

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



Book Review

Physical Design of Yagi Antennas

David B. Leeson, W6QHS; ARRL, Newington, CT, 1992

by Dave Barton, AF6S

The yagi antenna has been the subject of countless articles and books in both Amateur and professional literature since its invention in 1926. More recently, desktop computer software has made the yagi easy to design—electrically. Yet little information has appeared on the mechanical aspects of yagi design—until now. *Physical Design of Yagi Antennas* fills this gap so well it will surely become a “bible” of antenna literature.

The author begins by describing his windy hilltop and how the repeated destruction of his antennas led to his research, his experiments, and his resulting discoveries and inventions. He learned why hilltops are windy and passes some useful and relevant statistics along to his readers. He explains the physical forces wind imparts on objects and how structures react to these forces. In fact, chapter 3 is a short course on structural analysis that’s as concise and clearly written as you’ll find anywhere.

In chapter 4, Leeson treats yagis specifically. He begins with a discussion of cylindrical elements and proceeds to tapered elements and the construction of a computer spreadsheet to do the calculations. Leeson shows how to apply his strengthening method (using internal reinforcement) to elements for 10- through 40-meter yagis.

Later chapters treat the effects of wind angle, element and boom torque, various plates and clamps, and myriad related subjects. There is even a chapter on masts and rotators.

The title wouldn’t lead you to expect the range of subjects to extend to hilltop and

hillside propagation, antenna comparison using fading statistics, broadband matching, contest tips, or electrical characteristics of step-tapered dipoles. But Dave Leeson has probed all those subjects (and others) and he reports and explains what he has learned.

Mechanical strength calculations of Hy-Gain boom-to-element clamps and other similar issues are presented. The word *thorough* becomes hopelessly inadequate as one tries to describe Leeson’s complete solutions and his methods for solving every conceivable physical problem in the design of antennas made of tubing. He even includes a discussion of tubing manufacturing methods and a listing of yield strengths of a range of steel tubing and pipe.

The final chapter contains the author’s designs for reinforcing the Cushcraft 40-2CD, the most common Hy-Gain tribanders and monobanders, and several well-known ham-designed yagis—for survival of wind speeds of 100 miles per hour and more.

A book treating a technical subject with the down-to-earth practicality of *Physical Design of Yagi Antennas* seldom appears on the market. Dave Leeson has even made his spreadsheets available—in Microsoft Excel format for the Macintosh and in Lotus 1-2-3 format for DOS.

The brevity of this review precludes doing justice—too much must remain unmentioned. But here’s a prediction: *Physical Design of Yagi Antennas* will join the late W2PV’s *Yagi Antenna Design* and W8JK’s classic, *Antennas*—on the bookshelves of antennaphiles, ham and professional alike, everywhere.

In This Issue

Meeting Minutes	2
Roster Changes	3
Prez Sez—W6TEX	3
Contest Awards—WX6M	3
The Saving of Oleg	4
1992 Marathon—WB6WKM	6
ABCs of DXing—VK9NL	7
African Adventure—KE2CG	8
Visiting DXers—AF6S	8
DXer Cal. Redux—W6BJH	9
Packet Madness—W6BJH	9
First Professional—AF6S	9
Letters, Pitcairn QSLs	10
Editorial	11
Everybody ... Nobody	11
RIP Heathkit—A. Comarow	11

Elections, PG&E Noise Finder at June Meeting

Club members will complete nominations and elect new officers at the 7 o’clock June 12 meeting at the Farmhouse Restaurant, 386 Convention Way, Redwood City. Dinner is \$18.50 per person.

Wally Hanafin of PG&E will be featured speaker. Wally has long located power utility-related noise problems for local hams and gotten them solved.

Coming Events

The Livermore Swap Meet starts at 7 A.M. at Las Positas College in Livermore, the first Sunday of each month. Contact N7TVE.

The Foothill Swap Meet runs March through September at Foothill College in Los Altos, each month’s second Saturday.

For info on the ARRL National Convention in Los Angeles, Contact W6BF.

Pacificon ‘92, Oct. 17–18 in Concord, will be big, challenging Dayton. Call N6QGN at 510/932-6125 for info or early registration.

from ‘Pacific Division Update,’ published by ARRL Director Chuck McConnell, W6DPD

**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: Bill Fontes, W6TEX
 Vice President: Bob Artigo, KN6J
 Secretary: Stan Kuhl, K6MA
 Treasurer: Bob Wilson, NQ6X
 Director: Ron Rasmussen, NG6X
 Director: Eric Edberg, W6DU
 Director: George Allan, WA6O

DXer:

Editor: Dave Barton, AF6S
 14842 Nelson Way
 San Jose, CA 95124
 (or via DXPSN)

Printing, Mailing: Ron Pantone, W6VG
 Art Consultant: Kenneth R. Barton
 DX Ladder: Larry Bloom, KD6XY
 2520 Heather Lane
 San Bruno, CA 94066
 (or via DXPSN)

Membership Data: John Cronin Jr., K6LLK

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

The DXer is published Monthly by the Northern California DX Club and sent to all club members.

Unless otherwise noted, NCDXC permits re-use of any portion of this publication, provided source credit is given.

General Meeting

The general meeting took place May 8 at the Farmhouse Restaurant in Redwood City. Bill, W6TEX presided.

• First readings were held for:

Jim Muter, N6TDC, (99 SSB, 6 CW), age 14, is editor of the San Mateo Radio Club. He has an Advanced Class license, having received a Technician when he was 12. He is working on becoming an Eagle Scout and Extra Class ham.

Robert Sawyer, Sr., KM6ID (106, all SSB) was active in Air Force MARS before he got his Advanced Class ham license. He's still working on the code, in pursuit of an Extra.

• Second readings were held for the following, who were both voted into the club:

Dennis Petrich, KØEOO, an ARRL member and an Extra who works as a Marketing Director, had 120 confirmed last fall when W6FDU and AA6W sponsored him.

Terry Smith, K7YNO works for Biocad, and has 110 mixed. A member of NCCC and ARRL, he was originally licensed in 1962 and now holds an Extra.

• Irv Astmann, W6OMR, was reinstated (see feature story in May DXer).

• Steve, W6MKM, suggested the Farmhouse restaurant be made the permanent meeting location. He said some people don't like the food at Harry's Hoffbrau (Palo Alto Airport). Not everyone agreed that the Farmhouse is better—someone mumbled the choice was like that among presidential candidates.

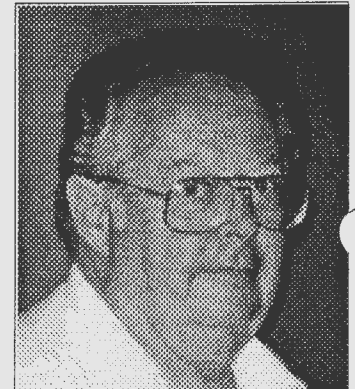
• Bob, KN6J, reported little progress on improving "Charlie" (the voice of W6TI/R). He said the consensus of several meetings was that "Charlie" is fine as is, so the issue should be tabled.

• The officer election is in June and anyone wishing to add to the list of nominees should contact Randy, WB6CUA. Ted, KA6W, spoke regarding the elections, saying "You have to search yourself to determine what the club needs. The club doesn't work unless all its cogs are turning. So come forward and offer to help. If you'd like to nominate someone, talk to the person first—to make sure he or she wants the job." Ted suggested he would like to be president again—but not this year.

• Knock, K6ITL, the chairman for next year's Visalia convention, said rooms at the Visalia Holiday Inn could be reserved starting the Monday, May 11 (call Cherie, 1-800-821-1127). He also mentioned that no reservations for blocks of over five rooms would be accepted and no special considerations beyond smoking/non-smoking would be accepted for these early reservations.

• Knock explained some worries about the Visalia Holiday Inn's owner, Grovner Corp., which is in default on a major loan. The lender will foreclose on the Visalia Holiday Inn if terms aren't met. Knock added that our contract ensures the hotel will meet its obligations and we've been told the same staff will be there regardless of who owns hotel.

• Someone suggested ticket prices be lowered next year and that the club shouldn't make a profit. Knock said making a profit was not the intention. He explained the uncertainties in predicting the number of attendees and the raffle sales, saying it is impossible to set the price at exactly break-even, but he would do the best he could. Steve, W6MKM said we made \$5,000 last year as a result of the raffle ticket sales—because such good prizes were offered. He said we broke even on ticket sales. Ron, W6VG said, "Selling raffle tickets is a gamble. We have to cover our known costs with the ticket price. The club must not gamble on the raffle."



Club Secretary Stan, K6MA

continued on next page

General Meeting

(continued from page 2)

- Bill, W6TEX, said 80 people received a letter from N6DJM accusing a member of improprieties. He said the letter would be discussed at the board meeting May 12 and that he has earmarked someone to look into the problem. He asked for comments from the floor, but there were none.
- The meeting adjourned at 9:35.

Board of Directors Meeting

The BOD meeting was held at Harry's Hoffbrau in Mountain View on May 12. Present were W6DU, NQ6X, NG6X, KN6J, WA6O, K6MA, and W6TEX, who presided.

- NQ6X gave the treasurer's report (see elsewhere, this issue).
- All BOD members signed the Procedures Manual approval page.
- On KN6J's recommendation, further "Charlie" changes were tabled.
- The officers nominating committee, W6JZU and WB6CUA, had nothing to report yet.
- The 1993 Visalia Convention has been firmly scheduled at the Visalia Holiday Inn.. 225 rooms were set aside and booked in less than two days!
- W6FAH, N6AN, and KG6GF were named to a special committee to review DXer of the Year selection procedures and report at the September BOD meeting.

Roster Changes

New Members:

Dennis Petrich, KØEEO
6419 Birwickshire Way
San Jose, CA 95120
(h) 408/997-9835
(w) 408/433-0500

Terry W. Smith, K7YNO
335 Alicia Way
Los Altos, CA 94022
(h) 415/941-5689
(w) 415/903-3900

Reinstatement:

Irv Astmann, W6OMR
Box 333 or 205 McCloud Ave.
Mount Shasta, CA 96067
(h) 916/926-2535

Address Changes:

Bob Wolpert, N6IP
10028 Bon Vista Court
San Jose, CA 95127
(h) 408/258-1015
(w) 408/730-3415

Vincent E. Henley, KB6GV
17660 John Telfer Road
Morgan Hill, CA 95037

Chuck Louda, KI6UT
713 Parkway Drive
Martinez, CA 94553
(h) 510/229-9356

Prez Sez

by Bill, W6TEX

Make your vote count! Attend the June 12th meeting to nominate or elect club officers.

The board has reviewed member input regarding past and present DX'ers of the year and comments on selection procedures. I have asked Bob Craft, W6FAH, to chair a committee to review the process (see BOD meeting minutes).

Be the first on your block to send in your dues check. KN6J will be at the helm for the June 12th election-of-officers meeting, while I'm on vacation.



New VOA Ham Callsign

The FCC has granted the Voice of America Amateur Radio Club the callsign K3VOA. Although the FCC has refused to issue special ham callsigns for more than a decade, Chairman Sikes made this exception in commemoration of VOA's 50th anniversary.

from the June 'Pacific Division Update,' published by ARRL Pacific Division Director Chuck McConnell, W6DPD

Contest Awards

by Rich, WX6M

The NCDXC Marathon is almost upon us again and Dick, WB6WKM, will handle it this year. He has some new ideas to make this year's contest more fun (see Dick's article on page 6—*ed.*).

Visalia is history and the club's awards for the 1991 ARRL DX Contest and the club Marathon have been presented. I would like to thank all those who helped, but especially Paul, AA6Z, for procuring the trophies and certificates and Bob, K4UVT, for his help during the convention.

Dues are Due July 1 for the year July 1 thru June 30, '93

Annual Dues schedule:

Regular Member	\$24
Family Member	Add \$15
Absentee Member	\$16
(Outside of NCDXC Area)	

Please send your check to:

NCDXC Treasurer
Box 608
Menlo Park, CA 94026-0608

Club By-Laws require that those whose dues are not received by September 1 be put on inactive status. To reactivate membership, a person must submit a Reinstatement

Application and subsequently be voted back in by the general membership.

Your club officers serve you voluntarily, but they may feel a bit put upon by the unnecessary work the reinstatement procedure gives them. And if you miss you won't be in the next roster. It takes no more of your time to pay today than later. So do it right now; don't let it slide!



Notes from the Presentation by Len Traubman, W6HJK, at the May NCDXC meeting:

The Saving of Oleg

How American physicians, using Amateur Radio, saved the life of a 25-year-old Russian ham

by Dave, AF6S, and Susan, KA6SEH

Oleg Murugov, UA4FAY, lay in Ryazan hospital—125 miles from Moscow. The auto accident happened enroute to radiosport games, on a stormy spring night. One person died in the accident—RA4FB.

After arranging for Oleg's helicopter evacuation, Igor, UA4FER, called U.S. hams for medical help. Oleg had suffered a



Oleg raising antennas, with his club

brain contusion, broken shoulder blade and ribs, and a ruptured spleen. Soon after arriving in the hospital he underwent an emergency splenectomy and a bilateral trephination (to relieve pressure on his brain).

Oleg is comatose and near death when Ed Kritsky, NT2X, who is fluent in Russian, answers Igor's call and takes down all the information. Ed then calls Len, W6HJK, and others for help. He faxes Oleg's medical data to Len—in Russian, to avoid translation errors. Len's neighbors—Rita, a physician from Russia and Alex, a professional translator—stay up into the wee hours translating Oleg's medical report.

Len gets help from famous Bay Area neurosurgeon, Joseph Izzo, and uses electronic mail (PEACENET) as an additional communications link. Lawrence Probes, MD, ND8S, also helps by translating telexes from English to Russian.

Oleg goes through a long series of crises. On Day 9 pneumonia spreads to both lungs and one lung collapses. Dr. Izzo

recommends Oleg's physicians re-expand the lung and seek a specialist.

Oleg needs stronger antibiotics—types unavailable in Russia. Ed, NT2X, puts out a call by packet radio that Angel Garcia, WA2VUY—who works in a hospital in New Jersey—answers. He finds the needed medicine and gets it to N2KW, who rushes it to Kennedy Airport—where he runs into red tape in Air Freight.

But he locates one agent who is willing to overlook regulations. The agent grabs the antibiotics and runs for the plane, reaching it just before the doors close.

One of Oleg's friends drives 400 miles from Penza through the night to Moscow Airport, to pick up the package, and then drives 125 miles back to Ryazan Hospital. The medicine arrives in time. The pneumonia soon subsides.

Doctor Izzo visits Len's ham station daily to give instructions for treatment, prescriptions, and dosage recommendations. Initial mistrust changes to real teamwork as the Russian doctors follow the instructions and see the results. The long-distance consultations give the Russian physicians the confidence they needed to continue despite overwhelming difficulties.



Oleg in the hospital



About Len Traubman

Licensed in 1951, Len was inactive for 35 years until 1988 when he recognized in perestroika an opportunity to build bridges, via ham radio, to Soviet citizens. He created a 20-page dialogue guide, *Russian Phrases for Amateur Radio* as a non-profit project and has distributed copies and audio cassettes to over 40 countries.

Len has a private pediatric dentistry practice in San Francisco. He has lectured at the University of California Medical Center for 15 years, has contributed to professional journals and textbooks, and has edited the American Academy of Pediatric Dentistry.

In 1982 Len and his wife Libby helped found Beyond War, which became the Foundation for Global Community. Len taught himself Russian and worked with the Beyond War International Scientific Initiative, a task group of noted Western and Soviet scientists, to publish the landmark book, *Breakthrough: Emerging New Thinking*. The book, calling for an end to war, was published in 1988 in both the U.S. and Russia—in both languages.

continued on the next page

They have many problems—with tracheal tubes, for instance. “Do you have better tubing?” they ask. Dr. Charles Starke, NX2T, a trauma expert, responds. He locates the right tubing, which N2KW again delivers to the airport.

Day 10: Messages arrive asking, “What is your opinion if we inject drugs into his artery? What if his heart slows down or stops? Should we use electric stimulation?”

The American doctors respond on 20 meters and by telex: “Do not inject the drugs. If the heart stops, use electric shock. Do not use a pacemaker if it just slows. It is doubtful you could salvage a normal human being.”

Oleg’s dear friend Igor (at UZ4FWO) is clearly troubled. He asks, “Can Oleg be saved? And, if so, will he have anything left to live for?”

Encouragement arrives from America: “His life can be saved. It is difficult to say what his quality of life will be, but it’s worth continuing the effort to save him.”

Day 14: Oleg’s third degree coma goes to first degree and his pneumonia improves. “The patient has begun to open his eyes and move his left hand,” Oleg’s friend Igor reports. There’s incredible emotion and hope on 20 meters and in the Russian hospital.

More helpful advice streams in: “Decrease drug use, the feeding schedule is okay.”

Blood chemistry test results are transmitted. The American doctors worry about brain and neurologic recovery.

Day 16: The intestines work for the first time since the accident, but now Igor needs a special feeding solution. NT2X again puts out a message on packet; Charles, NX2T, finds the feeding solution in his hospital; and N2KW runs again to the airport.



Angel Garcia, WA2VUY



Ed Kritsky, NT2X

Day 20: Oleg’s wife, mother, and twin brother visit him for the first time and Oleg breathes independently! Oleg communicates by squeezing his brother’s hand in Morse. Oleg’s right side remains paralyzed.

Day 22: Oleg recognizes his relatives, but his spinal fluid pressure soars. The Russian doctors ask whether they should puncture and drain. The Americans reply, “Do not perform a lumbar puncture. It is too dangerous. Be patient.”

Day 23: Oleg moves his right hand for the first time. The U.S. doctors recommend getting him out of bed and stimulating him. Russian doctors resist this; it’s not their way. The Americans persuade and finally convince the Russians.

Day 26: Oleg tries to help his nurse make the bed, but tires immediately. More advice arrives: “Remove all tubes; they now are ‘foreign’ to his body.” The Americans encourage Oleg’s physicians to stimulate him—play music, talk to him, move his arms and legs through their full ranges of motion.

Day 27: The Russian doctors remove the last of the tubes connected to Oleg.

Day 30: Oleg can cough, so his doctor allows him to sip some water.

Day 38: Oleg utters his first words.

Day 67: Suddenly, two setbacks occur! Oleg’s pneumonia returns and he

develops bed sore infections, with attendant fever.

In America, Dr. Izzo himself undergoes emergency surgery—for carotid artery stenosis. But the anesthetics have hardly worn off when he calls Len, insisting he be allowed to continue advising Oleg’s doctors.

Day 80: On 20 meters, Igor shocks us when he announces, “Oleg is home! The Ryazan doctors saw adequate recovery and discharged him.”

He had gone home on the train, been met by all his friends, and walked 200 meters to a car—with help, but he made it.

Today Oleg operates his Amateur Radio station, paints, writes, and takes long walks in the woods. And Len will never forget the year 1990, when the cold war really ended for him. “Now we must work for peace and to save not just one life, but all life—the planet Earth itself,” he says.

Questions After Len’s Talk:

Q: Are Russian doctors inferior to the Americans?

A: Many are highly skilled, but they lack equipment and medicines. Some hospitals lack hot water! We Americans can help, with medicine and food.

Q: Any jamming?

A: No, only support.

Q: Is Oleg fully functional now?

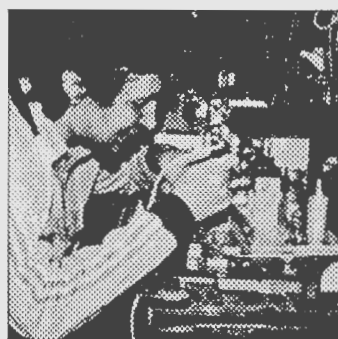
A: He is not the man he used to be, but he does well. When it’s icy he’s unsure of his footing, so he stays indoors.

Q: Is he on the air?

A: I haven’t worked him, but I have heard from all the others in Oleg’s club. And Oleg’s mother Olga showed up once at



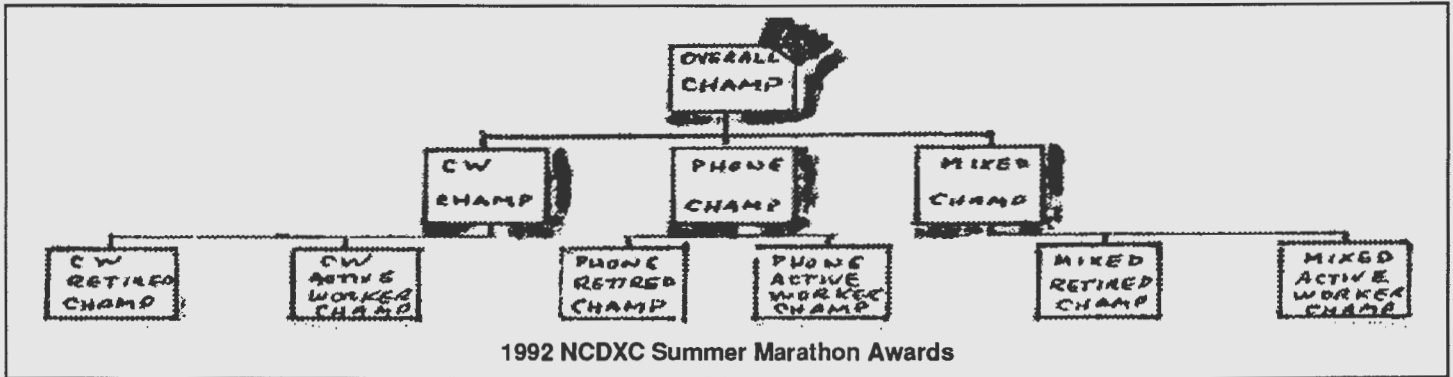
Len and Dr. Izzo, in Len’s shack



Oleg back home

continued on page 10

1992 NCDXC Annual Marathon Challenge



by Dick, WB6WKM

Get yourself and your station ready! The club's Summer Marathon starts June 1 and it promises to be the most exciting ever.

For members who cannot attend meetings, the Marathon offers a special opportunity to take part in a club activity. That activity can be low-key or really serious—if you go for one of the overall winner plaques. But no matter what level of competition you choose, the Marathon provides a way to enjoy some DXing during the summer—a season you might otherwise consider the doldrums.

Among this year's innovations:

- The new participation certificate looks much like a DXCC certificate—complete with places for stickers commemorating your entry in subsequent years.
- We've added separate categories for retired (R) and actively working (A) members. You qualify for the R category if you have earned the distinction of being able to stay home during working hours.
- For the first time, the Marathon awards will be presented early, at the November meeting and they'll be listed in the November DXer.
- And, if you make DX callouts on W6TI, up to 50 will count against the 100 countries you need for a participation award.



You don't need a "death ray" antenna on a hilltop to have fun in this contest. In addition to the overall winners in mixed, CW, and phone categories, awards for several new sub-categories add to the fun.

But the accelerated awards schedule does mean all entries must be submitted by Oct. 1, to allow enough time for scoring and award preparation. So be sure to submit your entry form soon after the contest ends (August 31).

Use the form inserted in this DXer and be sure to put an "A" or "R" after your total—102-A, for instance—to indicate your activity class.

Another good reason to take part in this year's Marathon is the nice memento for display in your shack. You'll receive one if you enter with 50 or more countries.

The chart at the top of this page shows the awards NCDXC offers entrants in its 1992 Summer Marathon.



The ABCs of DXing . . .

by Kirsti Jenkins-Smith, VK9NL

Amplifier: a square box designed for amplifying your power bill. It also amplifies hums and clicks and attracts calls by stations you can't hear.

Bin: a special place used for filing 95 percent of the information received in QSOs. It's also known as File 13.

Contest: an activity arranged by clubs and societies to occupy all bandspace on weekends. Contests are allegedly sponsored by environmentalists to keep thousands from touching Mother Nature or breathing dwindling supplies of fresh air.

Dinner: petrified pieces of undefinable substance and origin found lurking in lukewarm ovens throughout the world, especially on Contest weekends.

Eyeball: or eyeball-to-eyeball, something hams will travel great distances to have with each other. When combined with chinwag, the noise level increases beyond S9.

Frequency: an intangible watering hole where Amateurs meet to exchange useful information about rigs, power levels, weather, and each other's age and frailties.

Good One: an operation approved by the ARRL—the opposite of 'no good,' which has no such approval. Obtain proof of working 100 Good Ones and ARRL will issue you a certificate proving that you ... worked 100 Good Ones!

HI: abbreviation for a rumbling belly-laugh. Also used to emphasize a joke, as in "I must QRT ... my meal is on the table, HI (see Dinner).

Jumble: the normal state of my shack and yours too, I'll bet.

Key: a gadget used by experts in communications. The unwashed consider it a museum piece.

Lid: a magic word used in pile-ups to frighten the faint-hearted away. It never works.

Manual: a booklet hams refer to when all else fails, the brain is exhausted, and the rig is beyond redemption.

Negative: a long, refined word meaning 'no.'

Old Timer: Having been there and done that, the wise old sage hardly lifts an eyebrow at either yuppies or yappies, who therefore believe him or her to be fossilized. Hence, 'old fossil.' Just remember though: fossils, like diamonds, are forever.

Pile-Up: where DXers get together to test the thickness of their skins. Some pile-ups are (or should be) X-rated.

QSL Buro: or bureau, a sort of official dead-letter box. Most countries have them—and they're usually presided over by the country's national Amateur Radio society.

Radials: were invented by a radio engineer with shares in a copper mine. Thousands of miles and thousands of tons of copper lie more or less buried in the yards of suburban homes. (for 'less buried' see Vertical)

Scientific: an approach favored by hams who go to great lengths and use intricate technology to produce a computer image of a circle. Others get the same result by tracing around a jam-jar lid.

Tower: a metal structure dominating many gardens. It far outranks stately pines or flowering shrubs as a conversation piece.

UTC: what used to be GMT or Zulu. The reason for the change was to allow a wider scope for interpretation of the abbreviation, such as Unit Time Cost, Upper Thyme Crust, etc. Some think it's Swahili for My Local Time.

Vertical: an antenna providing an interesting array of strategically-placed trip-wires that usually catch the unwary visitor hands-down.

Wireless: a description of the rats-nest of wires that occupy space behind the operating table.

XYL: a saintlike creature who patiently puts up with Amateur Radio and its consequences—less common today than YF, who puts up with a lot less.

YL: a female who has discovered the secret of eternal youth, hence Young Lady. Many XYLs can also be YLs, thus combining a saintlike nature with eternal youth. Modesty is her middle name.

Zone: what the world is divided into for contest purposes and WAZ awards. To break the monotony, your zone number changes depending on the contest you're in (or not in).

from the April North Jersey DX Association 'NJDXA Newsletter,' edited by K2AIO (Box 359, Montvale, NJ 07645).

An African Adventure

by Guy Glaser, KE2CG

One benefit of my stay in Africa was that I could travel—mostly by air—as my primary job was running the airport at Kamembe in western Rwanda (9X). Although it's in Rwanda, the airport serves the the Kivu province of eastern Zaire. With 9000-foot mountains in the background, Lake Kivu—altitude 5000 feet—is a beautiful airport site.

The region is known for its coffee and tea plantations and the nearby mountain gorillas. While there I took a secondary job flying for an Italian construction company with offices in Bujumbura, the capital of Burundi (9U); Nairobi, Kenya (5Z); and Mogadishu, Somalia (T5). I flew a single-engine Piper Comanche 250, a four-seater with a cruising speed of 250 mph.

During the summer dry season of 1962, I was asked to take a company VP to Madagascar (5R). The purpose of his two-week trip was to attend the awarding of a multi-million dollar construction contract for a 75-mile road through virgin forest on the eastern shore of the island.

Our first leg was a three-hour flight across Lake Victoria and the Rift Valley to Nairobi, where modern hotels, nice shops, and sophisticated restaurants are a treat for any westerner living in Africa. My friends always gave me shopping lists when I went there. Sometimes I had to screw up my courage and shop for lingerie, a job made more difficult by European sizes. Even so, I satisfied all requests!

We flew next to Mombassa, a beautiful resort town on Kenya's coast and the lobster capital of Africa. (Guess what I had for dinner?) At three in the morning a tremendous racket awakened me. The wind howled through the louvered doors to the balcony and they rattled and shook. Alarmed, I got up quickly to go check on my airplane. Although bucking and straining against its tie-down ropes, it was unharmed.

The airport weather station reported gusts to 90 mph as a monsoon danced offshore in the Indian Ocean. But since the storm

presented no immediate threat to Mombasa, my clients asked to proceed immediately to Dar-es-Salaam, the capital of Tanganyika. (This was before Tanganyika and Zanzibar were combined to form Tanzania, 5H.)

I zig-zagged between thunderheads to get us safely to "Dar," a quaint tropical seaport. After one more gorge on lobster and a quiet night, we took off for Zanzibar. We had no business there; it just seemed like a good place to visit along the way. As we approached the island, an overwhelming but pleasing aroma penetrated the aircraft. Zanzibar is the world's foremost producer of cloves, and the herb is cultivated over the entire island. The harvest is spread on concrete slabs to dry.

We toured the island, visiting the local sultan's palace where we observed several Rolls-Royces in the garage. The traditionally garbed but heavily armed guards didn't look like eunuchs, but I sure didn't check!

After sightseeing, we returned to Dar to pick up the survival gear required for flights to Madagascar. Fortunately, we were able to rent rather than buy it. We spent the night in a primitive hotel with iron beds and the proverbial chamber pots. It was hot and the local cuisine was not, so we left town as soon as possible.

At 9000 feet the air was refreshingly cool. When we reached the Zanzibar coast, we put our swimvests on. The local Portugese told us the sharks were bigger than our airplane—but no fear, we had shark dye! I imagined the sharks having a very colorful feast on us. The only possibility of avoiding the sharks on the 75-minute crossing to Madagascar—should we have trouble—was Juan de Nova (FR/J).

The accommodations at our Madagascar hotel were superb, and we went to a local restaurant to sample French cuisine with the appropriate wine. A walk after dinner settled the copious portions of delicacies we had devoured.

from the April North Jersey DX Association 'NJDXA Newsletter,' edited by K2AIO (Box 359, Montvale, NJ 07645).

A Full Gallon

by Kevin Feeny (call unknown)

When I first got into VHF FM in the early 70's, I could only afford a Motorola 80D—which had been "pre-owned" by about every other ham in town. This hefty critter had a vibrator-powered receiver, and a dynamotor for the transmitter.

Vibrators, being sort of sealed, are tame enough, but a dynamotor's brushes put on a nice arc-show—visible through slots.

This story came with the radio. About three owners back, a fellow had done the installation right, drilling 4 mounting holes through the floor of his car's trunk—except that he drilled one a little too deep, through the top of the gas tank! One day after topping off, when he keyed up the rig he heard a loud WHUMP!—followed by a clatter as the trunk lid came back down.

Sorta makes you appreciate an IC2SAT doesn't it?

from the Sept. '91 Austin ARC 'AARCOVER' (edited by N5KOB) via Antenna Farm BBS

DXers to Visit S.F. Bay Area

by Dave, AF6S

The club has received letters from two European DXers hoping for personal contact with NCDXC members.

One is Jean-Pierre Hubert, ON7ZM, who plans to depart Europe June 8 and arrive in San Francisco July 5-7. Realizing that by the time you read this, it will too late to write, I have written Jean-Pierre and given him my phone number. If you would like to extend some hospitality to him, please let me know by packet. I'll give him your phone number when he calls me.

M. Ruiz, ZB2GZ, plans to leave for the states July 9 and visit California sometime after that. He'll be staying at the Gateway Holiday Inn in S.F., but it's not clear exactly when. In any case, you have time to write him before he leaves for the U.S. and make your own arrangements. If you do, please let me know by mail or by packet so I can make sure someone has responded.

Calibrating DXers, a Redux

by Ted, W6BJH

I believe Hugh Cassidy originally mentioned this (see *Calibrating DXers*, May DXer) in the West Coast DX Bulletin some years ago. NG6X's YF Nancy and I were (at Visalia) trying to verify Cass' theory and I'm happy to report a high level of coincidence (between high DXCC totals and the bagginess of a male DXer's pants—ed.).

We also noted two related phenomena. We saw DXers whose saggy pants didn't reflect their modest country-count. We suspect they, being aware of the theory, were simply putting on airs. The only other explanation we could think of is that they thought a low crotch-line would help increase their totals!

We noticed some wealthy and dapper DXers, who could easily afford the needed tailoring. But they faced a terrible dilemma: be dapper and project a neophyte image or stay baggy and show their accomplishments. Imagine the debate going on in their heads: "saggy, tailored, saggy, dapper, saggy . . . !"

It's a no-win situation, folks, and you gotta decide; you just can't have it both ways.

But we enjoyed the game and look forward to other conventions where we can gather more data



ZL3GQ Tours U.S.



by Dave, AF6S

Peter, ZL3GQ, and Maire Watson toured the U.S. during April and May and many NCDXC members met the gracious pair at Visalia, where they attended the FOC meeting, among other activities.

Are We Having Fun Yet?

by Scott Dorsey (call unknown)

Well, I joined with the local club this Field Day, and it wasn't a good experience. The rain was terrible, and the lightning was alarming, especially to us in a tent. We were freezing ... until the generator caught fire, when it got a bit too warm. Attempts at temporarily setting up car batteries ended when Dave (who's shame I'm protecting by not mentioning his call), splattered battery acid all over himself, causing him to run out naked in the rain in an attempt to wash himself off. I'll spare you the details but a police officer picked him up soon afterward.

We snagged some reasonable DX even under terrible solar flare conditions. We worked a Yugoslav station although we could hardly hear him under the pileup and the birdie from the local AM station that plays nothing but Grateful Dead tunes. In the middle of a good QSO with a KHØ, a falling tree knocked down the makeshift inverted-V; it fell into the water, causing the transmitter to fail with a loud report and a spewing forth of acrid black smoke.

And of course we neglected to leave one battery with enough charge to start a car, so we had to call for help the next morning.

Never again! ... at least not 'til next year.

from the Aug. '92 Austin ARC 'AARCOVER'—N5KOB Editor.

Next they toured Sequoia and Yosemite NPs, after which Duane, W6REC, showed them Central Valley highlights including Sacramento's Railroad Museum.

They visited Eric, W6DU, who showed them San Francisco and Stanford, and Dave and Susan, AF6S and KA6SEH. Susan took Maire shopping—to Valley Faire, and Dave took Peter to Fry's and Ham Radio Outlet in Sunnyvale.

Their next stop was the Dayton Hamvention, followed by the homes of many DXer friends in the Midwest and along the eastern seaboard. The trip was topped off by a motor tour in the Southwest, including a visit to Grand Canyon.

First Professional

by AF6S

In a recent 75-meter ragchew, the subject was the oldest profession. The discussion moved beyond the usual suggestion when a physician asked, "Who but a surgeon could have dealt with Adam's rib?"

An engineer answered, "But long before Adam existed, the earth, solar system, and cosmos were created from sheer chaos. Only an engineer's orderly mind could have accomplished that."

There was a short pause. Then another voice came on frequency. "And who, gentlemen, do you suppose created the chaos? I say it could only have been a lawyer!"

"Okay, I concede!" the engineer replied, "And no one but a lawyer, sir, would turn a little bull into a big bang."



Packet Madness (DXPSN)

by Ted, W6BJH

Adam, N6QR, enjoys a mind twister, so I couldn't pass up the chance to send him:

#9247... Adam-type brain twister:

Hi Adam. Here's one you'll like. There has been an OK---/P5 on, who everyone thinks is a pirate. Sam, TSQ, worked an OK in OK-land who sez he is legitimate; that is, the OK sez he is OK.

The question for you is: is the OK who sez he's OK OK?

Adam's reply came back quickly:

#9256 ... Adam-type breain twister

Hi Ted. I don't know about the OK/P5, but I suspect the OK in OK was a pirate. Could this be a variation on "I'm OK, you're OK"? If the OK in OK was not OK then the OK in P5 is in doubt!!

Pleased with Adam's clarification, I typed:

Reply to #9256

Tnx, Adam. I knew you would make it crystal clear. OK on ur OK!



We Get Letters (some months)

XYØRR QSL Concerns

Dear Editor:

I've overheard a lot of grouching about the slowness of Romeo's QSLing for his XYØ operation recently on the W6TI repeater. There was also speculation along the lines of: "Maybe he's absconded with the money and doesn't ever plan to QSL."

I'd like to ask everyone to try "walking in a Russian's shoes" before they jump to any unwarranted conclusions.

I have met Romeo and his support crew and can attest to their character and that they are committed, serious DXers who will do everything they can to send your cards as soon as possible.

When I was in Russia, economic conditions were already rotten and they are now far worse. The members of Romeo's crew have gone to great personal expense and great effort under conditions few Americans can imagine, much less survive.

So please just wait a little longer. If you can't be patient, at least try being a bit generous of spirit. I'm confident you'll get your cards in good time. But if you don't, you'll have reason aplenty for alarm. The Russian economy will have collapsed to the point that not even Romeo and his associates can accomplish anything.

de Duane, W6REC (April 24 '92)

Hi Dave:

As a first-timer to the DX Convention, I'd like to let you know how I viewed some of the events.

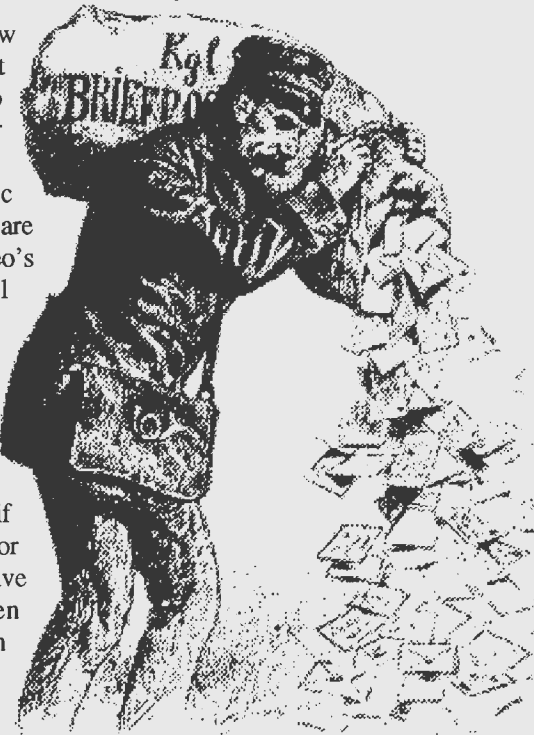
Registration: It should have started at noon. Between the registration table, raffle ticket sales, the barrel for raffle tickets, and things on display, it was a zoo.

Invocation: I agree it's not necessary. The moment of silence for SK DXers was [appropriate and people] could use it for ... prayer, thought, etc.

Slowness: At both the banquet and at breakfast, some speakers were long-winded, and prize drawings were a drag. Stick with "big ticket items" for banquet and breakfast drawings.

Winner Posting: Drawing winners should be posted where people can find them, not in small print at the back of the room.

Schedule: Things need to run more smoothly and on-schedule. The banquet ran way over.



Events: The forums, were interesting but I would like to have more to choose from.

QSL Checking: Field checking was great. Everyone did a fantastic job checking the cards and returning them so quickly.

I eagerly look forward to seeing how NCDXC does, in comparison with SCDXC, and am willing to help.

88 es gud DX, "Le" Henderson, KB6MXH

As a public service, this paper contains mistakes—because some people are always looking for them.

from the March '92 'South Bay Beat,' of the South Bay Traditional Jazz society

Pitcairn QSLs

by Gary, KB6ISL (from a letter to VE3BAZ dated 30 April '92)

Certificates: the Pitcairn Bicentennial ended 31 December '90 ... [and] applications were accepted through the end of 1991. All documentation is now finished and I expect certificates from the printer in two weeks; then I can start mailing them.

QSLs: if QSLs were sent to me direct, with sufficient postage, the VR200/PI cards went direct; otherwise ... the bureau.

This has been a one-man operation with ... problems, but I'm nearing the end now.

Send VR6JR cards to G3OKQ, VR6TC to WD6GUD, and VR6BX cards to: Box 21, Pitcairn Island, South Pacific.

Safeguard Your License

The FCC recently began printing two licenses printed on the same sheet—one for the wall and one for the wallet. Unfortunately, the laser-printing isn't waterproof! The FCC has "solved" the problem by inserting a warning label.

So have your new license laminated before you put it in your wallet. Or carry a photocopy and leave the original at home. And if you're in the VE program, be sure to mention the problem to new hams—to save them some grief!

from the Magnolia Report, published monthly by Venture Communications Co. (Box 9162, Jackson MS 39286)—K5QNE Editor

Oleg

from page 5

UZ4FWO, for our schedule. She cried in gratitude when we talked on 20 meters that night.

Q: Has the Russian Hospital improved, as a result of Oleg's case?

A: Yes. They now play music in all the wards. I believe they've applied everything they learned.

Len acknowledged the help Knock, K6ITL, has given him. He also acknowledged everyone who has ever relayed a helping message, as (he said) most of us have.

Len also acknowledged "that mysterious but undeniable force makes us want to help other people."



Editorial

by Dave Barton, AF6S

Many of you received a letter in late April containing a personal attack against one of our members. Accompanying that letter was another stating that your newsletter editor and your president had both refused to publish the first letter in the *DXer*.

You deserve an explanation or two and here's mine. First, my decision not to print that letter was made independently from Bill's (W6TEX), before we had any direct contact. I don't know what would have happened had we disagreed, but we never got the chance to find out, fortunately.

I believe the most important function of a club newsletter is to bind club members together. In a club the size of NCDXC, that's especially important—particularly since we have members living too far away to attend meetings regularly. So news of club happenings and news about members are priority subjects.

A club paper can also serve as a forum of member opinions. That too is appropriate and, so far, every opinion-expressing letter received from a *member* during this editor's tenure has appeared in the *DXer*.

But the letter in question was *not* from a member; it was someone who chose to quit the club because, to quote him, "I don't like the way things are going." That's too vague for me, so I asked him two questions—on the telephone: "First, if you really want reform, wouldn't you be more effective pressing for


it from inside the club?" And second, "Now that you're not a member, why do you care what goes on in the NCDXC?" I did not receive satisfactory answers. Instead, I was left wondering if there might be a hidden agenda—a personal vendetta?

The *DXer* is not the *DX Enquirer*. It's not the place for personal accusations. Any editor worth his or her salt always refuses to print items he or she believes are against the policies of the club, not in the club's interest, or beyond the limits of common decency. The letter, as I see it, failed all three tests. To their credit, I believe every one of my predecessors followed the same guidelines.

Besides, a club bulletin editor must sometimes actively move to prevent the newsletter from hurting or harming a club member. Would you want it any other way? The accuser in this case did get his message across, of course; but at his own expense. Your club dues didn't support it.

Another point I've learned to beware of is the possibility of libel action. I'm no lawyer, but if I were wrongfully and publicly accused, I'd sure consult one. And I doubt that you would want your club named as a defendant in court.

Bill, W6TEX, has taken steps to investigate the charges. If they aren't groundless, your officers and directors will take appropriate action, as past officers have in such cases. And perhaps bylaws changes or some new type of self-policing is needed. If you think so, help make it happen.

But I'd be surprised to see you tolerate *self-appointed* policemen. 

So Long, Heathkit

by Avery Comarow

Two fellow workers at Heath Company, Benton Harbor, MI, exchanged condolences. The company, once the king of electronic kits, had written its last manual and the pain was palpable.

From the late '40s, uncounted kit-builders (mostly male) spent a wan, sleep-deprived adolescence squinting at electronic parts and peeling solder splashes off the rug.

It was a defensible addiction. Check off the steps, page after page, hour upon hour, and eventually you had a working ham radio set, FM tuner, test meter, color television, metal detector, guitar amplifier, or audio signal generator—to name but a few of the Heathkit species. It gave rise to the argument, "See, Mom; it's cheaper, and if something goes wrong I'll know how to fix it." Many built 10, 20 or even 30 Heathkits. I lost count at 50.

Heath's star began to fade in the '70s with the dawning of solid-state chips (integrated circuits)—awesome technology with no soul. Plugging in rows of the things was a bore. Gone were the plucky little transistors, ocher-hued capacitors, and softly glowing vacuum tubes—along with that lovely spare time when one could breath tangy solder fumes.

I realized last week that I hadn't built a Heathkit for a decade. Neither had anyone I know. Times have changed. So long, Heath.

excerpted from U.S. News & World Report, April 13, 1992.

Everybody, Somebody, Anybody, and Nobody

An important club job needed doing, so Everybody was asked to do it. Everybody, who was busy, was sure Somebody would do the job. Anybody could have done the task, if the time weren't inconvenient, but Nobody did the work.

Somebody got angry because it was Everybody's job. Everybody thought Anybody could do it, but Nobody realized

that Everybody wouldn't, and that is why Nobody did the work. In the end, Everybody blamed Somebody when Nobody did what Anybody could have done.

This was excerpted from the April '92 'Repeater' of the Silicon Valley Emergency Communications System—W6GJF and N6SPC Co-editors. The 'Repeater' credits the original source as the Bay Area Scanner Enthusiasts newsletter.

Field Day Set-Up

Field Day friends you
shouldn't hafta bully;
Teamwork gets antennas lofted fully.
But when you pull a raising rope,
You sure hope some other dope
Doesn't let the free end
through the pulley!

—AF6S

NCDXC DX-LADDER

CALL	HONOR ROLL			DXCC				5 BAND DXCC					OTHER BANDS				
	MIX	PH.	CW.	MIX	PH.	CW.	RTY	10m	15m	20m	40m	80m	160m	6m	12m	17m	30m
W6AD				271	181	252		109	176	258	54						
W6AED					325				100	100							
N3AHA				268	243	154	1	129	160	194	58		3		14		1
WA6AHF		323			342		231	100	100	100	100	100					
KG6AM				300	282	194		168	223	253	45						
N6AN	318			339	288	287		281	281	307	177				68	100	41
K6ANP				316	199	211		133	144	199	110						
KA6BIM				196	190	59		108	131	141	33						
W6BJH	323			349	192	313		120	117	187	117						
WA6BSS				290	304	3		134	167	249	58						
W6BSY	323	323		366	360												
K6BWV				225	1	224											
W6CF	315			342	294	185		204	239	306	178						
WA6CTA				283		182		126	128	180	46						
W6CTL				330	3	266		190	182	327	93						
WB6CUA	323			334	325	311		100	100	100	100						
WW6D				233	118	211		82	130	180	93						
K6DC	315			359													
N0DJJ				273	137	242		115	130	145	16						
W6DPD	318	318		323	323												
K6DR				248													
K6DT	312	307		340	320	293		229	251	328	153						
W6DU	322			342	302	325		225	254	319	159						
AD6E				223	2	217		113	128	166	105			3			
N6EK				240	173	217		144	184	194	121			9			
WD6EKR					311			199	262	305	106						
WD6EKR/M					255			86	206	158	4						
W6ERS	323			353				100	100	100	100				100	100	100
KC6ESL				175	175			175									
W6ETR						237											
WB6EXW				303				100	100	100	50						
W6FAH	320			320	315	265		219	258	298	159						
K6FD				296	271												
W6FGD				330	275	289											
K6FO				277	185	239		134	164	235	125						
W6G				253		229											
W6GC				225													
W6GF	314			319				70	120	210	293						
WB6GFJ				313	300	70		161	192	246	105						
N6GG				301													
W6GO	320	320	314	334	334	322		270	300	324	264			60			
K5GOE				315	307			194	100	100	100						
WA6HAT	312			320		243											
K6HHD	312			316	311	23		209	176	223	43						
K6HNZ					290			209	242	254	125						
N6HR	316			337				100	100	100	100						
W6HXW		323			323												56
WC6I				305				173	181	236	175						
W6IEG					315			17	33	290	3						
KA6ING				248	246			248							52		
W6ISQ	315	312		355	331	207		285	150	250	315						
KN6J				309	301	287	245	218	210	200	152			108			
W6JD				325	233	302		109			191						
N6JM				303	292	247		205	229	270	127			17			
N6JV	322			330	306	323		261	252	300	251			73		108	137
W6JZU	312			328				75	115	255	22						119
W6KG	314			352	290	108		161	193	210	169						
W6KH	323			364													
WB6KJE				297													
K6KLY				315	315	15		216	196	209	127				70		
W6KOE		322			341												
K6KON				265	260												
AI6L				317													
NB6L	323			326	256	222		125	157	233	109						
WA8LLY				289	275	251		225	235	243	108				56	108	27
K6LM	316	312	307	321	316	309		100	100	100	100						1
K6LOA	320			338													
W6LOC	323	323		341	341	89		100	100	100	62						
K6LRN				303	233	236											
N6LTN					213												
WX6M	321	321		326	326	144		167	166	206	128			17			
K6MA	323	320	317	354	338	320		255	265	290	205						115
W6MEP	315			318		141		100	100	100	41						
W6MUR	323			361													
AA6MV				281	275	217		150	162	235	79						
W6NA						271		140	190	251	192						
W6NKR				289													
W6NLG	321	319		326	324	100		100	100	100	26						

NCDXC DX-LADDER

CALL	HONOR ROLL			DXCC			5 BAND DXCC					OTHER BANDS					
	MIX	PH.	CW.	MIX	PH.	CW.	RTY	10m	15m	20m	40m	80m	160m	6m	12m	17m	30m
K6NM				307	216	222		113	148	271	164	36					
W6NPY	317			330	200	265		200	200	200	178	139					
WA6O				217				88	50	123	2	16					
W6OAT				349	326	332		269	304	333	270	199					
N6OC				303	300												
WA6OEY				227				71	60	170	20	8					
N6OJ				329	275	105											
K6OJO	312	311		328	327			187	250	309	17	12					
W6OSP	323			328													
WB6OTB				307													
K6OZL	323			343				100	100	100	100	100					
NW6P				316													
WG6P	317	317		320	320	311	156	184	210	303	207	118	12		3	6	1
W6PHF	318			350	336												
K6PKO				308	301			270	175	185	97	112					
K6PU	323	323	313	353	343	319		200	200	300	200	100					
AG6O	315			321	309	220		173	222	296	167	143					
KB6O				294													
W6QL	315			337	263	69		114	161	201	111	103					
WN6R	318	317		318	317	200		215	300	317	155	150					
WR6R				317	293												
N6RC				281	129	161	3	25	49	193	24	3					
W6RJ	316			345				100	100	100	100	100					
K6RK	322			335	324	312		100	100	100	100	100					
W6ROY					208												
K6RO	323			362				120	197	310	130	90	5				
N6RR				289				116	210	176	129	88					
K6RUW				270	242	120		100	100	100							
DJ6RX	315			336				215	271	303	227	185					
AF6S				319		311		270	288	303	220	142			109	134	78
K6SIK				286	282	140		183	186	262	128	120					
WA6SLO		321			323			288	302	323	219	217	6	18	144	82	
N6ST	323	302	260	330	304	244		200	228	297	144	74	2		1		2
W6SYL					245												
W6TC	322		319	338		326		243	228	272	257	174			80	55	52
AA6TD				178	95	125		90	55	101	39	3	1				
W6TER				269													
W6TEX				317		294	121	100	100	100	100	100					
K6TMB				308	304	248		215	245	292	140	116					
WA6TOO				251				58	84	167	6	6					
W6TSQ				355				280	300	300	309	255					
W6TUI				306	305	1		109	125	187	125	116					
K6UD	308			318	306	207		240	244	244	176	147					
N6ULU				289		256											
WB6UOM					300												
K4UVT				313	249	175		65	112	293	88	24	2			8	
AJ6V	318			325	233	266		152	172	260	135	62	6				
N6VAW					143	71											
K6WD	316			330		277		100	100	100	100	65					
KI6WF				313	313	61		248	279	302	151	89	3		22	29	
WB6WKM				315	100	100		100	100	100	100	63					
KE6WL				274	248	233		210	233	248	147	54	8				
K6WR	322	322		354	354			100	100	100	100	100					
KK6X				281	227	255											
NG6X				250													
NQ6X				312	309			100	100	100	94	96					
W7XA				325				277	298	309	174	137					
K6XJ	323	323		338	338												
K6XM				267	209	222		163	179	246	144	68					
W6XP	323	323		341	341												
K6XT	312			327		160		100	100	100	100	99					
KD6XY				306	289	54		124	137	226	8	3					
KR7Y				317	301	285		169	209	285	150	121					
W0YK				322	321	318		290	270	310	230	150	50				
W6YK				367													
AA6YO				270	228	186		137	137	205	56	16					
W6YVK					251			160	198	173	56	42					
W6YWH					306			130	150	175	160	100					
AA6Z				317													
WZ6Z				314	299	265		218	238	297	228	138	14				
W6ZKM	320	320		344	344			207	100	100	107	126					
W6ZM	322	322		357	352			130	142	317	52	111					
WB6ZUC			313	329	1	319		188	255	315	168	110					
K6ZUR				294	85	290		139	189	265	176	79					
K6ZX	316		307	328		312											

NCDXC WAZ-LADDER

CALL	WAZ			5 BAND WAZ					OTHER ZONES					WPX		
	MIX	PH.	CW.	10m	15m	20m	40m	80m	160m	12m	17m	30m	06m	MIX	PH.	CW
W6TSQ	40			40	40	40	40	40								
W6TUI		40		30	33	40	40	29	26							
K6UD	40															
WB6UOM	40															
AJ6V	40															
K6WD	40															
KI6WF	40	40	24	39	40	40	28	25		3	12	15				
WB6WKM	40	40														
KE6WL	40	39	40	39	40	39	35	21								
K6WR	40	40														
K6XM	40															
K6XT	40															
KD6XY	40	40	24	28	34	37	6	2								
KR7Y	40	39	23	34	36	40	34	28								
W6YVK	40															659
AA6Z	40															
WZ6Z	40	40		39	39	40	39	33								
W6ZKM	40	40		39	40	40	28	34								
W6ZM	40	40														
K6ZUR			40			40										
K6ZX	40															

de Larry, KD6XY (06/92)



There were a total of 47 Club members who submitted updates to their DX Standings for this issue of the DX Ladder Report. Of these, 8 were new listings and 39 were changes to be made to figures previously submitted. Also, there were 15 updates to WAZ Standing, of which 3 were listed by members for the first time.

Doctor Griffin, W8MEP, reported he has qualified and received Honor Roll Certification. Congratulations, Jerry.

CALL: _____ NAME: _____

NCDXC DX-LADDER

HONOR ROLL:- Mixed: _____ Phone: _____ CW: _____

TOTAL DXCC Contacts:- Mixed: _____ Phone: _____ CW: _____ RTTY: _____

DXCC Band Contacts:- 10m: _____ 15m: _____ 20m: _____ 40m: _____ 80m: _____

OTHER/WARC Bands:- 160m: _____ 6m: _____ 12m: _____ 17m: _____ 30m: _____

NCDXC WAZ-LADDER

ZONES WORKED:- Mixed: _____ Phone: _____ CW: _____

BAND Contacts:- 10m: _____ 15m: _____ 20m: _____ 40m: _____ 80m: _____

OTHER/WARC Bands:- 160m: _____ 12m: _____ 17m: _____ 30m: _____ 6m: _____

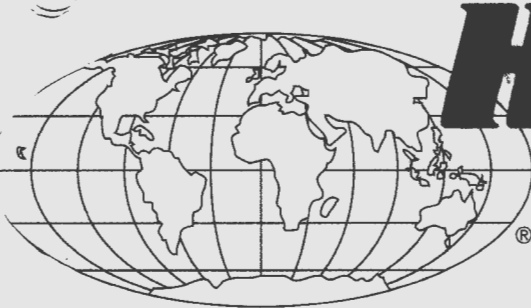
WPX Contacts:- Mixed: _____ Phone: _____ CW: _____

(Mail figures to Larry Bloom, KD6XY, to the address listed in the DXer, or send via Packet to KD6XY.)



P. O. B O X 6 0 8
 M E N L O P A R K , C A
 9 4 0 2 6 - 0 6 0 8
 U S A

DXER



HAM RADIO OUTLET
 WORLDWIDE DISTRIBUTION

YAESU

FT-990



NEW!

100W HF Gen Cov Transceiver
 DDS, QSK • 500Hz CW Filter included
CALL FOR LOW PRICE

ICOM

IC-765



100W HF Transceiver
 General Coverage Receiver
 Maximum Operation Flexibility
SALE! CALL FOR PRICE

US TOWER CORPORATION

KENWOOD

TS-850

HF Transceiver



Advanced Technology Performance
 108 db Dynamic Range, Optional DSP
CALL FOR LOW PRICE

OAKLAND, CA 94606
 2210 Livingston St.
 (510) 534-5757
 (800) 854-6046
 Rich, WA9WYB, Mgr.
 I-880 at 23rd Ave. ramp

-NEW ADDRESS-
 SUNNYVALE, CA 94086
 510 Lawrence Expwy. #102
 (408) 736-9496
 (800) 854-6046
 Tom, KB6LUC, Mgr.
 Lawrence Expwy.
 So. from Hwy. 101

NOW TOLL FREE IN CALIFORNIA!

CALL TOLL FREE:
 West
 1-800-854-6046

Phone Hours:
 9:30 AM
 to 5:30 PM

Store Walk-In Hours:
 10:00 AM
 to 5:30 PM
 Closed Sundays



MA-40
 40' Tubular Tower
 REG. \$809 **SALE \$629**

MA-550
 55' Tubular Tower
 Handles 10 sq. ft. at 50 mph
 Pleases neighbors with
 tubular streamlined look
 REG. \$1369 **SALE \$999**

TX-455 Sale \$1389
 55' Freestanding Crank-Up
 Handles 18 sq. ft. at 50 mph
 No guying required
 Extra-strength construction
 Can add raising and
 motor drive accessories

Towers Rated to EIA Specifications
 Other Models at Great Prices!



SHOWN WITH OPTIONAL ROTOR BASE

Call or visit HRO and check out
 the new Kenwood 950 SDX