also enjoyed a Ham-oriented meeting program. John Vugteveen, W7KNT, showed slides and spoke about taking part in the Kingman Reef and Palmyra Island DXpedition.

The **Southern California DX Club** presented “Tower and Antenna Tips, Tricks and Techniques for ‘The Man’”. Skip Bolnick, KJ6Y, has a reputation for carrying a bag of seeds, planting and watering them, and leaving a great DX antenna structure in place at the end of the day. This presentation would help anyone need-

ing to recable a Tristao or raise a Rohn.

A **North Shore Radio Club** meeting featured “Antennas, Antennas, and Yes, More Antennas!” by Professor Michael Anderson, WB7T. His motto is “if it’s metal, it’ll radiate”. Armed with the best of guesswork, information, and delightful humor, Mike spoke about simple homemade antennas. He showed samples of various antennas at the meeting.

The **Ogden Amateur Radio Club** May meeting featured a presentation on Field Day antennas by Rob Porter, K7WYU. Members found it interesting and of value when Field Day arrived.

Nothing dims the ardor of a group of Hams. In *Tales of the Treasure Coast*, **Vero Beach Amateur Radio Club** president Bill Wrocklage, K1IE, reported 28 members arrived at the county administration building for a club meeting to find they were displaced by a county commission meeting. Secretary Richard Jackson, AB4AZ, saved the evening by finding an available meeting room in one of the Piper Aircraft buildings.

Here’s an idea from **Ozaukee Radio Club** president Leon Rediske, W9GCF, for Field Day. Feature an “Elmer Station” to teach those non-contesting Hams the fun and excitement of contesting. He recommends “getting your feet wet with HF operating, even if you are a Novice or No-code Tech”.

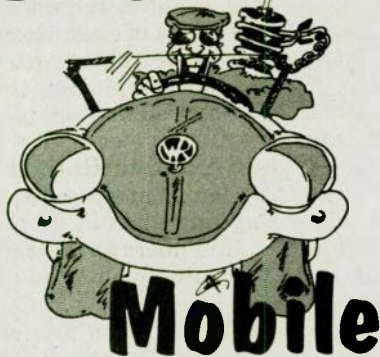
Stan Nelson, KD0G, led off his “The President’s Corner” column with some good news. Stan reports in *Feedback* that the **Johnson County Radio Amateurs Club** is probably involved in more events now than in its history. He further adds “the exciting part is that the newer Hams are taking an active role in these events”.

Nelson points out what every club needs to remember. Recruiting new members and keeping them involved in activities contributes toward having a better club.

Amateurs who enjoy motorcycling should contact the **Motorcycling Amateur Radio Club** for information about its activities. President Ray Davis, KD6FHN, and editor Bonnie Davis, KD6OFQ, publish an interesting newsletter which features stories about using Amateur Radio on motorcycle rides. The club holds meetings in Placentia, CA. Write Ray at 3 Lindberg, Irvine CA 92620-3367.

May everyone have an enjoyable holiday and find that special piece of Ham gear in your stocking. Santa knows handhelds fit nicely but expect the Yagi to be in the garage.

HF



Les Cobb, W6TEE

• 5000 North Avenue, Carmichael, CA 95608 •
• E-mail: lcobb@compuserve.com •

Do you notice that people using cell phones in their cars always wind up ahead of you on the road? Even if you can't see the phone in their hand, you can recognize the distracted driving style. I hope that no one goes into that kind of trance while operating Ham mobile rigs.

When I first went mobile, I learned to concentrate on my driving first, and my operating second. With the tweaking required by the mobile transmitters and receivers we had then, that was a necessity. Rigs are much easier to operate now, but putting driving first in your mind is still a safety requirement.

Most mobile operating today uses VHF FM transceivers which require a minimum of attention. But when you graduate to HF mobile, you need to reaffirm your commitment to your driving. The typical SSB/CW rig has more knobs, dials and meters to distract you than FM rigs. I usually make sure that everything is preset and tuned the way that I want it before I drive off. My rig allows me to electrically lock the tuning knob and to incrementally tune the band with the up and down buttons on the mike. This lets me "read the mail" while keeping my eyes on the road. Operating on a net or other single preset frequency is even safer.

That brings us to our main subject this time, CW mobile operating. A safe driving approach to CW operating is especially important.

Last time we ended with Dick Kovich, KD4YOT, with 6309 DX CW mobile QSOs with 178 countries. He uses a Yaesu FT-890, a Bencher

paddle, and a Perth Outbacker antenna on a mag mount on his Jeep Wagoneer roof. His transceiver is wedged between the seats on the console with the paddle on the top of the transceiver. He works mostly 20 and 40 Meters. Dick knows about ten languages which no doubt helps a lot in working DX. His wife of 40 years thinks he is absolutely off his rocker! He's been a Ham for five years and is sorry that he waited so long to have so much fun! Good going, Dick!

Bob Naylor, President of our local North Hills Radio Club, made some fine comments about his CW mobile operating, so I asked him to repeat them to me by Email for this column:

"You haven't lived until you've worked CW mobile. There's nothing like driving down Hwy 99, pouring down rain, engine noise, tire noise sloshing through the water, spray from 18 wheelers, and working Europe from California on 40 Meters CW!

"I did nothing special with my key. I used an MFJ keyer/paddle combination sitting on the seat of my pickup, hooked up to a Kenwood TS-50, and a Don Johnson screwdriver antenna.

"I have heard negative comments about copying CW while driving but my experience has been SSB is much harder to understand than CW, along with tire noise, engine noise, 60 miles per hour wind whistling around! 500 HZ bandwidth sure helps for CW mobile! Another big advantage of CW mobile is that 50 watts is plenty. When I operate CW mobile I go straight to 30 Meters. You can always find someone who will QSO for a half hour or so. One problem of operating CW mobile is that you will have so much fun that you can miss your turn off so be sure you have an extra gallon of gas or two!"

Thanks, Bob! Here's another one for DXers. This is from Bob Ryder, CE2/N1MFW/M.

"In the early spring of 1997 I shipped my trusty 1991 FORD 4x4, complete with HUSTLER antenna, by ship, to the coast of Chile. When I finally extracted the vehicle from customs, my DX/M began. In the ensuing eight months, I logged over 2,000 QSO's, all but one of them being CW. I had no idea that I would be in demand as a DX station when I started, but it soon became obvious that to handle all the calls, log them properly, and to avoid a major auto accident, I must operate off the road. I found a scenic beach with a seldom used parking spot not far from where

I lived, and was amazed at my success. The rig was a KENWOOD TS450/SAT, keyed by an old VIBROPLEX "Deluxe" bug. 17 and 12M were my favorite haunts, with 40M very active on the days I got up early to snag Asia.

"During that stay in S.A., El Nino was dumping horrendous amounts of rain, causing disastrous floods and in general making life miserable for many Chileans. I was able to make my 4x4 available to relief organizations, and though never called upon to use it, I stood by, ready to go anywhere they asked. Many of my most exotic contacts were during periods of weather that were truly terrible.

"In short, for those that may not have had the thrill of operating from a vehicle, it's worth a try.

"PS: for those expecting QSL cards...please be patient"

Thanks Bob for sharing that with us!

Now we'll change the subject to more general topics. Those of you on the internet may enjoy reading the correspondence on the Mobile/Portable mailing list on <http://www.qth.net>. Much of the discussion is on HF mobile technical subjects. Select the Mobile/Portable topic, then you can read any messages to date in the archives. If you would like to receive all new messages directly by email and participate, you may subscribe from that page.

Quent Galbraith, K5TVC, reminded me of an old stunt to match HF mobile antennas. Loaded whips have an impedance at resonance lower than 50 ohms, affecting SWR. One way to match this is with an L network, consisting of a series inductor and a shunt capacitor at the antenna base. The simpler way, mentioned by Quent, is to use only a fixed capacitor, the inductance provided by a slight retuning of the antenna. He recommends the following capacitor values for Hustler antennas:

80 Meters - 800 pf
40 Meters - 330 pf
20 Meters - 100 pf
15 Meters - 50 pf
10 Meters - none

The best value will change with antenna type. His capacitors are on alligator clips to allow changing bands. This same subject came up later on the Mobile/Portable mailing list.

Next time we will talk about RV mobile, a subject popular in my mail. Let me know about your HF RV operating, if you haven't already.

73, Les

Computers & Basic Stuff

C.H. Stewart, KD5DL
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BASIC Data

A number of years ago, when I was still serving in the Air Force, a friend asked me if I would help him with a BASIC program he was working on. His intention was to build a matrix of star data so he could use a Tandy PC-2 pocket computer as a navigation almanac.

What we came up with instead was something we both agreed was much better: a program that computed star locations based on information stored in DATA lines. My version of the program required navigational star numbers be used to locate the right stars, and I was able to modify the program slightly so my friend could use actual star names to do the same thing.

Another time we collaborated on a mission planning program. Our bosses were forever having us plan "what if" missions to various locations around the world: things like "Should we go to Copenhagen first then to Oslo, or would it be better the other way around?"

Again, DATA lines came to our rescue. We wrote a simple BASIC program, consisting mostly of DATA statements, and that's where we put the names of world airports and their latitudes and longitudes. Then we let our bosses do the "what if" work on their own.

DATA statements are perhaps the most flexible and versatile of BASIC's functions. Over the years you've seen me use them to store parameters for ferrite toroidal cores, "didah" information for a Morse Code generator, information pertaining to antenna performance curves, and more. It seems there is very little DATA lines cannot do.

If you have need to have a look-up table in a program, and the information you are looking up doesn't change, then it may be best to store the information in DATA statements.

DATA works with two other important commands: READ and RESTORE.

READ does just that, it reads things in the DATA lines. Each time a piece of information is read, a program pointer, or flag, "remembers" where in the data lines the information came from. If the data is not what the program is looking for, the program can direct the next piece of data be read, and the flag advances to it. When the flag reaches the end of the DATA elements an "OUT OF DATA IN LINE xxx" is displayed.

However, and this is important, the flag begins the next data search from where its last search ended unless you direct it to start somewhere. In other words, if you were searching the alphabet for the letter "R," then searched it again for the letter "C," the computer would return a "DATA NOT FOUND" message, since it began the second search at the flagged "R" instead of returning to the beginning.

RESTORE fixes the problem. Whenever RESTORE is encountered in a BASIC program, the flag is canceled and data can be read from the beginning again. Appending a line number to the RESTORE statement will invoke the flag again, but send it to the files beginning at that line number.

In fact, you can use the RESTORE <line number> trick when you can have many different kinds DATA files in a single program. It might be that you want to wind toroid coils for a circuit and want your program to give you the best choice of core, wire and number of turns for a specific frequency range. The core data can be

kept in one set of DATA statements, wire data in another, and frequency data in a third, with each group accessed by its own RESTORE <line number> statement.

Another oldtimer's trick was to group all DATA lines near the beginning of the program (although most published listings had them near the end). The theory was the READ command would always start searching for DATA beginning with line 0, and it was a waste of time to search all the way through all those non-DATA lines to look for the pointer flag.

Not a bad idea in the days of the relatively slow Commodore 64s and Apple IIs, and it certainly seemed to make our PC-2 and PC-3 star navigation programs run faster with DATA at the beginning. But with today's computers running 100+MHz processors it should make little difference where you put the DATA lines.

This month's BASIC listing illustrates just one way to use DATA statements in a search routine. In this case, each pair of DATA elements consists of a DXCC prefix and the country to which it is assigned (for brevity our listing includes only the first and last DATA lines; you can add the others on your own once you see how it's done).

The program actually begins at line 1000, where you are prompted to enter a call sign prefix. Line 1010 uses the RESTORE statement to set the pointer flag to the beginning of the data field and line 1020 reads the first two pieces of data into variables B\$ and C\$.

You'll notice that the last two entries in the data field are "999" and "999." These are "catch" prefixes; if we get to them without finding a match to our input variable we know what we're looking for is not in the list. Line 1030 catches the first "999,"

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telling us the prefix we're looking for was not found, and redirects the program to line 1060. Doing so avoids the "OUT OF DATA" message we'd otherwise get if the program tried to look beyond the two 999s.

Line 1040 compares the B\$ field with A\$, our input prefix. If the two match, the program prints both B\$, the prefix, and C\$, its country, to the monitor screen. The program is directed back to its beginning to await another call sign prefix input.

If B\$ does not equal A\$ in line 1040, the program skips to line 1050, which directs it back to line 1020 to READ the next B\$/C\$ pair in the data field. This keeps happening until a B\$/A\$ match occurs, or until the 999s are encountered.

Lines 1060 and 1070 simply offer options to continue with another search, or to quit. If we entered 3VAT as a prefix, and got the "PREFIX NOT FOUND" message, we might want to enter it again, shortened to three characters. If the three-character prefix wasn't found, try shortening it to the first two characters, and so on. In this case, "3V" would trigger the program to respond with "3V BELONGS TO TUNISIA."


```

10 CLS; REM DXCCLIST.BAS, BY KD5DL 12/98
20 DATA 1S, SPRATLY ISLAND, 3A, MONACO, 3B6, AGALEGA AND
    ST. BRANDON, 3B8, MAURITIUS, 3B9, RODRIGUEZ ISLAND
(Continue adding your data listings here...)
990 DATA ZP, PARAGUAY, ZR, SOUTH AFRICA, ZS, SOUTH
    AFRICA, ZS8, PRINCE EDWARD AND MARION ISLANDS, 999, 999
1000 PRINT: INPUT "WHAT CALLSIGN PREFIX ";A$
1010 RESTORE
1020 READ B$, C$
1030 IF B$="999" THEN PRINT: PRINT "**THAT PREFIX NOT
    FOUND**": GOTO 1060
1040 IF B$=A$ THEN PRINT B$;" BELONGS TO ";C$: GOTO 1000
1050 GOTO 1020
1060 INPUT "DO ANOTHER OR QUIT (A/Q) ";A$: PRINT
1070 IF A$="A" THEN 1000 ELSE END
    
```

You'll have to find your own countries list — there's not enough room to publish one here. You might want it to be an abbreviated list; whatever you want to make for your own needs.

If you copy the program and have the patience to add all the prefixes and countries in the DXCC list, you'll

see the DATA far exceeds the eight working lines of the basic program. But, in the end, you'll have a nice little program to help you identify those "rare ones" when you hear their call sign on the air.

That's it for now. Until next time stay radio active. 

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e-mail: nancy@tir.com



Many of the people entering Amateur Radio today are folks who have been out of a school environment for many years. We have forgotten how to study! When you're in school, you have a structured curriculum to follow. You know you are going to have French for an hour a day and math for an hour. We accept the schedule without realizing it's the constant exposure and repetition day in and day out that's allowing us to learn new subjects and improve our skills. After you graduate and are in the real world, you are on your own. Things like earning a living, supporting a family, running a household take priority. This is how it's supposed to be, but it leaves very little time for leisure activities. When we decide to try something new we squeeze in evening classes, maybe once a week. Unfortunately, once a week won't make us proficient with a skill such as Morse code. This leads to frustration, imaginary plateaus and discouragement.

What can we do about this? First you have to realize that you are going to need to take time out of every day to reinforce your knowledge of Morse code until it becomes second nature to you. This encompasses every thing I have said before about "The Theory Of Overlearning." Second, you can find "fun" ways to incorporate code in to your life. Get the family involved. Kids enjoy learning Morse code because it's like a secret language. They will love showing off how easy it is for them to learn while your old brain is still stumbling along! Spouses even catch the code bug when it's presented in a positive way. I've heard from several Hams whose spouses have picked up on the code

while over-hearing the practice sessions. Don't complain and g r u m b l e about having to practice. Make it seem appealing and fun — a challenge, not an obstacle. You might even surprise yourself with the difference having a good attitude makes.

Another way of incorporating code practice into your day is to get a computer program. There are pros and cons to using computer code practice programs. On the down side, you have to know how to type. If you don't know how to type, you'll be hunting and pecking at the keyboard, getting more frustrated than you were before you started. But if you do know how to type, or don't mind learning both typing and code at the same time, code programs can be a lot of fun. Some code programs have games built in them like *Codemaster V* available from Milestone Technologies. It makes the time go by much quicker when you're playing an interactive arcade-style game, trying to save your city from the MorseMonster!

In my previous column, I asked if anyone knew of code programs for the Mac computer. Bruce Graves, KA1TWX, wrote and told me about the web site of WD1V. It is chock full of Mac info and well worth a visit. The URL is www.mv.com/ipusers/wdlv/. David Ruth, KC2AFK, says there are a few on the QRZ page www.qrz.com. Click on the link that says "Shareware."

Diane Cooperman, AA3OF, wrote: "I learned the code primarily by using DOS computer code programs. I used two different programs — Morse Academy and Super Morse. I origi-

nally started learning the code because I wanted to upgrade from a Technician to a Tech Plus license. One thing lead to another, though, and I'm now an Extra.

"I like the programs because you can start at the very beginning, learning to associate a sound with a letter. You can practice as often as you want, in small chunks of time. You can also take as many practice tests as you like. I found it encouraging as I passed more and more practice code tests, and decided I was ready when I passed every practice code test that I took.

"I liked using two different programs because each generated a slightly different format of QSO for the practice code tests. Getting the different format helped prevent me from anticipating too much. It's that anticipation problem that I think is the biggest drawback to practicing with software. The software generates the practice tests from a script. With the versions of software available a couple of years ago, scripts were very limited. It's too easy to anticipate when you know you'll always get the format of 'my name is _____,' then 'the home QTH is _____,' 'the rig is a _____' with 'a _____ antenna at _____ feet.'

"Real code tests at VE sessions are quite different from the scripts generated by the practice software. I remember that my 13-wpm test talked about the family's pet, the spouse's job, and other non-script items.

"Another consideration is the code sent over the radio sounds different than the crisp clear tones generated by a computer. I had a practice code tape that was difficult for me because the code sounded so muddy and dull. Code practice sent over W1AW is a valuable adjunct to the software because it will help you deal with the variation in sound of the code. In real life, the code at the VE tests sound more like 'radio' or 'code tape' code than 'computer generated' code. This can hang a person up if they're not expecting it. I would recommend the computer code software to anyone who wants to work with code."

Another enjoyable way to increase your code speed is to get on the air and use Morse code. Straight Key night is held annually the evening of 31 December-01 January. Straight Key Night gives you the perfect opportunity to have some low pressure and enjoyable on-the-air practice. Jot down a few notes beforehand, in case you get the jitters and can't think of anything to talk about. Mention your

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hobbies, family, whatever comes to mind. You never know what will spark a friendship.

I still keep in touch with Don Monger, KC4UUG, whom I met on Straight Key Night almost ten years ago. I happened to mention a satellite going across the sky during our QSO and he replied that he is a retired astronomer! We had such an enjoyable chat that we made a sked (a regularly scheduled on-the-air meeting). I remember when I met John Harper, WB9CIS, for the first time — somehow the subjects of Volkswagons came up in the conversation and before we knew it, an hour had gone by.

These are just two examples that illustrate how practicing on the air is


painless and can result in making new friends. I look forward to Straight Key Night every year. Look for me in the Novice band on 40 Meters or on 80 Meters in the evening.

No one says it like somebody who's "been there, done that" because if they've done it — you can too! I'll leave you this month with words of encouragement about *The Overlearning Method* from Lyle Lucas, KB9ORB: "Dear Nancy, I first heard you at the 1997 Dayton Hamvention town meeting. You and Fred Maia had a debate about CW. At the time I was working on upgrading. I must admit I hated CW because I really would not use it. All I wanted to do is to talk below 30 megs.

"But after listening to you, I got a

renewed interest in CW. So I kept studying and passed my 20 wpm and became an Extra! Now I have been overlearning my CW letters. Yes, it is boring but just like learning anything, it takes practice, practice, practice! I did find out there are some letters that I do have problems with.

"I do short, frequent practice sessions and I've found out it really works! Well, I got to practice again. Keep up the good work. CW really is fun!! 73, Lyle Lucas, KB9ORB"

Please share your success and not so successful stories with me. Contact me by e-mail (nancy@tir.com) or Nancy Kott, P.O. Box 47, Hadley, MI 48440. My web page is at <http://www.freeyellow.com/members2/nananne>. 

Inside Amateur Radio

The following story has been excerpted from *Inside Amateur Radio*, by the late Lenore Jensen, W6NAZ. The book can be purchased from Worldradio Books, P.O. Box 189490, Sacramento, CA 95818. Price is \$9.00 plus \$2.00 shipping and handling. CA residents please add 70¢ sales tax.

Santa in Japan

LENORE JENSEN, W6NAZ

In 1951, Maxine Willis, W6UHA, was swapping news with her American servicemen friends in Japan, Navy Chief Bill Vunniff and Marine Master Sergeant F. A. Martin. Amateur Radio kept them from becoming homesick as they talked "all over stateside."

Maxine was a favorite contact; her signal from Los Angeles was always loud and her personality was like "the girl next door."

From her point of view, hearing news from across the Pacific and learning about Japanese lifestyles was fascinating.

She remembers, "One day Martin was very interested in knowing his signal report. He explained they had just set up their station at a new location, on the grounds of an orphanage. Naturally, I was very curious about the children and who ran the home.

"I learned it had been established as a private project by an elderly couple as a gesture of thanks for the safe return of their own three sons from the late war.

"Now there were 51 charges, all boys, ranging in age from 10 to 16 years old. The orphanage was an old family residence with no windows, little or no heat and almost barren of furniture. The total amount of money

received from the government was less than three U.S. dollars a day.

"A few days later, Martin told me that they'd collected \$100 from their buddies. What's more, the fellows had installed a window in the old building and given the remainder of the money to the old couple in charge.


"I was touched by his story and that very evening, when I attended a meeting with 25 other YL operators, I told the gals about the orphanage. Everyone wanted to help and we decided to collect clothing and toys. We wrapped them all individually and shipped the packages to Japan in care of Martin.

"He wasn't one to do things halfway. Would you believe that on Christmas Day he managed to engage a helicopter and had it land a Santa Claus with all packages right right on the grounds of the orphanage!

"But over here it was Christmas Eve. We gathered at my home and crowded into the radio room. I'd been told to call him on the air at a certain time and sure enough, we could hear all the excitement as Santa handed out the packages. Regulations would not permit the children to speak over the microphone but we could hear them very well in the background. It was a thrill.

"It wasn't until later that Martin told me the topper of the story. He and Bill had forgotten to bring along wire for the antenna.

"But, ingeniously, they found a ball of twine, soaked it in salt water, strung it up between trees and managed to put a very readable signal into Los Angeles.

"It was a charmed Christmas, indeed." 

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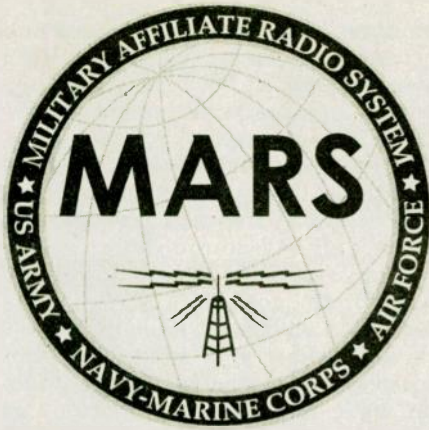
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A rmy MARS is pleased to announce it is again sponsoring the eighth annual Operation: Holidays. Several opportunities to participate are new this year and all MARS members from all services, all amateurs, and, indeed, all Americans are invited to join in the spread of good cheer to our service personnel during this holiday season.

For those readers who are new to this column, Operation: Holidays is the period of time from mid November until after the New Year during which Army MARS encourages everyone to use our message services to contact a military person who will not be home for Thanksgiving, Hanukkah, Christmas or New Year's. This year, those messages of good cheer can be sent to "Any Servicemember." There are those soldiers, sailors, marines, and airmen who may not have

family with whom to share the holiday season. This can be a very lonely time for them.

To send a message, which we call MARSgrams, either the recipient or the sender must be a military person (active or retired) or other qualified government civil servant or MARS member. He or she need not be deployed to an overseas location.

The MARS member accepting the message must have the full name and address of the sender, the full name and address of the recipient with telephone number if still in the United States. A message of 50 words or less could make someone very happy.

In order to have the message enter the MARS Message Traffic System, it must reach a MARS member. Most Amateur Radio Clubs have at least one member who is an active MARS member or someone who knows a MARS member. Contact the local radio club and determine whom to contact. Notices will be placed in some local papers and bulletin boards with this information as well. In the absence of a MARS member, the message may be given to a Ham who can transmit it to a MARS station via the civilian National Traffic System (NTS). If none of these sources of transmission are available to you, send them to me at the above e-mail address. Try, however, to use a local operator.

To spread good cheer to Any Servicemember, use the following addresses:

For Any Service Person stationed in Europe, the Middle East, or Africa, use: USO Regional Office Atlantic, ATTN: Any Servicemember, Unit 29623, APO AE 09096 USA.

For Any Service Person serving in Operation Joint Guard (Army, Navy, Marines ashore), use: Any Servicemember, Operation Joint Guard, APO AE 09397-0001 USA.

For Any Service Person serving in Operation Joint Guard (on board a ship), use: Any Servicemember, Op-

eration Joint Guard, FPO AE 09398-0001 USA.


This information has been generously provided for this article by Daniel Wolff/AEM1AM, the Affiliate Coordinator for Army MARS in Europe. He is located in Germany as is the Army MARS Gateway Station which serves all locations in Europe, the Middle East, and Africa. Thank you, Daniel, for all the help in gathering this information.

MARS operators in both Germany and Korea are planning very special Christmas programs for the children of military personnel who are stationed overseas. Operation Santa Claus has been an outstanding program in both command areas and this year should be no exception. Children will be able to talk directly to Santa by radio. The Gateway stations have set up direct lines to the North Pole and promise fine propagation so that Santa will hear every word and know every request. Many other activities are in the planning stages for the joy of the children. The joy the MARS operators see in those young faces translates to memories and warmth for the operators themselves.

All of us have an opportunity to bring the same element of joy to the adults, children at heart during holidays as we all are. All of us can encourage the sending of messages by the public via radio. This one activity can do much to open that mysterious radio world to the non-Ham public as well as bring joy to both the sender of a message and its recipient. All of us can send messages ourselves.

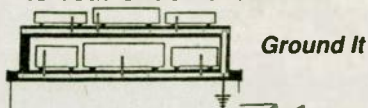
Welcome to Operation: Holidays. Join us in spreading the holiday glow throughout the world.

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ARIZONA

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. 5/99

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). 2/99

Tucson Repeater Assoc., P.O. Box 40371, Tucson, AZ 85717-0371. Meets 2nd Sat./monthly, 7:15 p.m., Dept. of Emergency Mgmt., 130 W. Congress. Net Thurs. 7:30 p.m. 146.82(-), 146.88(-), 147.08(+), 448.550(-) & 145.15 Packet. 3/99

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: call 146.835(-). 3/99

Amateur Radio Club of Anderson, (ARCA). Meets 2nd Thurs./monthly, 7:30 p.m. Amer. Legion Post #746, 1709 Bruce Dr., Anderson, CA. Net every Tue., 7:30 p.m. on 146.64. <http://www.snowcrest.net/bgorski/index.html> 10/99

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. 8/99

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. 5/99

Contra Costa Communications Club, Inc., WD6EZZ/R. P.O. Box 20661, El Sobrante, CA 94820-0661. Meets 2nd Sun./monthly (except May & Dec.), 0630, Baker's Square Rest. in Richmond, CA. Info: E. Caine, KA6OFF, (707) 996-0962. 1/99

Downey Amateur Radio Club Inc., W6TO. Meets 1st Thurs./monthly, 7:30 p.m., So. Middle School cafeteria, 12500 S. Birchdale, Downey, CA. VHF net W6GNS rptr. 146.175(+ Thurs., 7:30 p.m. 5/99

East Bay Amateur Radio Club, Inc. Meets 2nd Fri./monthly, 7:30 p.m., Albany Sr. Cntr., 846 Masonic Ave., Albany, CA. Info: S. Primbsch, (510) 741-8227. 145.11(-) MHz. 11/98

Fresno Amateur Radio Club. Meets 2nd Fri./monthly, 7:30 p.m., Ernie Pyle School, 4140 N. Augusta, Fresno, CA. 146.94(-) 223.94(-). 11/99

Golden Triangle Amateur Radio Club. P.O. Box 1335, Wildomar, CA 92595. Meets 4th Mon./monthly, 7 p.m., Sharp Health Care, 25500 Med. Cntr. Dr., Murrieta, CA 92562. Rptr: KE6UES 146.805(-) PL 100. Info: Norb Dean, AD6F, (909) 767-0449. E-mail: norbjudy@pe.net 7/99

Livermore Amateur Radio Club, (LARK). Meets 3rd Sat./monthly, 9:30 a.m., City Council Chamber, 3575 Pacific Ave., Livermore, CA. Net Mon. 1900 on 147.12(+). For info: LARK Secretary, P.O. Box 3190, Livermore, CA 94551-3190. (510) 846-6513. 1/99

Marin Amateur Radio Club (MARC). W6SG. Box 9456, San Rafael, CA 94912-9456. Meets 1st Fri./7:30 p.m., Kaiser Hosp., Bldg. 2, Terra Linda, CA. (except Dec.; Sun. a.m. Club at Alto Bldg., 27 Shell Rd., Mill Valley. 9/99

Motorcycling Amateur Radio Club. Meets 2nd Sat./monthly, 8 a.m., Lake View Cafe, 2099 E. Orangethorpe, Placentia, CA, at 91 Fwy/Lakeview. Info: Ray Davis, KD6FHN, (714) 551-1036 or (714) 551-2010. 3/99

Mount Diablo Amateur Radio Club. P.O. Box 23222, Pleasant Hill, CA 94523. Meets 3rd Fri./monthly, 8 p.m., Our Savior's Lutheran Church, 1035 Carol Lane, Lafayette, CA. Net Thurs. 7:30 p.m. on 147.06(+ PL 100Hz. Info: (510) 932-6125. 8/99

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. Contact Linda Johnson, KE6HWE, donandlinda@telis.org (530) 273-2008. 8/99

This month ... Pioneer Radio Operators Society, from East Aurora, NY, has won an MFJ Antenna Analyzer to share with its members. The club's name was selected at random from our "Visit Your Local Radio Club" listing.

North Hills Radio Club. Meets 3rd Tue./monthly, 7:30 p.m., Carmichael Elks Lodge, 5631 Cypress, Carmichael, CA. Nets 8 p.m. Tue., Wed., Thur., 145.190(-) PL 162.2 and 224.400(-). For info contact: Bob, AC6HF, (916) 966-3654. E-mail: ac6hf@juno.com or <http://www.ns.net/~NHRC> 3/99

Orange County Amateur Radio Club. Meets 3rd Fri./monthly, 7:30 p.m., Orange County Red Cross, 601 N. Golden Circle, Santa Ana, CA. 146.550. Contact Bob Buss, KD6BWH, (714) 534-2995. 2/99

Poinsettia ARC. Meets 1st Thurs./monthly, 7:30 p.m., First Christian Church, Telegraph Road. & Teloma Drive, Ventura, CA. For info: George Myers, KA6WZR, (805) 644-1131. 4/99

River City A.R.C.S. Meets 1st Tues./monthly, 7 p.m., SMUD Bldg., Don Julio at Elkhorn, Sacramento, CA. License classes offered. For info: (916) 483-3293. 9/99

Sacramento Amateur Radio Club. Meets 2nd Wed./monthly, 7 p.m. Sac. Blood Ctr., 32nd St. & Stockton Blvd., Sacramento, CA. Info net at noon on rptr. W6AK/R 146.91(-). Steve Cates, KC6TEV, (916) 391-7341 or Les Ballinger, WA6EQQ, (916) 393-4775. 2/99

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 Restaurant, 1000 Howe Ave. For info contact Paul Wlf, W6RLP (916) 331-1830. 12/98

Santa Clara County Amateur Radio Assoc., (SCCARA) W6UW & W6UU. P.O. Box 6, San Jose, CA 95103-0006. (408) 249-6909. Meets 2nd Mon./monthly, 7:30 p.m., Hewlett-Packard, Bldg., #48, 19483 Pruneridge Ave., Cupertino. Net all other Mon., 7:30 p.m. W6UU/R 146.385(+), 442.425(+ PL 107.2. 5/99

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. 3/99

South Bay ARC. P.O. Box 536, Torrance, CA 90508. Meets 3rd Thurs./monthly, 7:30 p.m., Torrance Memorial Hosp., 3330 Lomita Blvd., Torrance, CA. Talk-in on WB6MYD rpt. 244.38(-). Info: (310) 328-0817. 8/99

Southern California Six Meter Club. P.O. Box 10441, Fullerton, CA 92635. USB Net Tue., 8:00p.m., 50.150. FM Rpt. Net Thurs., 7:30 p.m., 52.86/52.36 tx. FM Smpix, call freq. 50.300. Net Sun., 10 a.m. 50.40. 4/99

Southern Sierra ARS. Meets 2nd Thurs./monthly, 7 p.m., Veteran's Hall, 125 East F St., Tehachapi, CA. Contact: Caroline, KD6KMN, (805) 822-5995. 147.06(+), 224.42(-), 145.090(S) Packet. 1/99

Stanislaus Amateur Radio Assoc., Inc. (SARA). P.O. Box 4601, Modesto, CA 95352. Meets 3rd Tues./monthly, 7:30 p.m., Stanislaus Co. Admin Bldg. 145.39(-) PL 136.5, 224.14, 440.225 PL 136.5. 3/99

Tri-County Amateur Radio Assoc. P.O. Box 75, Claremont, CA 91711-0075. Meets: 2nd Mon./monthly, 7:30 p.m., Covenant United Methodist Church, corner of Towne Ave. & San Bernardino Rd. in Pomona, CA. 1/99

Trinity Country ARC. P.O. Box 2283, Weaverville, CA 96093. Meets 2nd Wed./monthly, County School Adm. Bldg. in Weaverville, 7:30 p.m., Rptrs: WA6BXN 146.73(-) PL 85.4, W6HOR 146.925(-) PL 85.4. 11/99

United Radio Amateur Club, K6AA. L.A. Maritime Museum, Berth 84, Foot of 6th St. San Pedro, CA 90731. Meets 3rd Fri./monthly (except Dec.), 7:00 p.m. Monitors 145.52 Simplex 10 a.m.—5 p.m. 8/99

Vaca Valley Radio Club. Meets 2nd Wed./monthly, 7:30 p.m. (Board mtg., 7 p.m.) Vaca Fire Dist. Stn., Vine St. in Vacaville, CA. Rptr. WD6BUS 145.47(-) PL 127.3. Gerald Grossardt, (707) 447-0869. 5/99

Victor Valley Amateur Radio Club. P.O. Box 869, Victorville, CA 92392. Meets 2nd Tues./monthly, 7:00 p.m., Presidio Recreation Cntr., 11100 Apple Valley Rd., Apple Valley, CA. Talk-in 146.94(-), PL 91.5. Net Sun. 7 p.m. 146.94(-). 2/99

Westside Amateur Radio Club. P.O. Box 11092, Marina del Rey, CA 90295. Meets 4th Tues./monthly, 7:30 p.m., West Dist. Red Cross Bldg., 11355 Ohio Ave., W. Los Angeles, CA (VA Cntr. grounds). Net every Tues., 8 p.m. 146.67(-) except mtg. night. Website: <http://www.qsl.net/warc> Voice mail: (310) 917-1100. 7/99

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.zapcom.net/WARS> Talk-in: 145.13(-), PL 103.5. 9/99

Yuba-Sutter Amateur Radio Club, (YSARC). P.O. Box 1169, Yuba City, CA 95992. Meets 2nd Wed./monthly, 7 p.m., The Mall at Yuba City, 1215 Colusa Ave., Yuba City. 2/99

COLORADO

Bicycle Mobile Hams of America. 46 states/6 nations membership. Annual Forum at Hamvention. Net: 14.253, 1st & 3rd Sun., 2000 UTC. Info, sample newsletter: SASE to BMHA, Box 4009-W, Boulder, CO 80306. 2/99

Bolder Amateur Radio Club (BARC). Meets 3rd Tues./monthly, 7:30 p.m., NIST Bldg., 325 So. Broadway, Rm 1107, Boulder, CO. Talk-in: 146.70(-) & 100Hz CTCSS. Info: (303) 380-6540, e-mail: BARC@pobox.com or www.thisistrue.com/barc.html 8/99

CONNECTICUT

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: Bob Dargel, KA1BB, (860) 739-8016. 11/98

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 2/99

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 rptrs. 146.67(-) & 145.33(-), serving all of Pasco County. 11/99

Indian River ARC, Inc., (IRARC). P.O. Box 579, Cocoa, FL 32926-0579. Meets 1st Thurs./monthly, 7:30 p.m., Community Church of the Nazarene, 400 Crockett Blvd., Merritt Island, FL. 3/99

Port St. Lucie ARC. Meets 1st Fri./monthly, 7:30 p.m., St. Andrews Church, Prima Vista Blvd., Port St. Lucie, FL. Contact: Roy Cox, KT4PA, (561) 340-4319. Call in 146.955(-). 11/98

Vero Beach ARC, W4OT. P.O. Box 2082, Vero Beach, FL 32961. Meets 2nd Thurs./monthly, 7:30 p.m., Emerg. Mgmt., Indian River County Adm. Bldg., 1840 25th St. Net Mon., 7:30 p.m. 146.64. 2/99

GEORGIA

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 Wagh St. & Thornton Ave., Dalton, GA. Info: Harold Jones, N4OTC, 706/673-2291. 4/99

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. 8/99

HAWAII

Big Island Amateur Radio Club. P.O. Box 1938, Hilo, HI 96721-1938. 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, Pizza Hut, Puainako Twn. Ctr. 7/99

Emergency Amateur Radio Club, (EARC). P.O. Box 30315, Honolulu, HI 96820-0315. Meets 4th Thurs./monthly, 7 p.m., Lincoln Elem. Sch., 615 Auwailomau, Honolulu. Nets: nightly 7:30 p.m., 146.88 & 146.80. Rptrs: 146.76(-), 146.80(-), 146.88, 146.98(-), 146.94(-). Info: (808) 833-6944, WH6CZB. 11/98

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/ 8/99

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. 8/99

Dupage Amateur Radio Club, (DARC). P.O. Box 71, Clarendon Hills, IL 60514. Meets 4th Mon./monthly, 7:30 p.m., Holy Trinity Church, SE corner of Cass & Richmond, Westmont, IL. Net Sun., 9 p.m. on 145.25. W9DUP repeaters 145.25(-) 107.2PL, 442.55(+) PL 114.8, 224.68(-). Info: (630) 985-9256 6/99

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. 8/99

Hamfesters Radio Club, W9AA. P.O. Box 42792, Evergreen Park, IL 60805. Meets 1st Fri./monthly, 8 p.m., Crestwood Civ. Ctr., 139th & Kostner, Crestwood, IL. Nets: Sun. (local) 0100 UTC, 28.410 MHz; Mon. 9 p.m. 146.43 S., Packet Mailbox 145.65 MHz. Info: (312) 974-3291. 1/99

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(-). 6/99

The Starved Rock Radio Club, W9MKS. P.O. Box 198, Tabor St., Leonore, IL 61332. Meets 1st Mon./monthly, 7:30 p.m. Rptr. net 7 p.m. Wed./wkly., 147.12(+). 1/99

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, K9ZZE, (630) 365-0213, k9zze@aol.com 8/99

INDIANA

Land of Lakes ARC. Meets 4th Tues./monthly, 7 p.m., Steuben Co. Annex Bldg., Angola, IN. For info: Theresa J. Limestahl, KB9NNR, (219) 495-5403. Call-in 147.180 PL 131.8. E-mail: llarc-k9hd@yahoo.com 7/99

MAINE

Androscoggin Amateur Radio Club. Meets 1st Wed./monthly, 7 p.m., Auburn Police Station, 1 Minot Ave., Auburn, ME. Info: (207) 782-8699. 11/98

MASSACHUSETTS

Quannapowitt Radio Assoc., Inc. 6 Savin St., Burlington, MA 01803. Meets 3rd Thur./monthly, 7:00 p.m. at Wakefield Public Library, 345 Main St., Wakefield, MA, Sept. to May. Info: Jim Chamberlain, N1AKG, (781) 944-5098. 3/99

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: Mark Hinkleman, NU8Z, (517) 423-5906. 4/99

Genesee County Radio Club, Inc. Meets 3rd Tues./monthly, 7:30 p.m., Genesee Area Skill Center, Torrey Rd., Flint, MI. (810) 655-4360. 3/99

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. 10/99

MINNESOTA

St. Cloud Amateur Radio Club. Meets 3rd Thurs./monthly, 7:30 p.m., Radio Club Bldg., 401 4th St. N., Waite Park, MN 56387. Info: (320) 255-1410, 146.94 or 147.015 or www.w0sv.org/ 2/99

MISSISSIPPI

Jackson Amateur Radio Club, Inc. Meets 3rd Thurs./monthly, 7 p.m., Am. Red Cross Bldg., Riverside Dr., Jackson, MS 39202. 11/99

NEVADA

Frontier Amateur Radio Society, (FARS). Meets: 2nd Sat./monthly, bkfst. mtg. 8 a.m., Country Inn, SE cor. W. Sunset, Valle Verde, Henderson NV. Club info: Jim Frye, NW7O, (702) 456-5396 or Bill Scarborough, WA6ASI, (702) 269-9551. 8/99

Wide Area Data Group, Inc. P.O. Box 3132, Sparks, NV 89432. Meets 1st Sat./monthly, 8:30 a.m., Bonanza Casino/Restaurant, 4720 N. Virginia, Reno. Info: (702) 356-8200. Call on 147.30(+) MHz. 5/99

Sierra Intermountain Emergency Radio Assoc., (SIERA). Meets 2nd Tues./monthly, 7:30 p.m., Carson Valley United Methodist Church, 1375 Centerville Ln., Gardnerville, NV. Contact: George Uebele, WW7E, (702) 265-4278, 147.330 MHz. 11/98

NEW HAMPSHIRE

Great Bay Radio Association, W1FZ. P.O. Box 911, Dover, NH 03820. (603) 749-2970/332-9107. Meets 2nd Mon./monthly, 7 p.m., Rochester Community Ctr. Talk-in: 147.57. 1/99

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. 10/99

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. 6/99

The Garden State Amateur Radio Assoc., (GSARA). P.O. Box 34, Fair Haven, NJ 07704. Meets twice monthly/1st & 3rd Wed., 8 p.m., Bicentennial Hall, Cedar Ave. (off River Rd.) Fair Haven, NJ. Contact: Bob Buus, W2OD, (732) 946-8615. 12/98

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. 8/99

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 Company, 499 Zimmerman St., No. Tonawanda, NY. Talk-in: 146.955(-) rptr. W2PVL. 11/98

Genesee Radio Amateurs, (GRAM). N.Y.S. Civil Defense Ctr., State St., Batavia, NY 14020. Meets 3rd Fri./monthly, 7:30 p.m. 147.285(+) W2RCX. 1/99

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) 260-2022. 2/99

PROS, Pioneer Radio Operators Society. Meets 1st Wed./monthly, 7 p.m., Sardinia Town Hall, Savage Rd., Sardinia, NY. Net 9:15 a.m. Thurs. 3853 MHz. 3/99

Suffolk County Radio Club, (SCRC). Meets 3rd Tues./monthly, 8 p.m., Bohemia Rec. Ctr., Ruzicka Way, Bohemia, NY. Talk-in: 145.21(-) rpt. Info: W.S. Black, KB2YAP, (516) 289-5587. 4/99

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 WB2ZII/R 147.06(+) PL 114.8/2A. 11/98

NORTH CAROLINA

Cape Fear Amateur Radio Society. Meets 3rd Mon./monthly, 7:30 p.m., Methodist College, Fayetteville, NC. Talk-in 146.91/31. Info: Kelly Kanode, N4EWG, (910) 867-4300. 4/99

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(+). Phone: (704) 888-4815. 5/99

OHIO

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. 3/99

Greater Cincinnati Amateur Radio Assn., (GCARA), W8DZ, ARRL SCC, Meets 4th Wed./monthly, 7:45 p.m., Cincinnati Rec. Bond Hill Ctr., 1501 Elizabeth Pl., at Laidlaw Ave., Bond Hill-Carthage. Nets: Mon. 145.27-, Thurs. 1.936 MHz, 9 p.m. Info: http://w3.one.net-rkuns/gcara.html. KBJE (513) 825-2868, W8XS (513) 474-0287. 12/98

Lake Erie Amateur Radio Assoc., (LEARA). Meets at Dimitri's Rest., (Mid-Town Shopping Ctr.), Snow & Broadview Rd., Solon, OH, last Tues./monthly. Dinner at 6:30, mtg. at 7:30 p.m. (R.S.V.P. to Marv Grossman 440/349-8398 for dinner by 11 a.m. day of mtg.) 4/99

Toledo Mobile Radio Association. P.O. Box 273, Toledo, OH 43697; (419) 243-3836. Meets 2nd Wed./monthly, 7:30 p.m., Luke's Barn, Lucas County Rec. Ctr., 2901 Key St., Maumee, OH. 147.270(+) Net every Sun. 8:30 p.m. 2/99

Van Wert Amateur Radio Club, Inc. P.O. Box 602, 1220 Lincoln Hwy., Van Wert, OH 45891. Meets 1st & 3rd Sat./monthly, 8 p.m. Call-in: 146.85(-). 2/99

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: B. Beckman, N8LXY, Pres., 146.73(-), 444.900(+) MHz. 8/99

OREGON

Central Oregon Coast ARC. P.O. Box 254, Florence, OR 97439. Meets 2nd Sat./monthly, & every Wed./weekly, 9 a.m. for breakfast at Lovejoy's/Pier Point Inn. Net Wed. 7 p.m., 146.80(-). Info: 997-2323 or 997-4074. 1/99

Central Oregon Radio Amateurs, (CORA). P.O. Box 723, Bend, OR 97709. Meets last Thurs./monthly, 7 p.m., Bend Sr. Ctr., 1036 NE 5th, Bend, OR. 147.06(+) MHz. Info: (541) 389-7194. 9/99

Keno Amateur Radio Club. P.O. Box 653, Keno, OR 97627. Meets 3rd Thurs./monthly, 7 p.m., Keno Fire Stn. Rptr. 147.32(+)-K7ENO. For info: Tom Hamilton, WD6EAW, Telephone/FAX: (541) 883-2736. wd6eaw@cdsnet.net 11/98

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: W6VDF/R 146.90(+) or (541) 673-2747. 6/99

PENNSYLVANIA

Butler County Amateur Radio Assn. P.O. Box 1787, Butler, PA 16003-1787. Meets 1st Tues./monthly, 7:30 p.m., Boy Scout Cntr., 830 Morton Rd., Butler, PA. Call-in W3UDX/R 147.36(+). Net 10:10 p.m. nightly. 11/98

Mercer County Amateur Radio Club, 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. 145.01. 3/99

TEXAS

Brownsville ARC (CHARRO). Meets 2nd Tue./monthly, 7:00 p.m., Confederate Air Force Hangar, Brownsville Airport in TX. Coffee mtg. Sat./weekly, 10 a.m., Days Inn, Hwy 83 & Price Rd. Talk-in on 147.040(+). 4/99

VIRGINIA

Mt. Vernon Amateur Radio Club, (MVARC). Meets 2nd Thur./monthly (except Dec.), 7:30 p.m., Mt. Vernon Governmental Cntr, 2511 Parkers Ln., Alexandria, VA. Contact: Bob, KT4KS, (703) 765-2313 or 146.655. 10/99

Southern Peninsula Amateur Radio Club, W4QR (SPARK). Meets 1st Tue./monthly Salvation Army Community Bldg., Hampton, VA. Repeater 146.73(-), 449.55(-). VE Exam info: (757) 898-8031, W4RTZ. 2/99

Virginia Beach ARC. Meets 1st Thurs./monthly, 7:30 p.m., St. Andrews United Methodist Church, Tuscon & Princess Anne Rds., Virginia Beach, VA 23462. 2/99

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 at 9:30 a.m. 5/99

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(-) W8JNU/R. For info: D. Tennant, N8ZYB, Rt. 1, Box 188, Mt. Aito, WV 25264. 7/99

Tri-State Amateur Radio Assn. Meets 3rd Tues./monthly, 7 p.m., The American Red Cross, 111 Veteran's Memorial Blvd., Huntington, WV. 5/99

WISCONSIN

Central Wisconsin Radio Amateurs, Ltd. Meets 2nd Wed./monthly, 7:30 p.m., UWSP Science Bldg., A107. Info: Al Mallek, N9WBS, 246 Georgia St. North, Stevens Point, WI 54481. Call in on 146.985 or 146.670 5/99

-10-10- INTERNATIONAL News



Chuck Imsande, W6YLJ • 10-10 19636

The Gateway Chapter

Believe it or not, by the time you read this, The Gateway Chapter of 10-10 will have held their 1380th consecutive Wednesday net meeting. 1380 weeks equates into over 26 years of continuous weekly net meetings without missing a week! This group of 10-10 members has been meeting on 28.650 MHz at 8 p.m. local time in St. Louis every Wednesday evening since June 1972. They use a unique method of recruiting the net control operators each month. The net control operator on the last Wednesday of each month recruits the members to be net control operator for the following month. The Gateway Chapter maintains a very good website at www.Angelfire.com/mo/gateway1010. Visit their web site as it not only gives good 10-10 information but provides links to other very worthwhile 10-10 websites. Don Ward, WØRTV, #13962, is Chapter Head (CH) of the Gateway Chapter and Ken Scott, WBØKUU, #9597, handles the website. If conditions are favorable check into the Gateway Chapter net on Wednesday evenings on 28.650.

The highest number

The highest 10-10 number issued through 30 September 1998 was 69911, issued to Bill Novak of Houston, TX. We continue to grow, taking on many new members each month. As of the end of September, total ACTIVE 10-10 membership (those with paid up dues) was just under 7,400. Of the total active membership, 1,052 are Life Members and 437 are DX members. Not only is 10-10 growing in the U.S., but it continues to grow in the DX world.

If you have a 10-10 number, but have let your dues expire and would like to become ACTIVE, you can send your dues to the address listed below. No penalty or back dues are required to reinstate your membership.

10-10 website

10-10 maintains a very impressive website which covers all aspects of the

10-10 organization. Just a few of the discussion statements covered on the web are: What is 10-10?, Information for new and prospective members, 10-10 contests, awards, chapter activity and paper chasing, convention information, operating aids,

links to other Amateur Radio pages, 10-10 memorabilia, and questions. In addition to the above 10-10 items of interest, the 10-10 Email subscription list is described as to its purpose and operation. Members may use the list server to post messages, exchange information, pose questions on any and all 10 Meter operation. The list server is a free service to 10-10 members. Information on how to subscribe is included under the heading "TENTEN-L." The 10-10 website is: www.tenten.org.

The 10-10 website is a recipient of the "Best Ham" Award for exemplifying "good design and utility to Amateur Radio operators on the web." The collection of web pages is maintained through the courtesy of Lehigh.edu and the systems programs skills of Jim Eshleman, N3VXI, #69157. The pages are developed, designed, deployed and maintained by L.B. Cebik, W4RNL, #41159.

I urge you to spend some time visiting the 10-10 website and look at all of the pages. It is an interesting adventure and time well spent if you are a 10-10 member, active or not. And it is well worth your time if you are a prospective 10-10 member. New 10-10 members can find answers to most of their questions somewhere among the many pages in the 10-10 website.

Election results

The results of the recent 10-10 election are now known and for those who may have missed the announcements, here is a recap of those elected to serve 10-10 for the 4-year term beginning 01 January 1999. The Officers elected were: President, Tom Henderson, K4CIH, #33233, Vice President, Chuck Imsande, W6YLJ, #19636 and Secretary, Dave Prichard, KA5OVO, #37297. Directors elected were: Bob Ryan, K6YVG, #18022, Bob Peschka, K7QXG, #5956, Jerry Heien, N9AVY, #43313, Rex Holford, KØNO, #20423, and Ed Redwine, K5ERJ, #11843. These officers, along with the five Directors not up for election, will be the group responsible for the operations of 10-

10 beginning 01 January 1999.

New DX members

We are pleased to welcome the following 10 new DX members who joined 10-10 during the month of September 1998: DL2DWP #69814, LZ3RN #69815, DLØOBL #69816, JH7RTO #69817, DL3VXX #69818, HR1HCP #69819, LW1DDC #69820, P43E #69821, DF4UM #69822 and VE7IPU #69823. We welcome our new DX members into 10-10.

Mobile on 10


Now that band conditions are somewhat back to what we would like to consider "normal," it is a good time to get those mobile rigs back in your vehicle and start giving out counties to those 10-10 members that are "hunting counties." It is suggested that mobiles "hang out" on 28.336 and use this frequency as a calling frequency.

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: Jeff Ritter, N5VAV, #59692, 10-10 Information Manager, 6959 Hovenkamp, Richland Hills, TX 76118. No SASE please as the information package requires a 9 x 12 envelope. You will receive a copy of the 14 page Prospective New Member Brochure containing 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 8 page QSO Party Information Brochure and a the latest issue of the *10-10 International News*, the 32-page 10-10 quarterly magazine.

If you have lost, or forgotten, your 10-10 number, send the same as above to Jeff and you will get the information package along with your original 10-10 number.

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 #142, Omaha, NE 68114-2332. You will become an "ACTIVE" member again and receive all of the benefits of 10-10 including the quarterly *10-10 International News*. Remember 10-10 numbers are issued for life and your originally issued number is always yours.



YLS
on the air
Kay Eyman, WAØWOS
29048 SE 1200 Road • Garnett, KS 66032
e-mail: waowof@paola-online.net

YL Contests

YLRL Vice-President Cleo Bracket, KØJFO, announces two contests for early 1999. The first is "Meet the Novices and Technicians Day," which will run from 1500 UTC, 09 January, to 0500 UTC, 10 January 1999. Only YLs compete in this contest and the exchange is RS(T), name, QTH, and license class. Score three points for each QSO with a Novice or Tech YL, two points for each General or Advanced YL, and one point for each Extra class YL.

The second contest is the always-popular YL-OM Contest, with the CW portion running from 1400 UTC, 06 February, to 0200 UTC, 08 Feb 1999, and the SSB portion from 1400 UTC, 13 February, to 0200 UTC, 15 Feb 1999. Only YL-OM contacts count and logs must show station worked; QSO number given and received, RS(T) given and received, ARRL section/province/country, time, band, and date. Separate logs are required for each portion.

For these contests, participants can only work 24 out of the 36 hours. Logs must be postmarked within 30 days of each contest and should be mailed to Cleo Bracket, KØJFO, 810 Towne Square Drive, Fremont, NE 68025-7000. Complete rules and details will be published in the major amateur magazines or you can contact Cleo by mail or via e-mail at cleobacket@gte.net.

Awards

The YL-ISSB offers many awards to promote activity on the air and one of the best is the Global Award. Any member can earn it, even though working with a modest station. It also helps to keep the System active as it encourages members to contact new members. To earn the Global Award,

AMP REPAIR CENTER
Amp Supply, Ameritron, Dentron, Heath, Drake, etc.
40 years experience - Service manager with former amplifier manufacturer.
OMEGA Electronics • P.O. Box 579
101-D Railroad St. • Knightdale, NC 27545
(919) 266-7373 • FAX: (919) 250-0073
e-mail: omega@worldnet.att.net

for twelve consecutive months you must work 12 ISSB members holding a Top Flight Operator certificate, 12 ISSB members with an ISSB# below 9,000, work 3 ISSB members with an ISSB# above 15,450, and work 3 DX ISSB members. This totals 30 member contacts each month for a year, and the year begins on the day of the first contact. The same members may be worked again in a new month but in only one category for that month. Endorsements will be given each year for repeating the required contacts.

The Belgian Young Ladies Club offers an award to all licensed radio amateurs and SWLs for working its members. For operators outside Belgium, you need 15 points, and Belgian stations need 30 points to qualify. A contact with a Belgian YL counts three points and the club station ON4YLC counts for six points. You can count contacts with the same YL on different bands. All modes and bands are acceptable, except for contacts made on repeaters or packet radio, but only contacts made after 16 June 1996 are valid. Send a GCR list, verified by two licensed Radio Amateurs or local club officials to Mrs. Ingrid Leydens, ON1DXX, Beke Tuinwijk 29, 9950 Weerschoot, Belgium. The fee for the award is \$10.00 U.S. or 10 IRCs. The club station is activated many times during the year

but it's always on the air between 1600 UTC, 20 July, until 1600 UTC, 21 July, every year, to celebrate the national holiday of Belgium.

Svalbard Meeting

The Svalbard Polar YL '98 Meeting in Longyearbyen was held 20-24 August 1998, with YLs from 14 countries in attendance. A total of 70 YLs and OMs attended. The four organizers were Unni Gran, LA6RHA, Ruth Tollefsen, LA6ZH, Turid Bjerke, LA9THA, and SWLer Ingrid Thorin.

Almost everyone arrived at noon on 20 August on one of the two daily flights from Tromsø, on the northern coast of Norway. The rest arrived at 2:00 a.m. on Friday morning. Both groups were met and loaded onto a bus for the ride to the Polar Hotel, where they received a welcoming hot toddy, their room assignments, and warnings about leaving the area only with an armed guide because of polar bears in the area. They were also given slippers to put on when entering the hotel because of coal mining in the area, and goodie packets, which included a sweat shirt with the meeting logo and a beautiful scarf. (These can be seen in the group photo.)

Groups of YLs were soon departing the hotel to explore Longyearbyen and found a department/grocery store, several clothing stores, outfitters, a hospital, a university, a Lutheran Church, a museum, and a day care center. There were three gourmet eating places — the hotel, a motel, and the "Huset" or "the house." The food was excellent and included reindeer, smoked seal, and whale steak.

On Friday, there was a bus tour of the area and they visited a museum and learned about the background of the islands, the coal mines, the islands' role in WW II, and how Norway acquired them. They then drove to the top of a mountain to view Mine #7, the last of the coal mines which is expected to be closed within 10 years. This vantage point provided a beautiful view of the valley and the settlement below. On the way back, there was a photo stop to take pictures of the reindeer who didn't seem to have any fear of humans.

At the YL Forum that afternoon, Unni welcomed all the attendees, speaking in the language of each country represented. Each YL introduced herself and was given a Certificate of Appreciation for attending.

The third day was Saturday and there was a choice of optional tours. Some took the fossil hunt and found several nice fossils to bring home.



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Some opted for the kayaking and all came back without getting wet. Others went on the helicopter tour or the glacier-walking tour so all experienced this unique environment in one way or another.

The banquet was held that night, and messages were read from His Majesty King Juan Carlos, EAØJC, of Spain and from the Japanese Embassy in Oslo. The guest of honor was Liv Arnesen, the only woman to go alone to the South Pole. The menu was printed in several languages as a souvenir and featured Arctic specialties, such as home-smoked Arctic char (fish) with horseradish-dressing, reindeer with brussel sprout-sauté and game peppersauce, and home-made cranberry-parfait with vanilla and woodberry sauce. During dinner, the group from Japan sang several songs, including some Norwegian tunes.

On Sunday, everyone boarded a boat and went on a three-hour cruise up to the Russian settlement of Barentsburg. They were served a special Russian lunch there and then it was back to the boat for a close-up look at the Esmark Glacier and to look for seals. During this trip, they were served a memorable drink; the whiskey on the rocks contained 10,000 year-old ice that was hauled up in buckets from the sea.

JWØYL was on the air around the clock during most of the meeting, and everyone was assigned a specific operating time. A total of 1,583 QSOs was made by JWØYL with a total of 80 countries, 37 states in the U.S.,

and 30 zones. Thanks to a special permit, hundreds of other QSOs were also made using personal call signs with the prefix JW.

On Monday morning, most of the YLs flew out of Longyearbyen and many visited with friends in Europe or did more sightseeing before returning home. It was determined at the meeting the next International YL 2000 Meeting will be sponsored by WARO in New Zealand in 2000. You can check two sites on the Internet for further information. For the meeting in Hamilton, New Zealand, check www.wave.co.nz/pages/osborneg/organiza.html and for more info on the Svalbard meeting, check Turid's page at <http://home.sol.no/~tbjerke/svalbard/> where you'll find photos and links to other pages. Thanks to Carol Hall, WD8DQG, and Ruth Tollefsen, LA6ZH, who forwarded this information.

Updates

After the Svalbard meeting, Unni Gran, LA6RHA, and Gwen Tilson, VK3DYL, traveled to Morokulien, for a joint Norwegian/Swedish operation on 04-06 September, using the calls LG5LG and SJ9WL. Morokulien is a unique example of how two countries can share a radio station ON the borderline. There is also a joint post office where you can send mail with either country's stamps.

Marit Gridseth, JW4CJA, is on Bear Island now in conjunction with her job and will be operating until sometime in 1999. QSL to her home call, which is LA4CJA.

6 Meter bandplan controversy

The endorsement of a new 6 Meter DX bandplan by the Six Meter Amateur Radio Klub has brought a sharp rebuke by those Hams who oppose any regimented operation on any band.

The organizations' board of directors met on 03 October and endorsed the plan originated by the Central States VHF Society that moves the domestic DX calling frequency to 50.200 MHz. It is currently on 50.125 Mhz. The plan also calls for expansion of the 6 Meter DX Window from 50.100 to 50.150 MHz.


Within hours of being posted on the Internet, comments began raging pro and con with the majority not only being against the revised plan, but also against continuing any sort of 6 Meter DX bandplan at all. Some people posting to the W6YX VHF Reflector have flatly stated that the only governing body that can tell them where to operate is the FCC. They say they do not see the words Central States VHF, SMIRK or even ARRL printed on their licenses.

Proponents of the new plan say that it is necessary because of increased DX as band conditions continue to improve. They believe the higher maximum usable frequencies coupled with an influx of Technician class licenses will lead to overcrowding under the current scheme. — *Newsline*

Volunteer of the Year

William "Bill" Wawrzenciak, W1KKF, of Wallingford, Connecticut, received the New England Division Volunteer of the Year Award 29 August at the ARRL New England Division Convention in Boxboro, Massachusetts. — *Tom Frenaye, K1KI, ARRL Letter*

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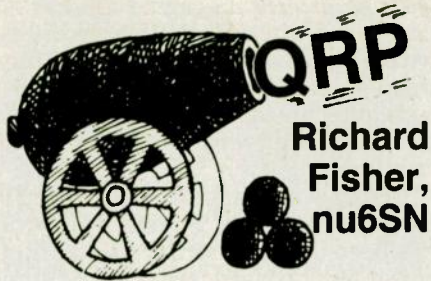


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An odd case for QRPers

As QRPers we are both blessed and cursed by the hands-on opportunities in our niche of Amateur Radio.

The tremendous number of kits, from transceivers and keyers to antenna tuning units and power supply accessories, offers a powerful lure to the workbench.

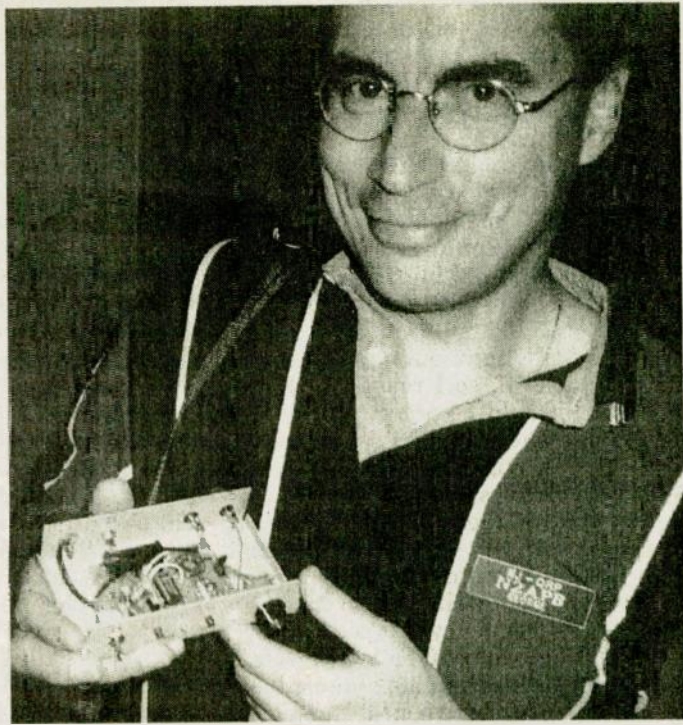
Then there is the antenna, believed by many low power enthusiasts to be the most important piece of the QRP puzzle. It's easy to spend days, weeks, months toiling in the trees around the back yard or on hands and knees in the attic in pursuit of the optimum radiating system.

Given these diversions, is it any wonder that we catch ourselves saying to fellow QRPers: Hey, why don't we get on the air sometime? After all, isn't that what this whole thing is about?

Call it an ODD case (Operating Deficit Disorder). Take a moment to look at your station log. How many contacts have you made in the last, say, six months? How many hours have you been at the key or the microphone? You may be surprised, as I was, at the imbalance between building and operating at your station.

Don't get me wrong. There are fewer things better than a good rag chew on 40 Meters some quiet evening. I have always been a fan of QRP net operations. And you can't

George Heron, N2APB, of Sparta, NJ, has been named editor of QRP Amateur Radio Club International's *QRP Quarterly*.



beat a good contest.

But when that pile of parts and cold soldering iron cry out for help it's hard to resist coming to the rescue.

So, what to do? I've found that a bit of regularly-scheduled operating tends to spur more casual operating. The elixir against ODD for me has been participation in one of the many QRP sprint-style competitions that are held variously on a weekly, monthly or annual basis. They're short contests that are easy, fun and not too time consuming.

The Adventure Radio Society's monthly Spartan Sprint is a prime example. The sponsoring organization, whose members have a passion for outdoor QRP operation from some pretty remarkable locations, hosts a two-hour contest on the first Monday evening of each month.

It's open to all QRPers and honors operators who make the most contacts using the lightest-weight gear, all in keeping with ARS' penchant for backpacking radio gear for field operation.

Operators need not go into the field for the Spartan Sprint; in fact, few ever do. But many use simple transceivers and light battery packs and keyers at their home stations to help raise their score, which is computed in one scoring division using a formula which takes into account the total weight of your gear, sans antenna and feedline.

But there's an ARS Spartan Sprint Tubby Division, too, for operators who want to use their regular non-portable transceiver, keyer paddle, etc. So everybody can get into the game.

There are lots other short-run contests for QRPers: QRP-L Internet QRP Club's weekly, Foxhunts, QRP Amateur Radio Club's Holiday Spirits Sprint this month, and many more. Different contests with different rules, but it's all for a good (short) time.

For the avid builder who is trying to make amends for a lack of airtime, I've found making a point to get on during one of these contests satisfies the need.

On top of it all, they're a lot of fun. You'll find you run into lots of friends during the competition, and if you're working on QRP Worked All States or want to field test some of that gear you've been building, what better forum for a test run?

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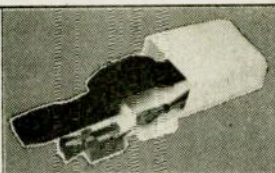
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I managed to get on 20 and 40 Meters for ARS' Spartan Sprint 05 October. The contest ran from 0100-0300Z. It was Monday evening here on the west coast and the bands seemed in fairly good shape. I'd just put up a new dipole here at nu6SN and the SP, as it's called, was going to be the wire's maiden voyage.

While sprint contests are fundamentally simple things, it doesn't hurt to do a bit of strategizing before you start.

It was still light outside for the Sprint's kick-off, so I reasoned that 20 Meters would be a good place to start. The band would likely be open with the sun still above the horizon — and who knows what stations may be lurking out there along the grey line?

The first 45 minutes would be spent at about 14.060 MHz, the 20 Meter QRP calling frequency. The second 45 minutes I'd move to 40 Meters' 7.040 MHz, and the last half hour would be spent switching between the two to pick up any stragglers.

Twenty meters opened up with a bang, and then started limping a bit. In quick order I worked the Ogden Storehouse Radio Club, KD7AEE, running 5 watts from Utah, Tom Whalen, WB5QYT (4 watts, New Mexico) and Bill Wolfe, N4ROA (5 watts, Virginia). Four other contacts didn't come so easily, however, as the sun went down, and the band took a dive: John Spence, AC5K (5 watts, Texas), Dana Michael, W3TS (5 watts, Pennsylvania), Jim Michael, VE2KN (3 watts, Quebec), and Leroy Marion, AB7CE (5 watts, Montana).

Hmmm. Seven states on 20 Meters in 45 minutes running 5 watts to a simple dipole. That's not too bad.

Forty meters generally has more activity during the ARS Spartan Sprint, but there are also a lot of non-sprint operators rag chewing that we must skirt around courteously.

First out of the box on 7.040 MHz was Bob Hightower, KI7MN, running 5 watts in Arizona. Other AZ stations worked included, Gary Surrency, AB7MY (5 watts), Larry Feick, NF0Z/7 (5 watts), and Dan Tayloe, N7VE (3 watts).

Tuning about 5 kHz either side of 7.040 MHz yielded several California stations, including: John Watrous, K6PZB (2 watts), Del Partridge, WV6Z (4 watts), QSO Amateur Radio Club, W6BAB (5 watts), Ed Loranger, WE6W (5 watts), David Epps, AB5PC (2 watts), and Paul Gordon, N6LL (5 watts).

Rounding out the evening on 40 Meters were contacts with Russell

Carpenter, AA7QU (4 watts, Oregon), WB5QYT (4 watts, New Mexico), Bob Armstrong, N7XJ (2 watts, Utah), KD7AEE (5 watts, Utah), and David Perry, N0IBT (4 watts, Colorado).

As Spartan Sprints go, this was fairly typical for a two-hour run; a total of 22 contacts in 10 states and one Canadian province.

Winning or losing wasn't a big factor at nu6SN. It was the joy of operating, the chance to say hello to some QRP operators I've known for years, while being introduced to some new calls.

The field test of the antenna went well, and I was pleased with its performance. I've also got some good data to plot its radiation pattern on both 20 and 40 Meters. What better way to gather that information than a two-hour hit-and-run contest? It's just made-to-order, isn't it?

And I used a transceiver during the sprint that hadn't gotten much work over the last several years, so it was good to see that the ol' radio was still in fine fiddle.

On reflection, that's accomplishing quite a bit in just two hours. And it was all for want of a little operating time.

If you've gotten the sense, as I did, that you've developed an ODD case, try one of the many sprint contests QRPers have come to like so well. It just may be a cure, for sure.

Changing of the guard

Monte Stark, KU7Y, of Reno, NV, has stepped down as editor of QRP Amateur Radio Club International's

QRP Quarterly magazine after several years in the post. He is credited with a range of improvements in the publication, from increasing its volume of technical and feature articles to hitting delivery deadlines with regularity.

Taking over Stark's duties is George Heron, N2APB, of Sparta, NJ, who has been a prolific writer and on-line editor for the New Jersey QRP Club, and has taken part in projects on both the regional and national scene.

Meanwhile, Joe Gervais, AB7TT, of Goodyear, AZ, and the Arizona ScQRPIons QRP Club, has been named assistant editor.

The Quarterly is published four times a year by QRP ARCI and has an all-volunteer staff.

Season's greetings

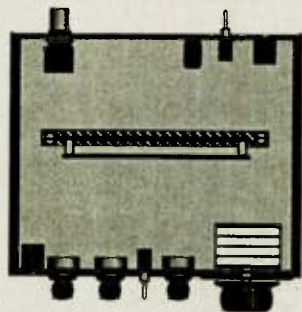
It is universally recognized that one of the best aspects of being a QRP'er is the tremendous sense of community and good will that is so often felt among low power operators.

In keeping with that spirit in this joyous holiday season, we wish you the warmest of 73, and hope that the coming year is healthful, prosperous and brings you the best of everything — QRP and otherwise.

FCC Electronic filing

The FCC granted a Petition for Reconsideration of the Report and Order in the Electronic Filing of Documents in Rulemaking Proceedings. The change eliminates the need to include a telephone number. — FCC, Newsline

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DOUGLAS CASAMER, W8DMC

Haven't we all given thought to a portable station with honest home QTH capabilities away from home? Of course we have and this is just how Douglas M. Casamer, W8DMC from Michigan has accomplished said task.

Building a HF portable station with sufficient equipment was my objective. I first determined it was to be carried by one person that enclosed the features one normally has at his/her home QTH. This then being a transceiver, adequate power supply, ability to tune various antennas, monitor my SWR/power readings and have a quality light weight station.

Searching for lightweight equipment historically could have been a challenge. However with the recent compact HF transceivers and lightweight power supplies, the solution was at hand. The weight issue was a major concern, along with size. This past Spring while at Dayton, I came across the MFJ Switching Power Supply model 4225MV, which weighed about three pounds. This vs. the average 26 lbs. one normally finds in the Astron RS35M Power Supply I use at the home QTH. Therefore with this lightweight unit my weight problem was resolved. Now to keep within my designed 21" x 22" x 16" wooden cabinet.

Next I secured some 3/4 x 8' x 16" pine boards, which when cut to size would provide two shelves and the bottom being it's third. Also front closing doors for travel. At the lower rear of this cabinet I installed a 1" x 1" x 20" solid copper bus bar for all the equipment grounding site. This

the MFJ 4225MV Switching Power Supply. At the right the Yaesu Sp67 speaker, I also bought at Dayton this past year used. The above center shelf is the Yaesu FT840, 160-10 meter transceiver. This is a really nice working radio with plenty of features to keep even the best DXer happy. To the right is the matching Yaesu FC10 Auto Tuner for any coax feed line fixed antenna, such as a multi band vertical or lightweight "Butter Fly" beam.

On the top shelf is the Autek Research WM 1 Auto Computing SWR/PWR meter. This is a very accurate meter with large two-inch meters, that is a joy to read in most any con-



Front view of the completed cabinet with the door open.

provided a common ground with one feed to the natural grounding earth point. I always take along a 4-foot copper clad grounding rod for set up when a natural ground is not found.

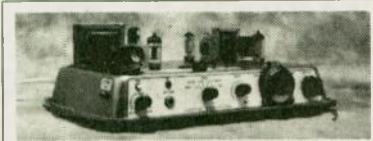
On the bottom shelf left I installed

dition. To the right I have selected the MFJ Deluxe Versa Tuner II model 949e. A good unit that provides much versatility, as any experienced operator requires, up to 300 watts, for long wires, dipoles and ladder line hook ups etc.

The rear view picture you will see how the copper bus bar is set up to provide grounding. Along the side of the cabinet I placed an "Isobar" AC power line choke and filter, which has four outlets and the one power cord line when AC is available or a portable generator is used. Notice the side heavy duty handles for carrying or as cargo tie down points when securing in a vehicle for travel. The entire station is only 27 lbs., and is easily managed by one person for stand-alone or table top operation.

The external antennas I have selected for multi-application use is the Mosley 40-10 meter vertical. It's

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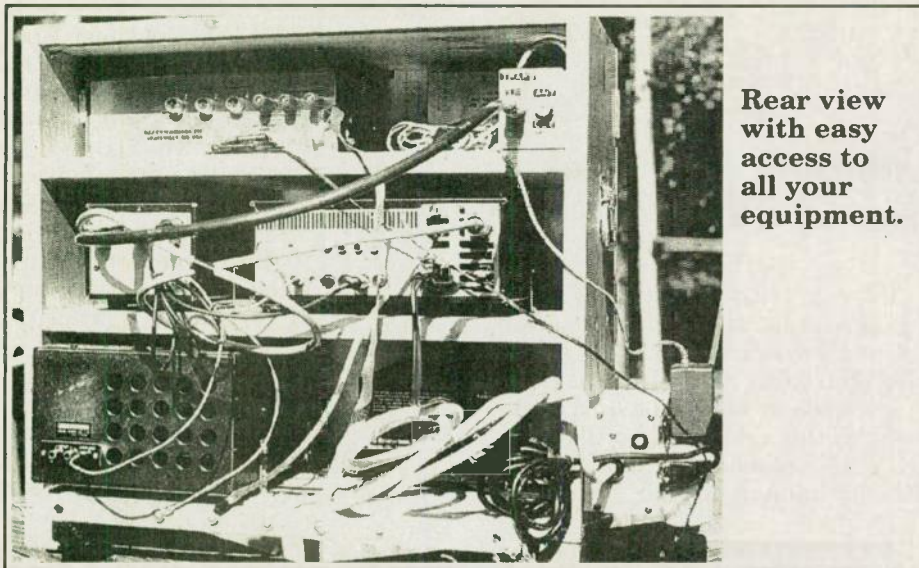
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The whole station, which includes new and used equipment, was less than \$1,325. That's excellent considering its total capabilities. I have enjoyed this portable station on the move in the pickup truck, at the cottage, back yard patio table or even when away on holiday or visiting family and friends.

The time involved to build was just four hours with basic tools and a table saw. I do suggest you secure the equipment with plastic straps you can find at any electrical supply store. Another good idea that I used were [L] brackets secured one or two to each piece of equipment, then the wooden shelf bottom support. When you're finished all equipment is self contained and easily stored away until used again and won't move around.

For those interested in a portable set up this has been a real joy for my many field applications at a low cost and plenty of versatility. Good luck and good building.

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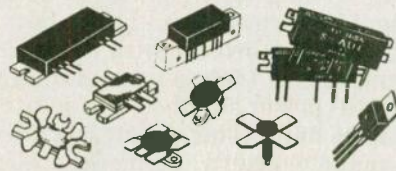
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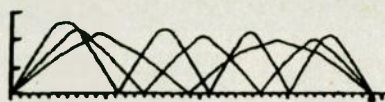
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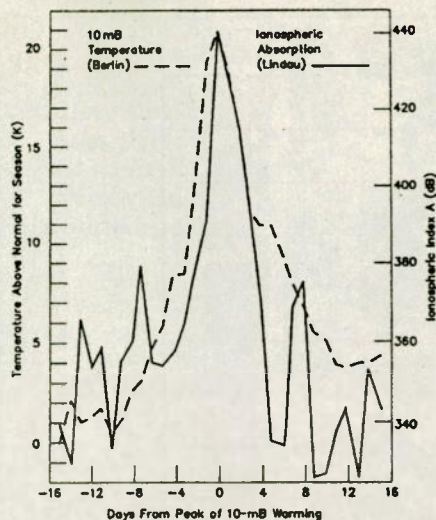


Carl Luetzelschwab, K9LA
1227 Pion Rd. • Ft. Wayne, IN 46845
e-mail: k9la@gte.net

For the next several months (December through April, to be specific), you might see something called a STRATWARM alert on PacketCluster or in an ionospheric report. What is a STRATWARM? And does it really adversely affect our Ham radio activities?

STRATWARM is an abbreviation for STRATospheric WARMing. It refers to a sudden increase in the temperature in the stratosphere (that portion of the atmosphere between about 16 km and about 48 km). This phenomenon was discovered by a German, R. Scherhag, who noted a sudden increase in the radiosonde 10-milliBar (approximately 30km) temperature over Berlin 30 January 1952.

Since that time, much has been learned about stratospheric warmings. They occur in the polar latitudes during the winter months (December through April for the northern hemisphere), involve temperature increases on average of tens of degrees Celsius (with major warmings in the neighborhood of a 50 to 60 degrees C difference), last for several days to a week or so, and progress from the higher stratospheric altitudes down into the lower stratospheric altitudes (and sometimes even down into the troposphere with major warmings).



STRATWARMS in the northern hemisphere start their life after the fall equinox, when heat at high latitudes starts decreasing as the polar night expands toward the equator. Thus temperatures in the polar regions decline, and a core of strong westerly winds called the polar vortex forms in the upper stratosphere. Eddies at mid-latitudes which form in the troposphere (called planetary waves) propagate vertically and perturb the stratospheric circulation. The polar vortex is broken up as heat from mid-latitudes is transported into the polar regions. This additional heat shows up as a stratospheric warming.

The tie to HF propagation is through nitric oxide (NO). NO is created by free N atoms which are produced by auroral bombardment. NO has a long lifetime in the dark polar night and accumulates in the polar vortex. When the vortex breaks up due to the stratospheric warming as discussed above, NO is spilled out toward the mid-latitudes. When NO gets into sunlight at these lower latitudes, it is easily ionized by solar radiation and serves as an additional source of D-region electrons. More D-region electrons mean more absorp-

tion. When a stratospheric warming occurs, a STRATWARM alert is issued, implying that HF propagation involving polar and mid-latitude paths suffers due to increased absorption.

Figure 1 shows the direct relationship between a stratospheric warming and absorption. The horizontal axis is the number of days from the warming peak. The left vertical axis is the temperature difference from normal in degrees Kelvin (Celsius plus 273) and goes with the dashed curve. The right vertical axis is the absorption index in dB and goes with the solid curve. The absorption index is a variable that reduces the absorption equation to an equivalent frequency of 1 MHz.

How much additional absorption does a STRATWARM cause? There was an excellent study done from 1935 to 1952 by Appleton and Piggott, and it showed that a major stratospheric warming increased absorption by about 52dB. On the surface this seems like quite a large amount. In fact, if one S-unit equals 6db, then the difference is a little more than 8 S-units. But digging deeper into the paper shows this to be at 1 MHz, at vertical incidence, and at noon local time. We need to add some "Ham radio" reality to this scenario.

For example, around noon local time during the winter, what bands would those of us in North America be using for QSOs on polar and mid-latitude paths (presumably to Europe)? More than likely we'd be on 20M and higher (17M — 10M). Knowing that absorption varies inversely as the square of the frequency indicates our 52dB is only roughly 1dB on 20M. This is not very much at all. But this is at vertical incidence. For a realistic angle of, say, 10 degrees, the difference would be on the order of 4dB (it's more because the wave spends more time in the D-region). This still isn't much, and would even be less on the bands above 20M. From this we see that our daytime HF operation should not be affected to any great degree by STRATWARMS.

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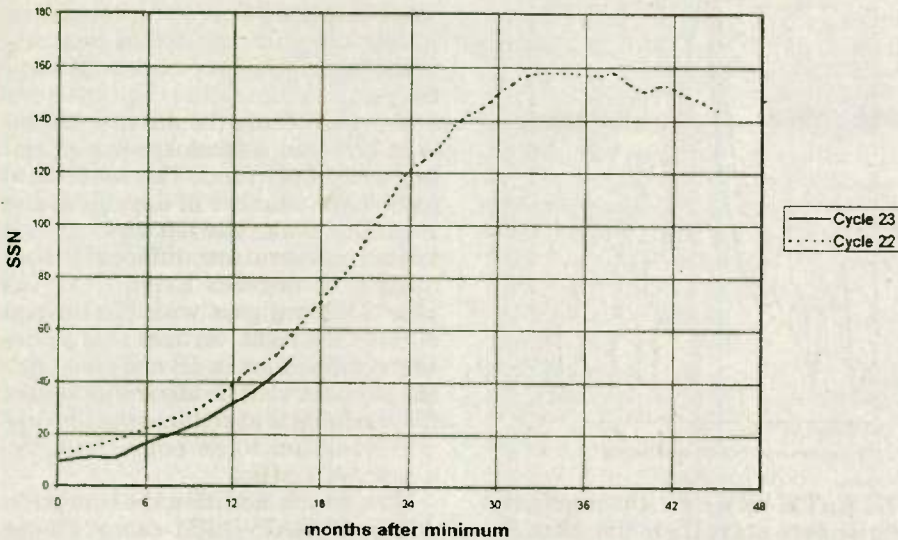
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What about night time operations on the low bands? Indeed the inverse square relationship still indicates significant increased absorption at 1.8 MHz. But that's not the whole story. The D-region, where all this excess absorption is occurring, essentially goes away at night. Thus night time low band operation should also be unaffected by STRATWARMs.

All this theory is well and good. But is there any actual evidence to support this? There sure is, and it's on 160M, where the STRATWARM concern seems to be greatest. Luis Mansutti, IV3PRK, kindly sent me his 160M log data for the period September 1995 to September 1997. He was on the band almost every night looking for North Americans. The path from Italy to the East Coast, Midwest, and West Coast goes right through those areas where increased absorption occurs due to STRATWARMs.

From his data, after isolating out

those days with a high k-index, I found that a day with a STRATWARM alert could have many QSOs or no QSOs. There just didn't seem to be any correlation between STRATWARMs and the number of QSOs between Italy and North America (if you'd like the details, send me an e-mail or check out the January 1998 issue of *The Low Band Monitor* that's edited by Steve Gecewicz, KØCS). In fact, the data indicated another unknown variable running around giving us good or bad 160M propagation.

In summary, STRATWARMs aren't the big bad wolves they have historically been portrayed to be. Although STRATWARMs can cause significantly increased absorption, it is under conditions far removed from typical Amateur Radio operations. So if you see a STRATWARM alert, I suggest you just keep operating. You probably won't even be able to tell a difference.



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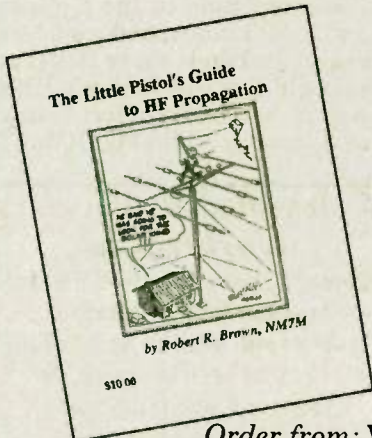
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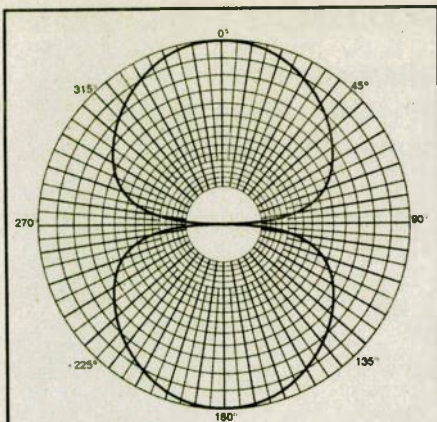
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AERIALS

Kurt N. Sterba

They are still out there. I hear them on the air. And, so at the risk of the "You keep going over the same old stuff" letters, I'll proceed hoping to (at least for a few) nip it in the bud.

For some reason, that defies all logic, it seems there are amateurs who deeply and sincerely believe that even the slightest flicker of SWR, losing half-a-Watt from ideal, will make their signal inferior.

So let's present a Truth Table. To put this into perspective, it would take about a 2 dB loss to have someone be able to hear the difference.

Starting with 100 Watts:

- 99W -0.04 dB or 4/100 or 1/25 dB
- 98W -0.08 dB or 8/100 or 1/12 dB
- 97W -0.14 dB or 14/100 or 1/6 dB
- 96W -0.18 dB or 18/100 or 2/11 dB
- 95W -0.22 dB or 22/100 or 1/5 dB

We used fractions because there are many who grasp fractions easier than decimals.

- 94W -0.26 dB or 26/100 or 1/4 dB
- 93W -0.32 dB or 32/100 or 1/3 dB
- 92W -0.36 dB or 36/100 or 3/8 dB
- 91W -0.41 dB or 41/100 or 2/5 dB
- 90W -0.46 dB or 46/100 or 4/9 dB

So, we have given up 10% of our power and the signal has lost less than half of a dB, of which there are six whole ones in an "S" unit.

Let's continue down the line of reducing power from the 100W level.

- 88W -0.56 dB or 56/100 or 3/5 dB
- 86W -0.66 dB or 66/100 or 2/3 dB
- 84W -0.76 dB or 76/100 or 3/4 dB
- 82W -0.86 dB or 86/100 or 5/6 dB
- 80W -0.97 dB or 97/100 or 1 dB

At about this time some Ham would be saying, "Oh, woe is me, woe is me, I will be mocked if I show up at the meeting of the radio club."

Whereas, in reality, no one will be able to hear the difference. Continuing further in reducing power from 100W.

- 75W -1.25 dB or 1/5 of an S-unit
- 70W -1.50 dB or 1/4 of an S-unit
- 60W -2.22 dB or 2/5 of an S-unit
- 50W -3.01 dB or 1/2 of an S-unit

Art Buchwald once said, regarding his humor column, that he didn't have to make anything up, he just ripped it off the wire. Meaning the news itself was so bizarre he didn't need to embellish it. I, KNS, instead listen to 75M Phone for my material.

So now let's compare this all to that nasty terrible SWR.

Let's say that you have a 100-ft. run of RG8 and you are on 14.2 MHz. What follows are various SWR values and the loss due to that value of SWR.

- 1.1 0.01 dB 1/100
- 1.2 0.02 dB 1/50
- 1.3 0.03 dB 3/100
- 1.4 0.04 dB 1/25
- 1.5 0.06 dB 3/50
- 1.6 0.08 dB 1/13
- 1.7 0.10 dB 1/10

(Yes, at this level of SWR many have entered a state of heart palpitations. And, it's true: one-tenth of a dB.)

- 1.8 0.12 dB 3/25
- 1.9 0.14 dB 7/50
- 2.0 0.16 dB 1/6
- 2.5 0.29 dB 3/10
- 3.0 0.43 dB 6/14

(The horrid, marked in red on some SWR meters, 3.0 SWR results in a loss of less than 1/2 a dB.)

- 4.0 0.70 dB 7/10
- 5.0 0.96 dB 24/25

(True, an SWR of 5.0 and nobody can hear the difference.)

With an SWR of 5 you would have to use a tuner to match the rig and the feedline. Tuner loss, contrary to bunkum heard on the air, (depending on quality of the tuner) one-half dB to one dB max.

There are some strange attitudes out there in radio land. Forwarded to me from the International Headquarters of *Worldradio* was a letter from Utah in which the writer wanted to "express my extreme displeasure" about "Sterba's column dedicated to the same old tired topic, arrogant ranting and raving how he is right and everyone else is wrong." "useless waste of space."

Alas, I take no pleasure in being similar to the man who cleans up the street after the elephant parade. But, when a major organization in Amateur Radio puts out a computer program in which the voltage rating for 9913 cable is given as 600V, someone should warn the unwary. It's actually much higher than that, so go ahead and use it with no fear.

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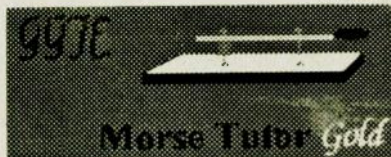


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In a recent article on stubs the author gave the wrong velocity factor for the cable mentioned. But that particular bird makes so many mistakes he has become now, more pathetic than comical.

I just bought a McGraw-Hill book about antennas for \$40. I think I was charged one dollar per mistake. I'll be writing about that book shortly. I may call the article "How NOT To Write An Antenna Book."

I don't do this just because they are wrong and I am right (which I am, of course) but rather so some readers can avoid the pitfalls one may encounter from bogus information.

Please allow me to explain further. Amateur Radio operators come to this column in the hopes of improving their knowledge. I take my obligation to them seriously. Therefore one of my duties is to prevent them from falling prey to slovenly work that appears elsewhere. Comes to mind (as but only one example) was one book by a major organization that gave the velocity factor of a particular type of coax as .08 instead of the .80 it really is. Should that have been the only book that some person had read on the subject they would be in a sorry plight indeed. Unless, of course, they availed themselves of their uncle, kindly Kurt.

I hope that I have caught, quickly enough, new amateurs who, following advice in books, were about to embark on digging holes in their back yard that they could stand in. Such an effort would have been for naught.

Do I get thanks for trying to prevent people from building 3L Yagis with 1/2 WL booms? Or is my column "a useless waste of space?"

Believe me, I take no pleasure in seeing this constant flood of bad information. It is a sorry indictment of a beloved hobby.

Possibly it is generational differences? Recently I was looking through an old copy of *QST*. The then Assistant Technical Editor, Jerry Hall, wrote a very well done article on feeding phased arrays of verticals. We now have Assistant Technical Editors going "Golly gee whiz Mr. Wizard, does that work?" over an antenna that has been used by amateurs since the very beginning.

So maybe my critics are young people who are defending other young people who can't get things right and are disturbed when someone points it (their state of hopelessness) out to them.

Pick up a book from 30 years ago. There are no mistakes in it.

Pick up a recent book. It is riddled with them.

A sorry situation indeed. But, someone pointing out the mistakes is "arrogant" to those who collectively are engaged in a race to the bottom.

Just today I was looking at an article by a two-letter call who said "high SWR will result in most of your power being lost." I am not, of course, advocating sloppy antenna work but rather feeling that better knowledge is the key to all this.

First, "high" was not defined. Just how high is high? Most? That usually means more than half. Is an SWR of 10:1 "high?" Let's agree that it is. In our example of 100 ft. of RG8A at 14.2 MHz what would the loss be? Answer: About 2 dB. That's where most people could detect the slightest amount of difference. Is that "most" of your power? No.

There is a strange phenomenon

going on. People write in and tell me that I'm wrong. Hey, this is America, that's OK! But, the oddity is they never present what would be right. The other half of the equation is missing.

Then someone said I was the laughing stock of one of those computer argument channels. From what I see on the printouts of what is sent me, I'm glad to be on the other side! There was one guy who was arguing with Walt Maxwell, W2DU, HA HA HA. Whew!

Then there was another who, without knowing it, I'm sure, decided that what Kraus, LaPort, and others have written was wrong. I'm pleased to be the laughing stock of that bunch.

A week ago I saw something in a licensing manual for potential General Class amateurs. It said, and I quote directly, "A small, three-element Yagi works quite nicely just a few feet off the top of your house."

I really do hope that all the new Generals, Advanced and Extra Hams follow that advice.

That way you and I will have all the DX to ourselves.

(Have you got yourself one of the Kurt White Caps yet? If you wear one, others will know that you don't have your Yagi just a few feet above the roof.)

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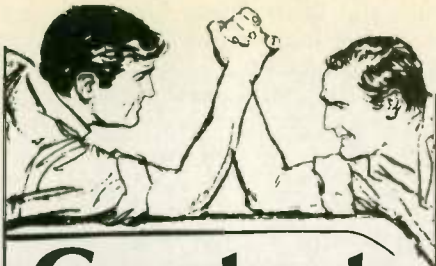
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One year on . . .

With this issue, I begin my second year as a columnist with *Worldradio*. So far, the experience has been great. I have had some helpful suggestions from some of you, others have posed me questions which I hope I answered to your satisfaction. A few others have been kind enough to alert me to errors I have made.

When I introduced myself to you last December, I undertook to devote this column to the beginning contesteer, whether a new Ham or an old-timer, in the hope that you might want to give contesting a try. I plan to continue in that vein. After all, there are new people joining the hobby all the time, just as there are old Hams who are looking for new challenges. If you have suggestions for improvements to this column,

please let me know.

In the topical section of this month's column, I would like to deal with some of the complaints of those who heartily dislike contests.

Too many contests?

There are literally hundreds of contests every year. With only fifty-two weekends, many feature several contests. Isn't this all too much? For some, it is, but in reality, there are only a few contests that truly dominate the bands, and even then, there are several escape routes for those who don't want to join in the fun.

Why are there so many contests? Just as with net frequencies, there is no central clearinghouse with authority to allocate the few available weekends. As well, there are national organizations, magazines, local clubs and inspired individuals who would like to sponsor an event for their members, subscribers and buddies. Anyone is free to organize whatever they want. Governed by principles that would vindicate a free-market economist, the success of a contest is directly related to the number of people the organizer can convince to participate. When looking at the contest calendars you see in *Worldradio* or any other magazine, please keep in mind that most of the events you see listed are poorly-attended and have few participants. Most of these contests are very hard to detect.

The contests that truly dominate the bands are few in number: CQ's WPX contests (the last weekends of March and May), the CQ WW contests (the last weekends of October and November), the ARRL DX con-

tests (one weekend in February and March) and the ARRL Sweepstakes (two weekends in November). However, these events occupy those weekends in either CW or SSB — never both at the same time. The contests that do take over the HF bands in both modes are ARRL Field Day (27 hours on the fourth weekend in June) and the IARU HF World Championship (24 hours on the second weekend of July).

Contest-free zones

From contesting's first days, there have been a number of people who whine about the hurly-burly, the crowding and the frenetic pace of contesters in full flight. It's a truism that having a pleasant ragchew is difficult, or even impossible when the band is crowded. But it's also a truism that if there are more contesters on a band than non-contesters, the contesters will dominate. The discomfort felt by some non-contesters often surfaces in letters to Ham magazines advocating the limitation or elimination of contesting. An unscrupulous few resort to jamming contesters. Many more join in the fun, if only for a short period, and others, sadly, turn off their rigs in frustration.

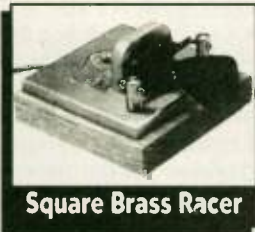
One idea that has popped up with some regularity is that of "contest-free zones." Already adopted by some amateur organizations in Europe, participants in contests are directed to pursue their fun, but asked to leave certain sections of the bands free for other users. ARRL recently tried this idea for their 10M contest (second weekend of December), setting 28.300 to 28.350 MHz as an area where contacts may not be made for the purpose of their contest. This immediately provoked howls from Argentine Hams, for their novice licensees could not operate above 28.350 MHz and so were excluded from the contest. This "contest-free zone" idea can be tricky to implement.

Smaller contests often suggest certain spot frequencies on which to find other participants. This helps concentrate activity to the benefit of the keeners, and keeps the activity contained, to the benefit of the uninterested. The rules for the RSGB Commonwealth Contest, for example, inform entrants to look for participants in the bottom 30 kHz of each band.

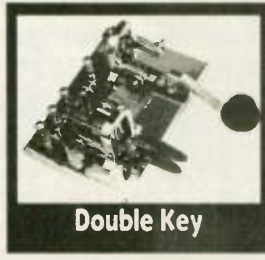
In the absence of a widely-acknowledged system of "contest-free zones," where can a non-contester go to escape the crush?

First, there are the 10, 18 and 24 MHz bands - they are never used in any contest, by worldwide agreement

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among IARU member societies. The only organization ever to violate that agreement was the ARRL, who for several years allowed participants in Field Day to use those bands. They have since corrected their error, and those bands are again contest-free.

There is also the mode switch on the front panel of your transceiver. During SSB contest weekends, anti-contesters can find solace on the CW end of the band, and vice-versa. Even during an SSB or CW contest, you can often go higher in the band and find an area where contesters do not tread.

There are many single-band contests on the calendar. This month's "Contest of the Month," the ARRL 160M, should have absolutely no impact on activity on any other band. The same applies to any other single-band contest, no matter what band it may be on.

Let's look at numbers

To put things in their proper perspective, let's look at how many potential operating hours through the year are involved in contests. There are 8,760 hours in a year, of which 2,496 happen on weekends. Taken together, the ARRL Field Day and the IARU HF World Championship (the only contests capable of dominating both the CW and SSB sections of the bands at the same time) count 51 hours. That's about one-half of one percent of all the operating time available in a year, and just two percent of weekend operating time. The major CW-only contests each take up 48 hours, for a total of 144 hours, consuming a further 1.6% of all operating time, and less than 6% of weekends. The major SSB-only contests take a similar slice.

All told, contests capable of dominating the HF bands take up only 3.9% of all potential operating time during the year, or 13.6% of all potential weekend operating time in any given year. The only reason these contests can so dominate the bands is that they are so popular — tens of thousands of people enjoy them. This doesn't seem excessive to me, but I admit an obvious bias.

And remember: there are safety valves, places where non-contesters can find peace: 10, 18 and 24 MHz, higher up in a contest band, and the opposite mode during a single-mode contest.

Contest of the Month — ARRL 160M Contest

CW: 2200 UTC Friday 4 December to 1600 UTC Sunday 6 December 1998.

(PST: 2p.m. Friday 26 November to 8a.m. Sunday)

(EST: 5p.m. Friday 26 November to 11a.m. Sunday)

"Top Band" (as 160M is often described) is a fascinating part of the spectrum. Here in the Americas, it is the lowest-frequency amateur band, and shares many of the propagation characteristics of the AM broadcast band. It is a night time band, and while it is possible to work stations hundreds of kilometers away on 160M, the band really comes into its own after sundown. DX from around the world is possible, and there are many people with DXCC on 160M. One interesting aspect of 160M propagation is that there is rarely a "skip zone," an intermediate area between your groundwave coverage and the first "bounce" off the ionosphere where you can't hear stations.

Being our lowest-frequency band, Top Band is the amateur band with the longest wavelength, and correspondingly, antennas must be much longer and much higher to be really effective. While a ground plane is something an apartment dweller can build for 10M, a similar antenna on 160 can require a fair deal of real estate. Conversely, that ground plane may not make much of an impression on 10M - there are many people with much larger arrays - a ground plane on 160M is a very competitive antenna and will yield a lot of DX than others cannot hope to work. That, for many, is part of the charm and challenge of 160M - making an antenna perform requires a bit of thought.

Another challenge on 160M is noise. Atmospheric noise, thunderstorm crashes, electrical noise - they are all louder on 160 than higher in the spectrum. Many people have resorted to building separate low-gain, low-noise receive-only antennas, such as small shielded loops or long, low wire antennas called beverages. Signal strengths are not usually a problem on 160 — noise is and anything you can do to improve the signal-to-noise ratio of the signals you are trying to hear will pay big dividends.

In my own case, when I operate on 160M, I transmit and receive using my 84-foot tower as the antenna, which I feed using a gamma match. This antenna is popularly known as a "shunt-fed tower." A good friend of mine, Chris, VE3FUQ, uses a much smaller 50-foot tower as his 160M antenna, and has worked a great deal of DX with it. I also receive on that same antenna, and until I build a separate receiving antenna (a project I have put off for years now), I simply

use the 18dB attenuator in my receiver to improve my signal-to-noise ratio on receive.

For the 160M specialist in North America, there are three "never miss" contests — the ARRL 160M and CQ magazine's 160M CW and SSB contests. The ARRL sponsors a CW-only contest on the first weekend of December. While it attracts far less DX participation than CQ's events, the ARRL contest's rules ensure that the DX is only interested in working stations in the United States and Canada. You won't be competing with DX to work the DX you hear.

As well, the turnout of U.S. stations in this contest is excellent, and you can count on all fifty states being active. If you're chasing the Worked All States (WAS) award, this contest may be a good place to pursue it: In-contest WAS is quite common in the ARRL 160M.

The popularity of this contest is such that the bottom 100 kHz of 160 is pretty well taken over by CW activity. SSB non-contesters usually move from their usual haunts to spots above 1900 kHz.

There are DX windows of which you should be aware: please do not call CQ from 1830 to 1835 kHz and 1907.5

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Contest	Date/Time	Bands	QSO points	Multipliers	Exchange	Entry Categories	Logs
ARRL 160m	2200z 4 Dec 1600z 6 Dec	160m CW	3pt/VE, W 5pt/DX	ARRL Sections + DXCC countries	RST Section	Single Op: High power, Low power, QRP Multi-op	6 Jan ARRL
QRP ARCI Holiday Sprint	2000z 6 Dec 2359z 6 Dec	160-6m CW	5pt/ARCI member 4pt/non-mbr DX 2pt/non-mbr NA +2000 for home-brew TX +3000 pts home-brew RX	US States, Canadian provinces and territories, DXCC entities on each band Multiply the resultant score by the power multiplier x15 for 0-250mW, x10 for 250mW to 1W x7 for 1-5W x1 for over 5W	RST QTH ARCI members will also send their membership numbers	Single Op: All bands, single band, high bands, low bands, portable. Multi-op Multi-tx	30 days N6GA or e-mail to CamQRP@ cyberg8t.com
ARRL 10m	0000z 12 Dec 2359z 13 Dec	10m CW & SSB	2pt/SSB 4pt/CW	x2 for USA novices/techs Canadian provinces, territories, Labrador, US States, DXCC	RST Prov	Single Op: Both or single mode, all with High, Low and QRP pwr cats. Multi-op.	1mo.
Croatian CW Contest	1400z 19 Dec 1400z 20 Dec	160-10m CW	10pt/9A - 160-40m 6pt/9A - 20-10m 6pt/DX - 160-40m 3pt/DX - 20-10m 2pt/NA - 160-40m 1pt/NA - 20-10m	DXCC + WAE countries on each band	RST + ITU Zone	Single op all bands Multi-op single tx	HRAS Dalmatinska 12 10000 Zagreb Croatia
Stew Perry Topband Distance Challenge	1500z 27 Dec 1500z 28 Dec	160m CW	1pt/QSO 1pt for ea. 500km measured from grid centre to grid centre	If your power is >100w mult=1 If your power is <100w mult=2 If your power is <5w mult=4	Grid square	Single op, Multi-op No packet spotting allowed Send in your log in ASCII either by e-mail or diskette	30 days KM9P or e-mail tbdc@ contesting.com
RAC Canada Winter	0000z 27 Dec 2359z 27 Dec	160-2m CW & 'Phone	10pt/VE 20pt/RAC stns. 2pt/DX	Can. Provinces and Territories (12) worked on each mode on ea. band.	RST Prov DX and VEO send Ser#	Single Op: All bands, Low Power, Single band Multi-op	31 Jan 720 Belfast Rd Suite 217 Ottawa ON K1G 0Z5
ARRL RTTY Roundup	1800z 3 Jan 2359z 4 Jan	80-10m RTTY	1pt/QSO	Canadian Provinces, Territories, US States, DXCC regardless of band	RST Prov	Single Op: All bands, high and low power Multi-op, single tx	1mo. ARRL
Japan International DX CW - Low Bands	2200z 9 Jan 2200z 10 Jan	160-40m CW	1pt on 40m 2pt on 80, 160m Work JA only	JA Prefectures (50) JAs will send 2-digit prefecture no.	RST Ser#	Single Op: Both bands, single band Multi-op	1mo. Box 59 Kamata Tokyo 144
North American QSO Party - CW NA QSO Party - SSB (NCJ)	1800z 10 Jan 0600z 11 Jan 1800z 17 Jan 0600z 18 Jan	160-10m	1pt/QSO	Canadian Call areas, US States, other NA countries	Name Prov	Single Op Multi-op, two tx All entrants must run 150w or less	1 mo. KZ2S

Addresses: CQ - 76 N Broadway, Hicksville, NY 11801 USA; ARRL - 225 Main St, Newington, CT 06111 USA; Call sign - Callbook Address; Bands: The 30, 17 and 12M bands are never used in any contest. Official forms and complete rules may be available from me. Please send SASE for details.

to 1912.5 kHz. The first window is where you can hear Europeans, Africans and other DX calling CQ. The second is where the Japanese are allowed to operate. In the former case, you may call the stations you hear on their transmitting frequencies (if they aren't working "split"), but do not work any other USA or Canadian stations in the window. In the latter case, Japanese uniformly listen outside their band, usually below 1830 kHz.

A typical ARRL 160M contest contact might sound like this:

Station 1: "CQ TEST KB2VIE KB2VIE TEST" (KB2VIE calls CQ very succinctly, and pauses to listen only a few seconds before calling CQ again.)

Station 2: "NE9DH" (NE9DH replies by sending his call sign once.)

Station 1: "NE9DH 5NN NNJ" (KB2VIE sends NE9DH's call once, and sends that station a signal report, the universal 599, and his ARRL Section, which is Northern New Jersey.)

Station 2: "R 5NN IL" (NE9DH replies with a signal report and his ARRL section - Illinois.)

Station 1: "TU KB2VIE" (KB2VIE thanks NE9DH for the contact, and is standing by for other stations to call him. If he gets no response, he'll call

CQ again.)

In this contest, you earn two points for each QSO with a station in Canada or the U.S., and five points for every QSO with any station anywhere else. You also earn multipliers for each ARRL section, Radio Amateurs of Canada (RAC) section and DXCC country you work. Your total score is the product of your total QSO points and your multiplier total.

As for logging on computer, CT, NA

and TRLog all log and score this contest correctly. ARRL accepts your log by e-mail, thus making submitting your entry a breeze. Otherwise, ARRL has log forms that you can obtain with a large self-addressed, stamped envelope (SASE). The address for these forms or for submitting your entry by post is: ARRL, 225 Main St., Newington CT 06111.

Top Band is a fascinating band, and well worth exploring, no matter what kind of antenna you can raise. Give the ARRL 160M contest a try.

Other December contests

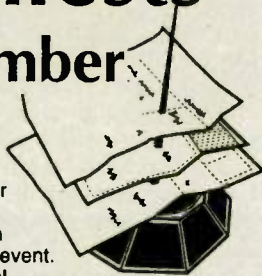
With Christmas holidays, December is a tough time of year to schedule a contest. Undaunted, ARRL also hold their annual Ten Meter Contest on the second week of the month. This contest was featured as "Contest of the Month" in the December 1997 issue of *Worldradio*. The Croatian Amateur Radio organization sponsors their national event on the third weekend. The fourth weekend sees two contests in that area that are a lot of fun: the RAC Canada Winter Contest and N6TR's "Stew Perry Top Band Distance Challenge" for those of you who couldn't get enough of 160M during the ARRL contest. 73, and good luck in the contests.



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Hamfests December

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FLORIDA

Columbia ARS Hamfest and Computer Show, 12 Dec. at Columbia County Fairgrounds, (SR 247, Gateway to Florida No.4.) Opens at 8 a.m.-4 p.m. Vendors and food. Admission \$5. Tables \$10. Setup: 4 - 8 p.m. Fri. and 6 - 8 a.m. Sat. Info: Colin Boutwell, WA5RKR Tel.: 904/755-7960 or 800/752-7969. Email: wa5rkr@isgroup.net; Joe Aymond, WD4EOJ Tel.: 904/935-2405 after 5 p.m. Fax: 904/935-2876. Email: wd4eoj@isgroup.net.

Hundreds of Amateurs volunteer for flood duty

The death toll is approaching 30 in central and southern Texas as flooding that began the middle of October. ARRL South Texas Section Manager Ray Taylor, N5NAV, reported at least 425 Hams were active in Texas, Louisiana, Oklahoma, and Arkansas handling various flood-related duties ranging from net control to shelter communication. With public telephone systems overloaded or out of service, Hams supported the Texas Department of Public Safety by providing communication between its Austin headquarters and affected communities such as Victoria and Corpus Christi.

Taylor says the worst damage was in the New Braunfels area in Comal County where he lives. Hams are providing communication assistance for the Dallas-based Baptist Men's Kitchens feeding program there and elsewhere as well as for the Salvation Army and other outside relief organizations. Taylor credited Comal County EC Todd Covington, N5IJR, with taking time away from his own flood-damaged home to roll out the PrimeCo communications van and pressing it into flood duty. He says two repeaters in the van aided Red Cross communication.

San Antonio and Bexar County also were hard-hit by the flooding.

Six shelters were opened in the San

ILLINOIS

Jacksonville ARS and Illinois Valley ARC Hamfest, 05 Dec. at Turner Jr. High School. Vendors, Indoor flea market, food, prizes and VE testing (with advanced registration). Admission \$3. Tables \$10. Opens at 8 a.m. Info: Tim KB9FBI 217/245-2061.

MINNESOTA

Courage HANDI-HAM System Winter Hamfest, 05 Dec. at Courage Center, Golden Valley, MN. Flea-market, VE exams and local radio retailers. Info: Nancy Meydell 612/520-0512. Email: handiham@courage.org.

SOUTH CAROLINA

Union County ARC Hamfest, 12 Dec. at Union National Guard Armory(Industrial Park Road) from 8 a.m.-2p.m. Hourly door prizes. Walk-in VE testing at 10 a.m. Talk-in: 145.250(-). Info: Roger W. Gregory, 102 Partridge Rd., Union S.C. 29379; Tel.: 864/427-1462; Email: rgregory@carol.net

Antonio area. Another 20 or more shelters were opened between San Antonio and the Gulf Coast, and additional shelters were opened as other areas were affected to the east and southeast of San Antonio.

The Red Cross has had to rely more heavily than usual on Ham radio assistance because its San Antonio headquarters was flooded out. The Red Cross set up temporary headquarters at Fort Sam Houston, but it had only a few telephone lines available, Martin explained. "This lack of telephone capability is why we had to man all of the shelters 24 hours a day," he said.

The FCC declared a voluntary communications emergency. Hams were asked to cooperate by relinquishing the use of 7.285 and 7.290 MHz during daylight hours and 3.873 and 3.935 MHz during the evening. The FCC asked hams to clear the frequencies within three kHz on either side.

— ARRL Letter

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See *Worldradio*, Oct. 1994 issue.

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New Products

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

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MFJ-1756 is quiet. A DC grounded radiator eliminates noise generated by static. It is easily cut for your favorite part of the 6 Meter band. A rugged adjustable air insulated matching stub lets you obtain a near perfect 1:1 SWR — a non-adjustable standard ground plane is much less than 50 Ohms.

MFJ's large diameter radiator gives you wide bandwidth and a heavy duty ceramic insulator gives low RF loss. MFJ-1756 has fiberglass ground isolators, a 55 inch high-strength aluminum radiator and four 60 inch radials. It will mount on any 1 to 1 1/2-inch mast with a single U-bolt (included). Mast is not supplied. It's per-

fect for your MFJ-9406, MFJ-9606, ICOM IC-706 and other 6-meter transceivers up to 1000 Watts.

MFJ's low-angle DX Vertical antenna comes with MFJ's famous No Matter What one year limited warranty. MFJ will repair or replace (at our option) your antenna for one complete year.

To order or for your nearest dealer, call 800/647-1800, FAX 601/323-6551; e-mail: mfj@mfjenterprises.com; or check out dealer and ordering information on the web at www.mfjenterprises.com.



MFJ 259 SWR Analyzer

MFJ has added many new features to the MFJ259 SWR analyzer and gives you more value than ever! It's still the low price leader at only \$249.95!!!

MFJ-259B gives you a complete pic-

ture of your antenna's performance. You can read antenna SWR and Complex Impedance from 1.8 to 170 MHz. The MFJ-259B has a built-in frequency counter, side-by-side SWR and Complex Impedance meters, and smooth reduction drive tuning.

It's super easy-to-use. Just set the bandswitch and tune the dial — just like your transceiver. SWR and Complex Impedance are displayed instantly.

Take the guesswork out of building and adjusting matching networks and baluns. Perfectly tune critical HF mobile antennas in seconds for super DX, without subjecting your transceiver to high SWR. Measure inductance and capacitance. Troubleshoot and measure resonant frequency and approximate Q of traps, stubs, transmission lines, RF chokes, tuned circuits and baluns. And this is only the beginning!

The MFJ-259B is a complete ham radio test station including frequency counter, RF signal generator, SWR Analyzer, RF Resistance and Reactance Analyzer, Coax Analyzer, Capacitance and Inductance Meter and more.

The MFJ-259B has eight powerful new features.

1. You can read Complex Impedance as series resistance and reactance ($R+jX$) or as magnitude (Z) and phase (degrees).

2. You can determine velocity factor, coax cable loss in dB, length of coax and distance to a short or open in feet.

3. You can read SWR, return loss and reflection coefficient at any frequency simultaneously at a single glance.

4. You can also read inductance in uH and capacitance in pF at RF frequencies.

5. NiCad battery charger function is enabled with a jumper inside the MFJ-259B.

6. Battery Saver function saves the life of your batteries while your SWR Analyzer is not in use.

7. Low Battery Warning feature tells you when you need to replace the batteries. No more climbing all the way up the tower and find out you're not functioning properly.

8. Easy access battery panel lets you get to your batteries quickly. Just two screws let you change out the 10 double AA batteries.

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CW is converted into audio tones that are sent to your mic jack and transmitted by your HT for everyone to copy.

You'll send beautiful code — the audio is a pure sinewave shaped to eliminate harsh keyclicks. You get great sounding sidetone from its built-in speaker and front-panel volume control. This lets you hear what you're sending and develops a good fist.

The Transmit/Receive switch automatically keys your Push-to-talk on your HT as soon as you start sending CW. It keeps it keyed until you've finished sending. Then it returns your HT to receive so you can copy. An adjustable T/R delay knob lets you send fast or slow CW.

MFJ-552 is compact and uses a 9 volt battery so you can use it with your HT anywhere. It includes an open-end patch cable you can solder your HT connector to. MFJ sells optional pre-wired interface to HT cables for \$ 14.95. Order MFJ-5024 for Icom, Yaesu, ADI, Radio Shack and compatible HTs. MFJ-5022 for Alinco and Standard HTs; or MFJ-5026 for Kenwood and compatible HTs. MFJ also sells an optional straight telegraph key, MFJ-550, \$7.95.

MFJ's JimHandy CW Interface comes with MFJ's famous No Matter What one year limited warranty. MFJ will repair or replace (at our option) your interface for one complete year.

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Leather for your baby

How many times have you nearly lost that mini radio? Or dropped it? Or had it slip out of your shirt pocket? These radios are all too vulnerable to damage. Cutting Edge has introduced a line of unique radio-holders to help keep these tiny radios in "new" condition. These pouches are custom designed to give a secure fit, provide easy access, and have the rich texture of fine leather.

The photo shows the Radio Glove manufactured to securely fit the following radios: Yaesu VX-1R, Icom IC-Q7, Standard C508A, C108A, and Alinco DJ-C1T, DJ-C4T, DJ-C5T.

It's constructed of glove quality leather, with a belt clip that is also leather covered to avoid scratching your belt. The Velcro closure secures your radio, yet gives you easy access without any buckles or clips. Speaker holes allow you to hear transmissions easily. Comes with a lanyard.

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BetterRF Tune Control

The BetterRF Co. Tune Control, for ICOM 706 owners (original or MKII), makes the radio's TUNER/CALL button operational. The product plugs into the Molex connector on the back of the radio. No radio modification is required.

With TUNE CONTROL, the tuner button causes the radio to emit a steady carrier at 10 watts. This is useful for tuning an antenna, a tuner or just checking SWR. After, the radio reverts back to the previous mode/power. The product works 160-10 Meters and sells for \$32.95. The BetterRF Co. can be reached at 800/653-9910 or www.qth.com/BetterRF.

G4ZPY Keys from England

Morse Express is now distributing G4PZY Morse keys and paddles, made in England by Gordon Crowhurst, G4PZY. Gordon has been making premium-quality keys for many years, and his products have a well deserved reputation for superb quality. The G4ZPY line comprises a wide range of straight keys and paddles, some 55 different models in different finishes and styles. The

straight keys range from simple brass keys on stone bases to the Sovereign presentation key with engraved plaque, British Gold Half Sovereign inlaid in the top of the knob, and a glass cabinet with gold plated edging.

Paddles range from the miniature three-in-one, to the Very High Speed Paddle, (rated at 60 wpm), available in solid gold with jewels. Morse Express will carry the popular keys and paddles, including the "kit key" as stock items, and the remainder of the G4ZPY line will be available by special order. Credit card orders can be placed by calling Morse Express at 800/238-8205, or by using the secure order page at the Morse Express web site: www.MorseX.com. To request a catalog or for information about the G4ZPY keys or other Morse Express products, call 303/752-3382, or write to: Morse Express, 3140 S. Peoria St. Unit K-156, Aurora, CO. 80-014-3155, or Email: info@MorseX.com.

New Key from Wm. M. Nye Company

Morse Express has announced a new straight key from Wm. M. Nye Company, Nye's first new product since the late 1970s.

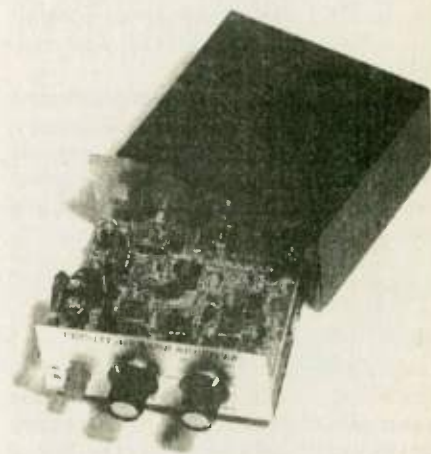
The Model 330C is a deluxe version of Nye's classic Master Key, with a highly polished chrome base, nickel plated hardware and Navy Knob. The hardware is selected by hand and each 330C is carefully inspected before packing to ensure a flawless finish. Model 330C has gold-plated hard silver contacts which are electrically isolated from the rest of the key, and is supplied complete with cord and 1/4-inch phone plug. Weighing in at a pound and a half, the 330C is a real attention-getter and a delight to use.

Unlike any other Nye or Speed-X key, each 330C has a serial number stamped in the base. According to Marshall Emm (N1FN), General Manager of Morse Express, the first nine keys have single digit serial numbers and have already been sold to collectors. Proceeds from the sale of the single-digit 330C's will be used to fund an annual award for encouraging the learning and use of Morse

code, Marshall said.

Nye's Model 330C is priced at \$139.95 and is covered by Nye's standard two-year warranty.

Credit card orders can be placed by calling Morse Express toll free on 800/238-8205 or by using the secure order page at the Morse Express web site: www.MorseX.com. For further information about the Nye and Speed-X keys or Morse Express's other products, contact Marshall by phone on 303/752-3382, write to him at Morse Express, 3140 S. Peoria St. Unit K-156, Aurora CO 80014-3155, or send e-mail to info@MorseX.com.



New Vecronics kits

Vecronics has announced a new kit line with over 30 different kits, providing a professional product at a hobby price. From short-wave converters to aircraft receivers and Ham radio kits to an old fashioned crystal radio kit, Vecronics offers something for everyone.

The Vecronics kits are created by engineers who are hobbyists at heart. Each kit features a professional quality epoxy glass PC board with solder mask and screen printed components legend, and the highest quality components. The kits feature an extensive "owner's manual," which has been written specifically for each kit.

This detailed, yet still easy to follow, manuals feature illustrations, specific instructions, and even a schematic diagram. Not only are step-by-step instructions and helpful tips provided, our comprehensive manual also guides you into the next step, the fun of using your equipment!

Vecronics offers an optional custom cabinet for most kits, which includes a sturdy metal box, knobs, hardware, decals, and protective rubber feet. It'll turn your kit into a show piece your friends won't believe you built.

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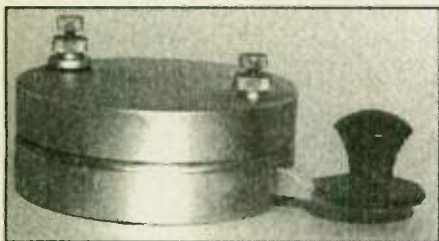
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The CAL-AV Labs' Eureka Morse Key

The CAL-AV's Eureka is a straight Morse hand key built into its own base in an inverted design. This yields an elegant appearance, protects the mechanism, and allows the armature and knob to be very close to the sending desk. The key utilizes magnetic attraction in place of a tension spring. This provides a dramatic decrease in the force required as the knob starts downward, accelerating the armature. The result is a pleasant, positive contact closure, similar to a snap-action switch.

The case is machined from a single piece of solid brass. Case finish is a non-glare matte. Polished brass, chrome, or gold plating can be added at additional cost. The extremely stable finished key is 4 inches in diameter and weighs 4.6 pounds. The aluminum armature's axle rotates in a pair of sealed, stainless steel ball bearings. Both the contact gap and the force adjustment are on the case, and are therefore stationary. The contacts are coin silver. Knob style is derived from the U.S. Navy type 26003A key. A brass cover plate with neoprene anti-skid surface offers additional protection, and eliminates the need for a dust cover. A rear connector facilitates easy cable change.

Expensive? Of course, and a good value as well. The Eureka is a no-compromise design utilizing the finest materials available. Therefore, we offer you, the original purchaser, a LIFETIME warranty. Production is limited, with each key serialized. Price, including one standard cable assembly, is U.S. \$530. Orders may be placed by money order, cashier's check, or any major credit card, including Japanese JCB. Delivery of standard matte finish keys is from stock to 70 days ARO; FOB Tucson, AZ. Shipping weight is 6 pounds.

Credit card billing at time of shipment. We export directly.

CAL-AV Labs, Inc., 1802 W. Grant Road, Ste. 116, Tucson, AZ 85745; Tel.: 520/624-1300; FAX: 520/624-1311; Email: calav@flash.net; URL: www.cal-av.com.

TechAmerica offers on-line ordering

Electronic enthusiasts, specialists, hobbyists and professionals throughout the country now have an abundant supply of capacitors, cables, batteries, breadboards, inductors and diodes right at their fingertips — thanks to the new TechAmerica On-Line Catalog at www.TechAm.com. Armchair shoppers can view and order from more than 18,000 different electronic parts, components and publications, including: test equipment, tools and related technical support; "Club" sound, including professional audio and lighting; wire, cable, and connectors of all types; unique video and satellite products including distribution systems; computer boards, processors and networking items; major two-way communications and wireless services; home automation and security products; a complete library of technical and computer books and a diverse specialty battery selection.

TechAmerica has also released its new 1998 -1999 catalog, available at most RadioShack locations nationwide for \$4.95, with a \$5 discount on the first order from TechAmerica. Customers can also order catalogs by calling 800/877-0072 or by visiting TechAmerica's website. Catalogs ordered by phone or from the Internet are free with any purchase from TechAmerica.

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AOR AR7000B DSP Wide Range Receiver

AOR USA has released the new AR7000B. The AR7000B blends a color video display, DSP technology, a triple conversion front end and computer interface into a precision, high performance, all-mode receiver.

The LCD color video display is the most noticeable feature of the AR7000B. The large panel is approximately 2 inches high and 2.5 inches wide, and it displays a vast array of information to the operator, including frequencies, modes, volume, squelch, AGC, bandwidth, channel and bank designators, alphanumeric channel label, date, time and much more.

Video information can also be exported to an outboard monitor from the composite video output on the rear panel of the AR7000B. The user can select either NTSC or PAL video formats for the output port.

The AR7000B rear panel has a nine-pin RS-232C port for a

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full-control computer interface, an 8-pin DIN Auxiliary connector, BNC antenna connector, constant-level audio output, external speaker jack and 12 volt DC input coaxial connector. The front panel has a headphone jack and a remote control receiver window for commands from the standard Infrared (JR) remote controller that allows operation of the AR7000B Dom across a room.

Front panel controls include power switch, a multi-function keypad for direct frequency entry and 12 secondary functions. Additional buttons control volume, operating mode (VFO or Memory) keyboard lock, escape command, frequency entry command and run/break for executing programmed search and scan functions. A large tuning knob with finger indentation allows the user precision manual tuning control. There are two VFOs that can be selected by the operator.

Modes received by the AR7000B include WFM, NFM, AM, LSB, USB and CW. Frequency coverage is from 100 KHz to 2 GHz (cellular frequencies blocked on USA version). There are 1500 memory channels (15 banks of 100 channels). Banks and channels can have alphanumeric identifiers of up to 7 characters. The operator can scan selected or all memory banks.

In addition to its many unique features, the AR7000B includes a capability to shift the IF plus or minus 8.5 KHz in 100 Hz steps. Tuning steps, AGC, receiving mode and bandwidth can operate automatically or be over-

ridden.

The color display shows several different pages of information. For example, when the receiver is in the search mode, it displays the frequency and related operational information. The lower part of the screen shows a solid line that is the squelch threshold. Below the line, a display of signals across the scanned spectrum comes into view, showing signals above and below the squelch threshold and progressing graphically in step with the digital display.

The AR7000B also includes a calendar and clock, with a capacity for maintaining time in UTC and up to four additional time zones. The unit can be programmed to turn on and off at preset times.

AOR designed the AR700013 for the serious wide-range receiver user. Digital Signal Processing, AGC control, Attenuator settings and IF shift functions give the operator control abilities not found in previous AOR models.

For more information write to: AOR, Inc., 20655 S. Western Ave., Ste. 112, Torrance, CA 90501 or call: 310/787-8615; Fax: 310/787-8619.

DoD may help save Ham bands

A demand by the Department of Defense to be paid in advance for any spectrum that it agrees to reallocate may help protect the rights of radio amateurs. This is the result of the wording of the fiscal year 1999 Defense Authorization bill that says the Department of Defense will receive reimbursement from private companies seeking to buy sections of spectrum that agency was ordered to offer for auction.

But the kicker is that the costs associated with offering the spectrum for auction will be charged to the purchaser. Also the purchaser must compensate the Federal agency in advance for the expenses.

The estimated costs for such compensation could run into the billions of dollars and could lessen interest by many potential bidders. Since much of the spectrum that Ham radio occupies is allocated to the Department of Defense, amateurs could see some worthwhile spectrum protection from this action on the part of the Defense Authorization Committee. — *VHF Reflector, Newline*

Phase 3D Tested

Amateur Radio's Phase 3D spacecraft was put through pre-launch testing to analyze the satellite's ability to withstand the harsh environment of space. Thermal-vacuum testing began 20 October at Orbital Sciences Corp. in Germantown, MD.

The spacecraft was transported from the Phase 3D Integration Lab in Orlando to the DC area. AMSAT-NA Executive Vice President Keith Baker, KB1SF, said the satellite was placed in a large chamber for the thermal-vacuum test, and most of the air was removed. "Then the temperature was cycled up and down to simulate the harsh heating and cooling environment the satellite is expected to encounter in space," he said. The Phase 3D satellite endured five 36 hour cycles.

The satellite is slated to undergo vibration testing to simulate the launcher environment either late this year or early next year.

Maryland-DC AMSAT Coordinator Pat Kilroy, WD8LAQ, arranged opportunities for AMSAT members and "family" to get a look at the spacecraft before it entered the test chamber.

For more information on Phase 3D, see: www.magic.net.net/~phase3d/. — *ARRL Letter*

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VE exam schedules

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 **w/i**=walk-in only
p/r=pre-register only—no w/i **w/i pref.**=w/i preferred to p/r

State	City	Contact	Notes	State	City	Contact	Notes
Alabama				Massachusetts			
12/01/98	Mobile	David, WA4VAC 205/649-5229	p/r pref	12/19/98	Melrose	Scott, WB1F 617/665-7654	p/r pref.
12/12/98	Rainbow City	Gene, KC4TFF 205/492-8194 or Lloyd 205/547-0358	w/i	Minnesota			
Arizona				12/05/98	St. Paul	Ed, WØVC 612/636-0108	p/r pref.
12/12/98	Tucson	Joe, K7OPX 520/886-7217	w/i	Michigan			
Arkansas				12/12/98	Marquette	Richard, N8GBA 906/249-3837	p/r pref.
12/12/98	Forest City	Tom, KK5YN, 870/588-3759	pr pref.	Missouri			
California				12/12/98	St. Louis	Ron, KBØDIY 314/510-3223	p/r
12/12/98	Anderson	Al, N6BJ 530/357-4834	p/r pref.	New Jersey			
12/08/98	Arcadia	Denny, W6VRK 818/358-1480	p/r pref.	12/17/98	Bellmawr	Diane, N2LCQ 609/227-6281	w/i
12/06/98	Chico	Jackie, W6YKU 916/342-1180	p/r pref.	12/12/98	Cranford	24-hour hotline 973/377-4790	w/i pref.
12/17/98	Colton	Harold, AB6RN 909/825-7136 days or 909/685-6073 eves	p/r pref.	12/12/98	Pennington	Don, AA2F 609/737-1723	p/r pref
12/06/98	Concord	Gene, WW6H 510/254-5090	w/i only	New York			
12/26/98	Culver City	Scott, K6PYP 310/459-0337	w/i	12/8/98	Bethpage	Bob, W2ILP 516/499-2214	w/i pref.
12/05/98	Culver City	Clive, AA6TZ 310/327-2538	w/i pref.	12/6/98	Yonkers	Emily, AC2V 914/237-5589	w/i ok
12/19/98	Downey	Wes, KA3DSE 310/923-5598	p/r pref.	North Carolina			
12/26/98	Escondido	Harry, WA6YOO 760/743-4212	p/r	tba	Brevard	Harrison, KO4RV 704/877-4757	
12/01/98	Fremont	Dennis, K6DF 510/791-0914	w/i only	12/13/98	Marion	Randy, AC4JS, 704/668-3176	w/i
12/19/98	Lake Isabella	HOTLINE 760 379-2947	p/r pref.	12/13/98	Marion	Cecil, WB4UCF 704/668-3176	w/i
12/19/98	Long Beach	Don Boyce 562/420-9480	p/r pref.	12/12/98	Shelby	Bobby, AB4OE, 704/937-9697	w/i ok
12/12/98	Petaluma	Dale, 707/762-9414	p/r pref.	Ohio			
12/19/98	Redwood City	Joe, KB6OWG 408/255-9000	w/i only	12/05/98	Cincinnati	Herb, WA8PBW 513/891-7556	w/i pref
12/13/98	Sacramento	Dick, N6DK 916/383-2113	p/r	12/20/98	Elyria	Charles, W8HF, 440/327-3832	p/r pref.
12/09/98	Santa Ana	Red Cross 714/835-5381 x140	w/i	12/26/98	Van Wert	Robert, KA8IAF 419/795-5763	p/r pref.
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Colorado				12/9/98	Roseburg	Mel, AB7DC 541/672-5884	p/r pref.
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12/12/98	Denver	Glenn, WØIJR 303/366-0155	w/i pref.	12/5/98	Erie	Norma, W3CG 814/665-9124	w/i only
12/12/98	Pueblo	Chas, 719/544-1613,	w/i pref.	12/3/98	Philadelphia	Dusty, ND3Q 215/879-0505,	p/r pref.
Florida				12/21/98	Telford	Joe, W3PNL 215/723-6697	p/r pref
12/19/98	Melbourne	Bill, WB9IVR 407/724-6183	p/r pref.	Puerto Rico			
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12/12/98	W. Palm Beach	Steve, W2QX 561/535-8504	w/i	Rhode Island			
Georgia				12/10/98	Providence	Judy, KC1RI 401/231-9156; Al, NN1U 401/454-6848	w/i pref.
12/26/98	Dalton	Bert, N4BZJ 702/259-5625 or Harold, N4BD 706/673-2291	w/i	South Carolina			
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12/06/98	Gainsville	Terry, K4FB 770/967-6364		12/02/98	Greenville	Sue, N4ENX 864/967-0001	w/i ok
Idaho				12/08/98	Spartanburg	Peter, KI4KN 803/576-5566 day or 803/585-4919 eve	
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Anytime!	Burr Ridge	Deni, W9DS 630/986-0061	p/r	12/17/98	Jasper	Edgar, KF4CJ 205/597-3863	
12/15/99	Chicago	Mike, KG9C 773/781-7171	w/i ok	12/19/98	Johnson City	Jim, AE4DA 423/282-2490	
12/12/98	Oak Forest	David, NF9N 708/448-0580	p/r pref.	12/19/98	Knoxville	Ray, W4CPA 423/687-5410	
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12/19/98	New Albany	Dick, K9RT 812/246-6377	w/i	Texas			
12/6/98	Terre Haute	Fred, K9EBK 812/466-2122	p/r pref.	12/19/98	Austin	Jim, AB5EK 512/327-6184	w/i pref.
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Title of Publication: Worldradio Publication No.: 947000 Date of filing: Oct. 10, 1998 Frequency of issue: Monthly No. of issues published annually: 12 Annual Subscription Price: \$15.00 Location of known office of publication: 2120 28th St., Sacramento, CA 95818. Location of the headquarters or general business offices of the publisher: 2120 28th St., Sacramento, CA 95818 Name & address of publisher: Armond M. Noble, 2128 28th St., Sacramento, CA 95818 Name & address of editor: Rick McCusker, 2120 28th St., Sacramento, CA 95818. Owner: Worldradio Inc., 2120 28th St., Sacramento, CA 95818; Armond & Helen Noble, Sacramento, CA; Dorothy Campini, Somerset, CA; Linda Rutledge, Sacramento, CA; Norm Brooks, Carmichael, CA. Known bondholders, mortgagees & other security holders owning or holding 1% or more of total amount of bonds, mortgages or other securities are: none

	Average no. copies each issue during preceding 12 months	Actual no. copies of single issue published prior to filing date
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1) Sales through dealers & carriers, street vendors & counter sales	551	511
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Schools in four states on next SAREX schedule

Schools in Indiana, Rhode Island, Texas, and Virginia are on the schedule to make Amateur Radio contact with the astronauts aboard the space shuttle Columbia next year. The four-day flight, mission, STS-93, is tentatively set for launch 21 January.

Hams aboard STS-93 are Commander Eileen Collins, KD5EDS, Michel Tognini, KD5EJZ, and Catherine Coleman, KC5ZTH.

If all goes as planned, students at each school will get a chance to directly interview the astronauts via a Ham radio linkup. Typical passes last approximately 10 minutes. Specific times and dates of the school contacts have not yet been arranged.

For more information on the SAREX program, contact Jean Wolfgang, WB3IOS, e-mail jwolfgang@arrl.org. — ARRL Letter

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