

DXer

N O R T H E R N
C A L I F O R N I A
D X C L U B



Fund Formed in Memory of Jim Rafferty, N6RJ

by "Knock" Knochenhauer, K6ITL

Well known for his outstanding DX contest operations and for his personal support of DXpeditions to rare places, Jim Rafferty was also a prime supporter of the International DX Convention. A silent partner, he cheerfully providing much-needed assistance to those from the NCDXC or SCDXC who volunteered each year to run the convention.

Always available, Jim helped find speakers and exhibitors, and provided the impetus for many foreign DXers to attend. His behind-the-scenes support (he wanted no publicity) made the last ten (at least)

Visalia meetings the world's première DX conventions.

Jim would call, write, or visit anyone who would further the program and presentations. He also helped make sure the exhibits were meaningful and interesting.

And he gave of himself without any expectation of return. Whenever any Convention Committee member needed help, Jim was the first person they called, and he never failed them.

In 1993, despite his critical illness, he did it again. The 1993 International DX Convention had the highest registration in

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Little Pistols and Low-Band DXing

by Garry Shapiro, N16T

The halcyon days on 10m and 12m, when one could work the entire world over the course of a day with low power and modest antennas, are history. For most DXers, even those who began DXing fairly late in the solar cycle, it was not difficult to achieve 100 countries on the higher HF bands. But now, with the solar cycle in its dreaded decline, the thoughts of DXers will turn to the low bands—and how to put a five-band DXCC certificate on the wall.

The typical little pistol sports a small tribander on a 40- to 60-foot tower on a modest lot. Attached to the tower is the enter of an inverted vee, and one end of a horizontal dipole or a support for a loop or two—if there exists a strategically

positioned tree, or perhaps a sloper. The wires have snared some good ones, and the coveted 100 cards may already be in the box for 40. But 80 meters is a different story; it is almost always the last of the five bands to be vanquished.

The universal problems with 80 are noisy reception and limited antenna options. Few are blessed with rural expanses, 140-foot towers, or underground power. The city lot precludes the elaborate radial system so necessary for efficient radiation when utilizing the tower as a vertical. The home itself, with all its wiring, is in the near field. Horizontal antennas are typically less than a quarter-wave high, so they radiate mostly

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October Meeting

The October meeting, at The Bold Knight in Sunnyvale, will feature a program titled "The Spratly DXpedition" by WA6AUE and other guests.

Social hour begins at 6 and dinner starts at 7. Dinner selections will be prime rib or chicken rignati. The \$16 price includes salad, vegetable, roll and butter, coffee or tea, plus dessert, tax, and tip. A chef's salad, as an alternative, should be available by the next meeting. (Its price is being negotiated).

To place your meal reservation, contact N6ITW on the Thursday W6TI net or via packet, mail, or phone. (408/777-0700)

Coming Events

- Livermore Swap Meet: 1st Sunday of each month at Las Positas College in Livermore, 7 till noon all year.
- Pacificon '93: Hilton Hotel in Concord, October 22-24.
- CQ Worldwide SSB Contest: October 30-31.
- ARRL November Sweepstakes CW: November 6-8.
- CQ Worldwide CW Contest: November 27-28.
- ARRL 160-meter Contest: Dec. 3-5.
- ARRL 10-meter Contest: Dec 11-12.

N O R T H E R N
C A L I F O R N I A
D X C L U B

Club Officers:

President: George Allan, WA6O
 Vice President: Garry Shapiro, NI6T
 Secretary: Craig Smith, N6ITW
 Treasurer: Dewey Churchill, KG6AM
 Director: Bob Artigo, KN6J
 Director: Jim Knochenhauer, K6ITL
 Director: Louese Bloom, KA6ING

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 San Bruno, CA 94066
 (or via DXPSN)

Membership Data: Garry Shapiro, NI6T

Club Repeater, W6TI/R, (147.36+)

Trustee: Bob Vallio, W6RGG
 Comm. Chairman: Ralph Hunt, AG6Q
 Club simplex: 147.54 (suggested)
 Thurs. Net QTR: 8 p.m. local time.
 Net Manager: Ralph Hunt, AG6Q
 DX News: Dave Pugatch, KI6WF
 Propagation: Al Lotze, W6RQ
 Contest News: Rich Hudgins, WX6M
 Westlink: Craig Smith, N6ITW
 Swap Shop: Ben Deovlet, W6FDU
 933 Robin Lane
 Campbell, CA, 95008
 408-374-0372

QSL Information: Mac McHenry, W6BSY

W6TI DX Bulletins:

W6TI Station Trustee Bob Vallio, W6RGG, transmits DX information at 2:00 zulu every Monday (Sunday evening local time) on both 7.016 and 14.002 MHz.

Club address: Box 608
 Menlo Park, CA
 94026-0608

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Board of Directors Meetings

The **August BOD meeting** was at W6VG's house on the 18th. President WA6O, Vice President NI6T, Treasurer KG6AM, Secretary N6ITW, Director KA6ING, Director K6ITL, and Historian W6VG attended.

- Previous BOD minutes were read. Changes were made to those minutes and will be made to the secretary's data base.
- Letters from K1ER and WJ6O were read and discussed. No response was necessary.
- Treasurers report: 273 checks realizing \$5241.05 as of 8/16/93.
- Old Business: A letter was read by Vincent Chin, K6KQN, concerning the \$1000 NCDXF annual donation. After discussion, the board tabled the issue.
- The procedures Manual will be revised on Saturday November 13th at 1:00 pm, at K6ITL's home. W6VG will bring the manual on disk, and N6ITW will bring his Macintosh.
- NI6T and W6VG will now keep the main databases (parallel). The "drop dead date" for roster changes is August 31st. Those who have not payed their dues by August 31st will not be in the roster.
- KA6ING moved that the roster publication date be September 15th of each year, and Louese's motion passed unanimously.
- The board determined that whether QSL card counting for new membership could occur at a meeting would be the prerogative of the Secretary.
- The Board directed N6ITW to ask AG6Q what the options are for shutting "Charlie" off during on-the-air meetings and other times when packet announcements on W6TI/R would be inappropriate.
- N6ITW asked the board to consider having a new club award—"The Meritorious Service Award," which could be given at any time by the board to those who qualify. K6ITL and N6ITW will study the matter, and make proposal with specific qualifications.
- K6ITL moved to make Vince Chin, K6KQN, a Life Member free of charge in recompense for years of free tax service Vince has given the club. The motion was seconded by KA6ING, and will be brought before the membership at the September meeting. N6ITW will fill out an application for K6KQN.

The **September BOD meeting** was at W6VG's home on the 15th. Those present were: President WA6O, Vice President NI6T, Treasurer KG6AM, Secretary N6ITW, Director K6ITL, Director KA6ING, and Historian W6VG.

- The meeting convened at 7:30 p.m.
- The previous BOD minutes were not available to read.
- A letter was read from K6DR concerning reduction of dues for those who can't make the meetings. The secretary will respond back to K6DR under direction of the BOD.
- The Treasurers report: \$5076.81 as of 9/15/93
- K6ITL had planned to write the club concerning a proposal for the club to donate \$2500 to the NCDXF in memory of N6RJ, but he decided to make it an article for the DXer (page 1).
- WA6O will call K6LLK concerning turning off Charlie during the weekly net. Issues concerning Charlie were discussed.

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- WA6O will call a number of prospects for DXer editor, as AF6S has resigned. The board plans to reduce the newsletter to "bare bones" to start, and possibly try sharing the job among several people to reduce the workload on any one person.

General Meeting

The September general meeting took place at The Bold Knight in Sunnyvale. George, WA6O, presided.

- Brad Wyatt, K6WR gave an update on DXAC actions and upcoming elections.
- WA6O introduced Mr. Joseph Olsen, who presented a video of "The Fires of Kuwait". The movie was produced by Bechtel Corporation and recounted the difficult task of putting out 640 oil wellhead fires. The presentation was an excellent encapsulation of all the major hurdles the fire fighters faced.
- There were no first readings.
- Craig, N6ITW gave second readings for Eric Swartz, WA6HHQ; Jay Selwitz, KB6LYO; and George Staudacher, KI6CG. All three received the voice-vote approval of those present, and were welcomed into the club.
- The second reading for Danny Hayes, AB6LJ was rescheduled because his sponsors, K6OZL and NI6T, weren't present. (Garry, NI6T did call N6ITW in advance to say he could not be at the meeting)

Coral Relief

The pileup on eighty was hellish
For the coral reef called Mellish.
But with cards, ten through forty,
Joe had confirmed it *a priori*.
Making *this* contact ...
swellish.

©1993 David M. Barton, AF6S

Packet is a grand experiment in digital communications that began in the 1980's, but may grind to a halt due to infighting among sysops.

from the August '91 Red River Radio Flyer (Fargo, ND) via the June '93 Milford ARC "Collector & Emitter"—N8SMD, Editor

It's Time For 9-Band DXCC Submissions Again

by Chuck Vaughn, AA6G

It's time again to submit for the NCDXC's 9-Band DXCC award. "What is 9BDXCC?" you ask? Have you worked 100 countries on any one of the nine HF bands? Would you like a nice plaque for your wall showing your DX achievements? Do feel you've worked hard for those countries but no one ever said, "Good job, congratulations"? If so, 9BDXCC is for you.

The 9BDXCC award's fifth year is almost over, and I hope you have been crossing off countries on your checkoff sheets. If you need a checkoff sheet, there is one inserted into this DXer.

- Here is a brief review of the rules:
1. Purpose: To promote continued interest in DXing by all club members on all HF bands and to recognize DXing achievements by individual club members.
 2. To be eligible, you must have worked at least 100 countries on **one** band since October 10, 1987—or from when you joined the NCDXC, if after October 10, 1987.
 3. Bands: 160 through 10 meters,

- including the WARC bands.
4. Use the NCDXC checkoff sheet to track countries worked.
 5. Numbered tags for the plaque are issued in the following increments: 100, 150, 200, 250, 260, 270, 280, 290 and 300.
 6. This award uses the honor system; no QSLs are required.

From time to time I have heard some misconceptions being propagated about the 9BDXCC award. For instance:

1. I'll never qualify because I can't work 100 countries on all 9 bands. Truth is, you only need 100 countries on one band to qualify.
2. I'll never win because I can't compete with the big guns. You're not competing with anyone for this award. The 9BDXCC recognizes what *you* have done in DXing.

The club anniversary, October 10, is the cutoff date for working countries each year, and the deadline for submission is November 10 to me, AA6G. To make a submission, just state how many countries

over 100 you have worked on each band (don't send a list of countries worked). Include a check to cover the one-time cost of the plaque, the cost of engraved country tags and the cost of mailing if you don't intend to come to the 9BDXCC awards meeting.

If you already have the plaque, just apply for any additional tags you have earned. The awards meeting is planned for January 1994.

Here is a summary of costs:

9BDXCC Plaque (one time)	\$35.00
Band-Country-Total Tag, each	.75
Surface Mail—U.S.	5.00
Surface Mail—Foreign	7.00
Airmail—Foreign	20.00

To determine the number of tags, first see rule 5 above for the increments in which they are issued. For example, if you worked 110 countries on 40m, 190 on 20m and 125 on 15m, you would need to include \$3.00 for tags. That covers a 100-tag for 40m, 100- and 150-tags for 20m and a 100-tag for 15m.

Send your band-country totals and your check payable to the NCDXC (in U.S. Funds) to: Chuck Vaughn, 4387 Othello Dr., Fremont, CA 94555.

Help Wanted, DXer Editor

If you read the board meeting minutes, you know I am resigning as editor of the *DXer*. My increased engineering workload has forced me to this decision despite the satisfaction and enjoyment I have gained from editing your paper.

The job provided an incentive to learn new skills, too. In July of 1991, when I accepted the job, I felt unequal to the task. So I read books on editing and layout, and took writing classes. I enlisted the aid of my son, an artist, and my wife, an eagle-eyed proof reader. And before long editing the *DXer* became a major highlight of a time when my engineering business was slow. As a bonus, I now feel much more confident writing articles for commercial publication.

I was saddened to learn that the board is resigned to lowering standards—to allowing the paper to become little more than meeting notices and minutes. My recent

predecessors surely share my hope that we had built something of more endurance, and that when it became necessary to pass the torch, some other enthusiastic member would step forward and carry it forward.

A good club paper that people enjoy reading is worth the effort producing it takes. With that in mind, I became editor of the monthly *ARNS Bulletin* in January, 1992. ARNS is a national organization of ham club newsletter editors. Its purpose is to help its members produce better papers. The *raison d'être* of the ARNS are that a good newsletter attracts new members and provides cohesion to a club, and that strong local clubs are amateur radio's foundation.

Many members know this. Besides, they want a club organ that won't embarrass them. Most feedback has been supportive on my watch, though some carped when they missed the necessary deadline.

A downside is that few articles are submitted. Yet you'll receive material that is a joy to share with the club, and you'll you can provide members a chance to try their creativity on friends before they confront the hostile world. More than one *DXer* writer appeared later in *QST*. When they did, the *DXer* editor shared their pride.

I'll not minimize the work. Editing a 12-page *DXer* takes three full days per month. You don't need a Mac, PageMaker, and a laserprinter, though the best tools make any job easier.

Should you accept the task, I'll gladly show you the ropes, and where to find good "filler" material and continuing help.

Ron, W6VG, handles all details of publication and mailing, and the club will reimburse your out-of-pocket expenses.

Remember the old joke about a camel being a horse designed by committee? I think the idea of several people sharing the job is unrealistic. An editor could use help, though—a photographer, a reporter ...

ELMER

By Rich Regent, K9GDF



Badger State "Smoke Signals," via the Copper County Radio Amateur Assn (Dollar Bay, Michigan) "The Landline"—Doug Polzien, N8SKO, Editor

Items from My Dictionary of Reality

by Charlie Cotterman, KA8OQF

Dummy Load: What you thought was a bargain at the flea market before you hauled it half a mile to your car.

Duplex: A poor choice of housing for a ham; the neighbor invariably believes you interfere with everything, even the toilet.

Feedback: The phone call from next door when you switch on the linear.

Ground: Where you stand to gaze up at your antenna, as you wonder why it doesn't work right.

Guy Wire: A convenient place for neighborhood kids to hang their kites.

from the Penn Wireless Assn. "X-Mitter"—Dave Heller, K3TX, Editor—who credits "SCARA Newsletter via OBARC."

Have you Checked Your Mouse Balls?

by Dave Foster, WD5BRP

The following message went out to all IBM branch office field engineers.

Abstract: mouse balls available as field replacement units.

Mouse balls are now available as FRU. Therefore, if a mouse fails to operate or should it perform erratically, it may need a ball replacement. Because of the delicate nature of this procedure, replacement of mouse balls should only be attempted by properly trained personnel.

Before proceeding, determine the type of mouse balls by examining the underside of the mouse. Domestic balls will be larger and harder than foreign balls. Ball removal procedures differ depending upon manufacturer of the mouse. Foreign balls can be replaced using the pop-off method. Domestic balls are replaced using the twist-off method.

Mouse balls are not usually static sensitive. However, excessive handling can result in sudden discharge. Upon completion of ball replacement, the mouse may be used immediately.

It is recommended that each replacer have a pair of spare balls for maintaining optimum customer satisfaction and that any customer missing his balls should suspect local personnel of removing these necessary items.

To re-order, specify one of the following:

P/N 33F8462 - Domestic Mouse Balls
P/N 33F8461 - Foreign Mouse Balls

from the May '93 Delaware-Lehigh Valley ARC "W3OK Corral"—Clarence Snyder, W3PYF, Editor

[Who says major American corporations aren't watching the bottom line? Of course it was meant as a prank, but apparently not all who received it understood that.—ed.]

Ham Today, Byron Tomorrow?

by David M. Barton, AF6S

The article "HF Radio Data Communication" in the spring '92 *Communications Quarterly* notes how we've gone full circle from digital communication (CW) to analog (AM, SSB and FM) and back to digital, with RTTY, AMTOR, packet and the newest, CLOVER.

Along with a fine tutorial on the new modes, the authors, K9GWT and W7GHM, discuss the bandwidth and data integrity advantages of digital communications.

But another advantage occurred to me. All the new modes require spelling out what is sent—just as with CW—putting the operator's literacy, or lack thereof, right out where everyone can see it.

In pre-technology days, the only way to communicate with someone too far away to shout at was by mail. And a letter with poor spelling or bad grammar reflected unfavorably on its author.

Sure, the nobles had scribes to write their epistles—presumably in bureaucratized dialects of the day. But ordinary folks wrote their own letters, and most cared how they came across. So the public had clear cause to treasure schooling, and they sought an education for their offspring that stressed language skills first and foremost.

Today a young person's world is mostly verbal and visual. As the schools trend away from stressing literacy, they reflect public

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from the September '93 Inland Empire VHF Radio Amateurs (Spokane, Washington) "Repeater"—Kyle Pugh, KA7CSP, Editor

In Memoriam

Vernon Howard and Leroy Cross

Two beloved perveyors of mountaineering books

by Nick Clinch

With the death of Leroy D. Cross in March and Vernon Howard in November, 1992 was a sad year for older American mountaineering book collectors. Back in the 1950's climbers in the United States were so few, we all knew each other. There were even fewer mountaineering book dealers; three to be exact: Glen and Muir Dawson in Los Angeles, Vernon Howard, and Leroy Cross.

Unlike the Dawsons, Vern and Roy were hobbyists rather than full-time book sellers, yet they introduced a generation of mountain lovers to the world of mountain books. Widely different in their personalities, they were alike in their integrity, knowledge of mountain literature, and in their enthusiasm.

I first met "Uncle Vern" in the fall of 1952. I had broken my leg twice that year—once in a ski mountaineering accident, and again in a car crash. I was extremely frustrated because I couldn't climb. Then an old climbing friend turned up with a car trunk of mountaineering books. I couldn't believe it! I had obtained a few books over the years, but had gained the impression there weren't many books on the sport—or, if there were, they had all disappeared. Dick said they came from Vernon Howard, who had a basement filled with books.

Uncle Vern had graduated from the University of California as a Phi Beta Kappa English major in the 1930's. There weren't many jobs available, yet he took ones that gave him time to gather and read mountaineering books.

When I first met him, he was the swing-shift operator of San Francisco's 3rd Street drawbridge. Not many ships came through, so he had plenty of time to read. Later he became a meter reader for the gas company because he could finish the job by early afternoon and return to his beloved books. The gas company repeatedly tried to promote him into management, but he refused. He knew what he wanted—time for books. As a result, he gained a vast knowledge of literature.

whiskey crates filled with books. It looked almost like a winery. In fact, Uncle Vern operated his sideline book business like a winery. He aged the stock. If he liked a new book he would order many copies of it. Beside rare old treasures there would be 25 or 30 pristine copies in original dust jackets of new books such as Hermann Buhl's *Nanga Parbat Pilgrimage* stashed away. No French wine cellar had a better ambience.

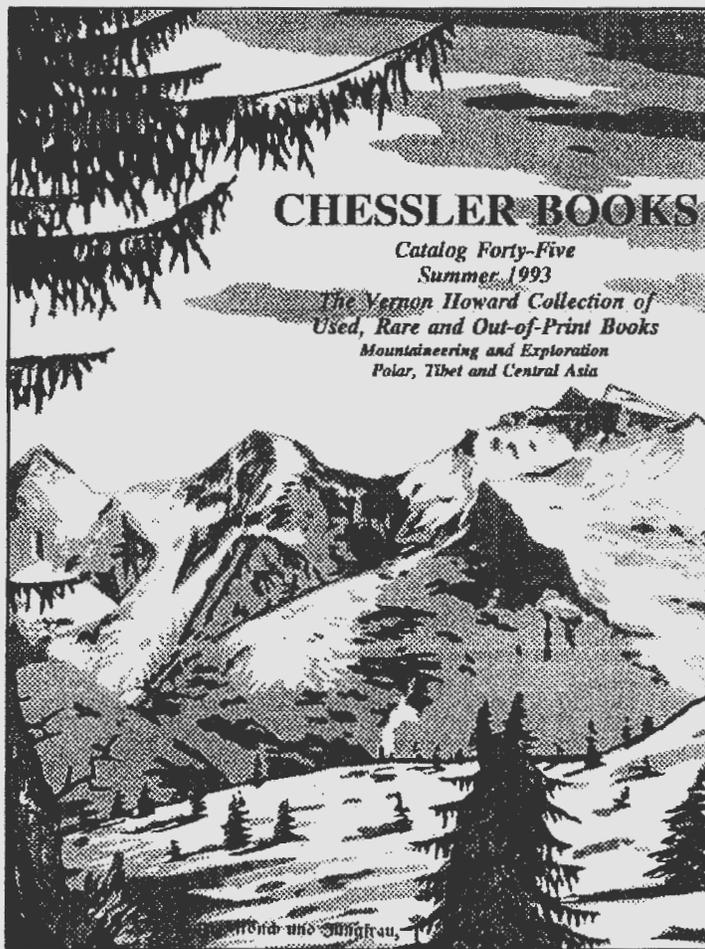
Uncle Vern not only knew of the standard works, he was familiar with all sorts of mountaineering items, chapters in general books, newspaper stories from the 1860's, and obscure journals. He was a walking encyclopedia. If you could come up with something Uncle Vern did not know about, you scored a coup. He knew far more than any modern collector armed with a notebook computer. Moreover, like any good book dealer, he passed on his knowledge to the neophyte and experienced collector alike, while imparting his enthusiasm for the subject.

He gave me the idea of collecting mountaineering journals—because the history of the sport is in them.

Uncle Vern told me if I ever saw anything rare, I should not write, but send a cable. In those days, cables were sent only in dire emergencies and most telegrams ended, "come at once." In 1957 I saw, in an obscure British catalogue, Colemans' *The Snowfields of Mont Blanc*. They wanted \$100, a sizable portion of my Air Force pay. But for reasons I still don't

understood, I sent a cable and got the book. A few weeks later I was visiting Sai

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When I first visited his house on a San Francisco hill, steep wooden steps led down to the basement. The stairs continued into the garage, passing tiers of old wooden

Little Billy, Nine Holes, and World Peace

by Dick Norton, Ennsixaa

To: American Good Golfing League (AGGL)
 Subject: Little Billy, Nine Holes, and World Peace

Over a number of years, I have learned to play a somewhat respectable game of golf. I have become interested in the US Open, which appears to be the most prestigious national golfing event.

The US Open is enjoyable but has one flaw. Essentially the same guys keep winning. I think the contest would be more interesting if the rules were changed so that more people would have a chance to win.

I can now win smaller local events, but I would also like the prestige that comes from winning the US Open. But I lack some combination of skill, strength, endurance, equipment, and dedication to do so under the current rules. Therefore I would like the rules changed so that I can win or come closer with the effort I am currently capable of producing.

First, the length of the fairways on many of the holes is longer than I can hit. I have

only one driver, and my small golf-club bag has space for no more. And do not feel those who are stronger or who have spent more money on golf clubs should be rewarded. I can hit the ball about 200 yards. Therefore please make the maximum length of any fairway 200 yards.

Second, I have only one putter, and choose to practice only a limited amount of time. I don't feel people who spend large amounts of money for fancy putters, or practice excessively, or compulsively evaluate slopes on greens before putting should receive all the golfing glory. Most of my putts go within one foot of the hole. I feel that's close enough. So please enlarge each hole to have a one-foot radius.

Third, my sister-in-law has planned a birthday party for her adopted orphan son, little Billy. It falls on the day you have scheduled the US Open next year. Little

Billy is in the Cub Scouts and already helps little old ladies cross the street. I'm certain it would not be in society's best interest to ignore Cub Scouts and the safety of little old ladies. Please change the date of the US Open to another weekend so it will fit better with the things in my non-golfing life.

Fourth, as I get older I find playing 18 holes too hard. Please reduce the number of holes on all golf courses to nine. The land this would free up could then be used to grow food to feed the hungry, for homes to house the homeless, and to construct laboratories where researchers can find cures for cancer and AIDS.

Rarely can adoption of so few suggestions hit such a hole-in-one for mankind. In a few more years I will be older and may suggest an even greater reduction in the US Open that, besides permitting me to win then, will further promote world peace and harmony.

Fore forever!

from the September/October issue of the ARRL's "National Contest Journal"—Trey Garlough, WN4WKN, Editor

Service

from page 3

- Hy-Gain: 402/465-7021 (rotor parts)
402/465-7022 (ant. parts)
800/328-3771 (technical assistance)
- Icom: 206/454-7619 (service)
206/454-8155 (parts)
fax: 206/454-1509
- JRC: 212/355-1180
- Kenwood: 213/639-7140 (service)
213/639-9000 (parts)
fax: 213/609-2127
- MFJ: 601/323-5859
- Ten-Tec: 615/453-7172
- Yaesu: 213/404-4884 (service)
213/404-4847
fax: 213/404-1210

from the Johnson City (TN) ARA newsletter—Ed Ingraham, WX4S Editor—who credits N8EMR's ham BBS

And They Call This Advertising?

by Dave Foster, WD5BRP

I took the following verbatim from newspaper classified advertisements.

For sale: antique desk suitable for lady with thick legs and large drawers.

Dinner special: turkey, \$9.75; chicken, \$8.75; children, \$5.

Now is the chance to have your ears pierced and get an extra pair to take home, too!

Tired of cleaning yourself? Let me do it.

Dog for sale: eats anything; fond of children.

Get rid of aunts. Zap does it in 24 hours!

Stock up and save. Limit: one.

Man, honest: will take anything.

Used cars: Why go elsewhere to be cheated? Come here first!

Wanted: man to take care of cow that does not smoke or drink.

We will oil your sewing machine and adjust tension in your home, for just \$10.

Wanted: part-time married woman to work in craft shop.

Man wanted, to work in dynamite factory. Must be willing to travel.

Will work for food, if necessary.

from the September '93 Delaware-Lehigh ARC "W3OK Corral"—Clarence Snyder, W3PYF, Editor

SO LID CPY and Other CW Games

by Dan Johnson, KC4EWT

You can play games on CW—if you like linguistic gymnastics. Some of the games also work on packet or RTTY. But proceed with any of the following at the risk of your reputation.

Fastback: To play, find someone on a bug or straight key and answer each transmission with a single statement or question that requires a lengthy response—TELL ME ABOUT UR LIFE BK, for instance. You win if the QSO lasts more than one hour and you send for a total of less than five minutes.

SO LID CPY: Answer each transmission with comments unrelated to what you just received. You win if the QSO has more exchanges than the last time you played.

SQZ: Squeeze maximum information into the minimum number of characters, using abbreviations. SQZ is a gas when the other guy doesn't know you're playing a game. FL FRE TO MK NW

ABBRs JST DRP VWLS NVR PNCT. Sometimes SQZ degenerates to SO LID CPY, allowing you to "kill two Birds (wattmeters) with one tone."

SCREAM: Using a straight key, establish a QSO, then shorten your dahs, stretch your dits, and use weird spacing. (Good SCREAM transmissions sound much like a stream of E's.) You can get a similar effect with a full-featured keyer by seriously maladjusting weighting. You win if the other guy's next transmission contains "QRN," "QRM," "73," or "SK."

HYDRA: To play, maintain several threads of conversation at once. One op comments on three or four topics, the other replies by commenting on each, then the first answers all those and adds another topic. Start by sending a brief but unrelated comment in your first reply. The other guy usually will play the game—unwittingly. You win if the last exchange in the QSO contains all the original topics.

SUCKER: Find someone copying CW with a computer (undoubtedly sends with the computer too—perfect fist, no abbreviations, full punctuation, answers fill requests with exact repeat of previously sent info. Vary your code speed wildly while you send, vary weighting, and run some letters together. You always win SUCKER if the other guy really is using a computer. (Play this one all the time.)

Actually, SQZ and HYDRA are good exercises and tend to produce interesting QSOs. SQZ is difficult, as it involves a special dialect (not dielectric). U CN DO LTS WO QRQ THO HD CPY RUF HI. In written English, HYDRA's interleaved threads of thought would be poor style, but in CW it spells efficiency. For variation, or if you're not quick on the draw, skip topics and reintroduce them in later overs. Once you get used to it, a HYDRA-style QSO can be relaxing. It's particularly nice when you head-copy.

from the October 92 Ole Virginia Hams RC 'Ole Virginia Times'—Bonnie, N4QBB Editor

Lightning and Your Ground

by Tim and Al Megahertzzi

Dear Tim and Al:

I plan to install a tri-band yagi and tower on the roof of my home. I'm concerned about lightning and would also like to know how to determine the effectiveness of my ground system. What can you tell me?

Rob, KC6IRK

Tim: Excellent question Rob, and Al and I will handle it in two parts. We will start here, then tell you more about effective ground systems in next month's column.

As everyone knows, lightning searches for the path of least resistance—the path of highest conductivity. So don't walk outside wearing a steel helmet during a thunderstorm, the way Al did last fall. You can see what it did to him.

Al: That had nothing to do with anything, Tim! Being charged up is just a natural state of existence for me.

Rob, I'm certain your wife and kids wouldn't want your tower to "drop in" for a visit. They might not like having their house "fried" either, so ground your tower!

A safe installation requires good design. You must connect the tower to the ground system using number 8 AWG or larger wire; wide, flat copper braid; or wide strips of sheet copper. The distance to the ground needs to be as short and as direct as possible. Avoid sharp bends in the wire and space the wire away from the house with insulators.

Tim: That sounds complicated to me, Al. I suggest putting a 75-foot metal flagpole in front of my house, with a large metal American Flag on top. Connect the flagpole

to the metal sewer line running under the street with 4/0 wire borrowed from the neighbor's power pole. Use silver soldered heavy-duty connector lugs bolted securely to the tower and sewer line, to provide a low-resistance path for lightning bolts.

Al: Tim, we already have enough evidence that you need a straight jacket! I agree on making the connections to the ground as direct as possible. If you can do it without terminal lugs, all the better.

Other factors to consider are multiple ground rods, in lieu of only one, and enhancing soil conductivity. We will cover that in next month's column.

Two reference books that provide lots of information on grounding and lightning protection are the ARRL *Antenna Book* and Joseph Carr's *Practical Antenna Handbook*.

Tim: I hope our suggestions have been helpful, Rob. As Al suggested, further study

continued on the next page

Tid-Bits

by Dave Foster, WD5BRP

- Some folks say what they think; others have friends.
- Children are biased. When I take my grandchildren out, all they say is, "Bias this and bias that."
- The salaries major league baseball players receive give a whole new meaning to the phrase "ballpark figure."
- I'm giving my quirky new computer one more week to shape up or chip out.
- My new VCR has a generous warranty; it's guaranteed until I learn to program it.
- Governmental Wisdom: A recent report says researchers have completed a \$650,000 study to determine whether too much money is spent on government studies. The results were inconclusive. You guessed it: further studies are planned.

from the July '93 Delaware-Lehigh Valley ARC "W3OK Corral"—Clarence Snyder, W3PYF, Editor

Future Byrons from page 5

disinterest in "readin' and writin'." The kids pick up these attitudes and think using their language well isn't 'cool.'

Yet literacy remains essential in the professions, and businesses are hard pressed to hire employees literate enough to keep them competitive. You see this every time you try to decipher a notice from your bank, the instructions for a hedge trimmer, or even a stockholders' report.

Amateur radio could provide one answer. A young person who becomes a ham will discover the digital modes and begin 'writing' to others. As with the letter writers of old, some will be motivated to master their native language. And motivation is the key—all a young person needs to accomplish nearly anything. But amateur radio can benefit only if hams promote the idea.

Could future Byrons, Twains, and Steinbecks emerge from the ranks of amateur radio? Why not?



Ethics in Amateur Radio

by Rick Rubeling/KB4SFR

Like many hams, my original attraction to Amateur Radio was its clean, friendly use of the radio spectrum. This on-the-air ham attitude is more than mere courtesy; it's based on ethics.

Our ethics are the standards we abide by. They are expounded in the FCC rules regarding the Amateur Radio Service, the basis on which we police ourselves. One becomes a ham willingly, and in accepting a license agrees to abide by the rules that govern the hobby.

Several hams have recently challenged the FCC, claiming their constitutional rights were violated when they were cited for using obscenities on the air. They assert the FCC can neither cite them nor lift their licenses, because their First Amendment rights to free speech take precedence over FCC rules and radio law.

So the American Bill of Rights has come to loggerheads with the ethical operating standards of our worldwide hobby. But American hams should remember that, when they elected to become part of amateur radio, they consented to abide by its rules.

Also, ethics are not an extension of the Bill of Rights in all cases. Sometimes ethics

precede, and sometimes have a congruent place alongside the Bill of Rights—thus guaranteeing freedom of speech.

In other words, because of good standards and ethics, freedom of speech is allowed to continue. Don't ever forget that most countries do *not* have a bill of rights guaranteeing them freedom of speech. Yet they still have laws concerning the ethics of amateur radio.

Remember also that radio conversations go well beyond the borders of the U.S. The entire world can listen to us.

We Americans can enhance our use of the amateur spectrum, as well as our First Amendment rights, by conducting ourselves well on the air. We should be searching for ways to further our goodwill and good operating standards, rather than ways to destroy these good things.

We should take pride in our hobby and do everything we can to keep it clean and honorable. Only fools, and perhaps a few with hidden agendas, would denigrate the hobby and then, in cowardice, cloak themselves behind First Amendment rights.

from the September '92 Bluegrass Amateur Radio Society 'Ham News'—Bill DeVore, N4DIT, Editor

N6RJ Fund from page 1

history, thanks in no small part to Jim's efforts in encouraging so many to attend.

As a result of this year's high registration and several cost-cutting measures, we realized an unexpected profit in 1993. So the Convention Committee, in recognition of N6RJ's constant support of the convention, has proposed that a portion of the profits be contributed to the Jim Rafferty Memorial Fund of the Northern California DX Foundation. They deemed the sum of \$2,500 appropriate. The balance of the convention proceeds will be returned to the NCDXC treasury.

All members of the NCDXC are hereby asked to comment on this proposal, which will be on the agenda of the October general meeting.



Last Letter

September 17, 1993

... my personal thanks for your great efforts as *DXer* editor. Sure hate to see you give it up, but I understand your business has taken off—good for you and Susan, but not so good for the rest of us.

Vy 73, "Knock," K6ITL (Tnx, Knock—ed.)

Tim & Al from page 8

on these subjects is necessary to gain an understanding of what you need to do, and why you need to do it. Thank you for the question. Al and I look forward to talking to you again next month.

From the April River City ARC "The Readout"—Terry Seeno, N6YQD, Editor. The real authors of this series are Tim Dolan, KM6AS, and Al Thearle, WB6RUU.

Little Pistol

from page 1

at high angles—not hot for Europe on the long path.

But line noise beggars all other problems. DXers soon learn that the power company always cuts the maintenance budget first. Almost everyone has 7.2 kV primary feeders nearby, and monster transmission lines carrying 230 kV loom above some ham stations. So “buzzers” (radiating pole hardware) make an S-9 noise level on 80 meters all too common.

Yet many have worked 80-meter DXCC in one season! You can too. Here’s how...

- **Improve reception.** On the low bands, hearing the DX is 80 percent of the battle. Signals are frequently strong enough but may be buried in sky noise or local man-made noise. To hear them, you must increase signal-to-noise ratio. If line noise is a problem, learn how to locate it. (See “Buy ‘The Books’” below). Better, find the guy in the local power company hierarchy who can locate the noise and get it fixed. Be prepared to go boldly up the corporate ladder to obtain relief!

Then optimize your receiving strategy. If a directive transmitting array or Beverage antennas are not possible, consider a remotely-tuned receiving loop with a small rotator. An effective method is to subtract the output of the loop from the signal received with the transmitting antenna. If the loop null is toward the desired station, the signal is unaffected, but the noise components partially cancel. A dramatic increase in SNR is possible with the loop only a few feet off the ground. Ted, KA6W, in his talk at this year’s International DX Convention, stunned the audience by reporting a 12 dB improvement on 160 meters.

- **Run power.** One hundred Watts is fine on ten meters, but with city-lot antennas you will spend too much time fruitlessly calling on 80 meters, unless you run the legal limit. Remember, the other station has noise, too—especially if it’s in the tropics or in the summer hemisphere.

- **Optimize your transmitting antenna.** As N6BT says, a dipole is an excellent antenna. Get it or its inverted-vee variant up as high as possible. If your yard will not allow a full-sized dipole, bend the ends or match a shorter one. Put a loaded rotary dipole up with your tribander. Put out more and longer radials for your vertical.

If a choice of orientations is possible, be aware that an inverted vee has more low angle radiation in its end-fire direction than broadside, and that the maximum gain of a sloper is broadside to the wire. Be aware also that a vertically polarized antenna isn’t superior at low angles unless soil conductivity is high, and it usually is more susceptible to received noise than a horizontal antenna.

- **Monitor the WWV propagation forecasts.** Watch for low values of the A and K indices. A single-digit A-index and a stable K of 0 or 1 for a day or two imply a quiet geomagnetic field for low absorption, making excellent DX opportunities. Good propagation can also occur briefly at the beginning of a geomagnetic storm, while the A index is rising sharply.
- **Know where the DX is.** DX windows exist at 3500-3510 and 3790-3800 kHz, but may expand during contests. You can use the JA’s working each other in the morning above 3510 as a measure of propagation to Asia.

Many countries allot phone segments far below 3750. Look for opportunities for split operation. Africans often congregate around 3790. You’ll find VK stations from 3795 to 3799 kHz only, and occasionally you will find non-DX QSO’s in the phone window when DX is present. Usually the ops are unaware of the window, and will QSY if you ask politely.

- **Don’t be shy; create your own opportunities.** Ask stations you work on other bands if they are QRV 80, and sked them if they are. (Choose a gray-line path, if possible, or at least be sure the whole path will be in darkness at the chosen time.) Many will be eager to

try a QSO on 80, and you will have the first shot at them! You might wish to choose a frequency outside the DX window, to avoid having “your” QSO preempted by cruising predators.

- **Ask others to help.** If you can hear the European but can’t break the East Coast Wall, and your friend in Georgia gets through, ask him to tell the DX that West Coast stations are calling. Often the DX station would love to work you, but can’t hear you through The Wall. There are rude Easterners who will not let you through, but others will try to help you.
- **Understand the band.** D-layer absorption occurs only when sunlight is on the ionosphere; it disappears soon after sunset. So low-band paths that cross sunlit areas suffer high absorption, particularly at high latitudes during local summer.

Generally, 80 meters starts cooking around sunset and gets better all night, until just after sunrise—along paths in total darkness. See “Exploit the Graylines” below. Note that winter sunrise occurs later each day well into January—well past the winter solstice.

- **Forget Europe!** (Did that get your attention?) De-emphasize Europe and the Middle East, even though those areas represent lots of countries. But polar cap absorption is severe on the longer wavelengths, because the short paths from the West Coast to Europe, the Middle East and Central Asia traverse the region of the north magnetic pole.

One can spend many a winter evening listening to barefoot East Coast stations with low dipoles run Europeans. But West Coasters seldom share this experience—or even hear the European stations. Our propagation seems to stop at the Rockies.

That doesn’t mean you will never work Europe with your inverted vee. There are occasional “good” evenings (low A and K indices) when you can pick off countries on the periphery of Europe at their sunrises, or log a

continued on next page

Little Pistols from page 10

- Balkan or Mediterranean "super-station." Your success will be a tribute to your persistence.
- Feast on your own hemisphere, on Africa, and on the Pacific. There are over 70 DXCC countries in the Americas (zones 1-13), 50 in East Asia and the Pacific (zones 19, 23-32), and 65 in "workable" Africa (zones 33, 35-39). Granted some are rare, especially on 80, and many aren't often QRV. Even so, there are nearly 200 countries outside Europe, the Middle East, and Central Asia. You may want to orient your antenna for best performance to Africa or the Pacific, rather than to Europe.
 - Exploit the gray-lines. Plan to operate at local sunset and sunrise whenever possible, but especially when the A and K indices are low. West Coast stations do very well on low-latitude trans-equatorial paths; so look for Africans at their sunrise (after our sunset); European sunrise is more of a problem. At our sunrise, weak Asian and Pacific stations will be enhanced, as will stations on the long path (see "Bob & Larry"). Moreover, your only competition to the west will be from other West Coast stations, since the rest of North America will be in daylight. Propagation enhancement at these times is usually short-lived but dramatic. An unreadable station will often leap out of the noise for a few minutes, then fade quickly.
 - Listen to the "Bob & Larry Show." A fascinating aspect of 80-meter propagation is the early-morning long path to Europe and occasionally to the Middle East and Central Asia. The bad news? Signals are usually weak. Only the awesomely well-situated and well-equipped stations, like those of Bob, W6RJ, Larry, KG6GF, and a handful of others on the West Coast can "test" the path daily. But it is fascinating to watch the opening follow the sunrise north and west. The good news is that conditions occasionally allow

modest stations to hear and work a few of the DX stations, and Bob and Larry generously help others who try. Hang out long enough and you might come up with QSO's in zones 16, 17, 20, 21 or even 22, along with the regular Scandinavians and other Europeans.

- Buy "The Books," and read them. ON4UN's *Low-Band DXing* (ARRL) remains the best treatment of the subject. Similarly, WA6FQG's *Interference Handbook*, Radio Publications, edited by W6SAI (the "yellow book") is the RFI "bible." It contains practical

information on noise and other interference.

The low bands are a challenge compared to the higher bands at the peak of the solar cycle, but they can reward you if you trouble to maximize your station's performance, and learn how to exploit the band's unique propagation.

And 80-meter conditions will improve over the next several years. You can be depend on that band to provide incredible DX opportunities—but only diligent seekers need apply.

See you in the pileups!



Vern & Roy

continued from page 6

Francisco and was having coffee with Uncle Vern in his kitchen. He was telling me about an unbelievable thing that had happened to him. He asked if I had seen the Chyington Catalogue and the Mont Blanc item in it. I said I had. He said it was a very rare item and he had ordered it immediately by airmail. The dealer replied his was the first letter she had received, but a couple days before, she had received a cable ordering the book. It was the first cable she had ever received. Uncle Vern shook his head in disbelief while I gathered up the courage to tell him that I was the person who sent the cable, and I had done it only because of his stern advice. As I stuttered my apologies to my mentor, he roared with laughter.

Uncle Vern dealt in mountaineering books because he loved them. We thought his prices were high (Students think all prices are high.) but later I realized the high price was to assuage his pain upon seeing those books go out the door.

Roy Cross lived in Brunswick, Maine and, as with Uncle Vern, selling mountaineering books was a labor of love. Roy's obsession was to put mountaineering literature into climbers' hands. He was so nice and his prices so low, that when a book arrived whose condition was less than anticipated, no one said anything. He especially enjoyed selling books to noted climbers. Like Uncle Vern, he educated his customers while helping them.

Although neither man would claim to be a technical climber, they were both mountaineers in the truest sense; they loved the mountains and climbed them. Roy continued hiking until he was in his 90's.

Once I obtained a set of the *Swiss Alpine Club Jahrbuch* for 1865—missing only Volume One. Finding such an old journal set is extremely difficult. I mentioned my problem to Roy, and three weeks later he produced one. The miracle but one blemish: the original set was bound in dark blue cloth and Roy's was bright red. Now that Roy is gone I feel the red volume is a metaphor of how Roy stood out from the rest.

Vernon Howard and Roy Cross dispensed books, knowledge, and a passion for mountaineering literature. Other dealers still furnish books, but no one can fill the void they left in the hearts of all who knew them.

from a flyer advertising the Chessler Books catalog, sent to the DXer by W6ISQ, who got it from W6CF. For a copy of Chessler Books catalog number 45, write Box 399, Kittredge, CO 80457.

New NCDXC members may not know that Vern Howard was W6ERS, a club member of long standing. For many years, "Uncle Vern" worked DX from his book store. He always began monitoring W6TI/R by asking, "What have I been missing?" (Also see the obituary for Uncle Vern in the January '93 *DXer*—ed.)



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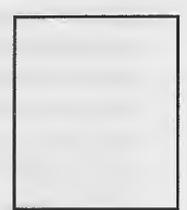
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