

10-10 INTERNATIONAL *News*

Volume 33 Number 4

1.50

October 1995 (FALL)

HAMCALC for Easy Calculations

By L. B. Cebik, W4RNL, #41159

Sometimes a service to amateur radio comes along that just needs appreciating. George Murphy, VE3ERP, has made it the work of his retirement to compile, organize, and make available to amateur radio operators world-wide every common calculation program in BASIC he can find or write. This is not a commercial venture by Murph. Rather, he contributes the donations he receives in excess of his disk and mailing costs to the Canadian National Institute for the Blind, which sponsors an amateur radio program. I have a receipt from CNIB that proves Murph is a man of his word

.....continued on page 7

Don Zielinski Named to Contest Managers Post

Don Zielinski, K0PVI, 9902, has been selected by the Operations Committee to fulfill the duties of Ten Ten Contest Manager. Don replaces **Harry Arsenault K1PLR, 28160**, whose resignation from the position was accepted July 4th.

An avid, award winning contester, Don is certainly no stranger to the band or the membership. His accomplishments in contesting extend not only to Ten Ten but include contests sponsored by ARRL, CQ and others.

A member since 1974, Don is President and Founder of the Colorado Bighorn Amateur Radio

.....continued on page 7

A Group from the ALLI'S CHAPTER



The ALLI'S Chapter entertained visitors VK4QN and N6TXT for a picnic and Bar-B-Q on the beach on the island of Kallia. L to R, back row: Lin, VK4QN #19040, Evillo, KH6DRT #33751, Juan, KH6JJJ #21971, Sam, NH6SJ #51801, Richard, WH6IA #64994, Larry, KH6DLU #36078. Front Row: Clarence, AH6CG #34749, Al, N6TXT #50198, Gemi, KH6F #37649

OFFICERS AND DIRECTORS

President Tom Henderson, K4CIH #33233
 4901 15th Place E., Tuscaloosa, AL 35404-4522
 Vice President Chuck Imsande, W6YLJ #19636
 18130 Bromley St., Tarzana, CA 91356-1701
 Secretary Dave Prichard, KA5OVO #37297
 16314 Thunderbay Dr., Houston, TX 77062-5111
 Treasurer Keith Schlottman, K17RK #63324
 9581 E. Calle Cascada, Tucson, AZ 85715-5819
 Director Linda Barnes, KJ4FM #43299
 310 Sequoyah Dr., Kingsport, TN 37660-3742
 Director L.B. Cebik, W4RNL #41159
 1434 High Mesa Dr., Knoxville, TN 37938-4443
 Director John Ellison, W0ERZ #5145
 2 Douglass Ln., Kirkwood, MO 63122-4406
 Director Marv Hagan, WB2SJQ #6090
 553 Central Avenue, Cedarhurst, NY 11516-2133
 Director Bill Howe, VK4WBH #22187
 13 Fritz St., Loganlea, Queensland, 4131 Australia
 Director Pete Matson, KC1CP #37190
 73 S. Edgewood Rd., Niantic, CT 06357-2036
 Director Jack Miller, W9WYN #6894
 PO Box 123, Brookfield, IL 60513-0123
 Director Ed Redwine, K5ERJ #11843
 9 Yellowrose Lane, Augusta, KS 67010-2230
 Director Bob Ryan, K6YVG #18022
 26409 Doveweed Way, Santa Clarita, CA 91350-2647
 Director Joe Williams, WA9TSG #310
 PO Box 93181, Milwaukee, WI 53203-0181

NET OFFICIALS

Award/Cert. Guide Mgr Linda Barnes, KJ4FM #43299
 310 Swquoyah Drive, Kingsport, TN 37660-3742
 Chapter Coordinator Dave McCardell, WD4EWB #18760
 PO Box 246, Harrison, TN 34341-0246
 Contest Manager Don Ziellinski, K0PVI #9902
 301 Main Street, Genoa, CO 80818
 Editor & PR Manager Chuck Imsande, W6YLJ #19636
 18130 Bromley St., Tarzana, CA 91356-1701
 Historian Morrie Goldman, W6EHM #4189
 21518 Marjorie Ave., Torrance, CA 90503-6418
 Information Manager Mike Elliott, KF7ZQ #54625
 9832 W. Gurdon Court, Boise, ID 83704-4080
 Net Manager Nat Green, 8P6SA #45858
 Welches Terrace, Saint Michael, Barbados
 Scholarship Manager Morrie Goldman, W6EHM #4189
 21518 Marjorie Ave., Torrance, CA 90503-6814
 SK Manager Grace Dunlap, K5MRU #218
 PO Box 445, La Feria, TX 78559-0445
 Supplies 10-10 International Net, Inc.
 643 N. 98th Street #142, Omaha, NE 68114-2332

AREA MANAGERS Listed on page 31

AWARD MANAGERS Listed on page 30

PRINTED IN THE U.S.A.

10-10 *News* INTERNATIONAL

EDITOR

Chuck Imsande, W6YLJ #19636

19130 Bromley Street
 Tarzana, CA 91356-1701
 PHONE: 818/881-3676
 FAX: 818/996-4240
 E-MAIL: w6ylj@aol.com

The *10-10 International News* is published four times annually by the **TEN-TEN INTERNATIONAL NET, INC.** Publication dates are approximately mid January, April, July and October.

DEADLINE FOR NEXT ISSUE December 15, 1995

Each paid-up member receives a copy. This is an independent publication. Permission to reprint is hereby granted, providing suitable credit is shown.

News items should be sent to the Editor. Technical articles and information on all 10-meter activities or news are welcome and solicited. All copy submitted must be typed, sent on computer disk or via E-mail. Suitable formats will be provided upon request.

Photographs are encouraged. Black and White or Color are acceptable. Include complete information on the back of each photo. Attach a label or other suitable paper to the back of the photo and write all information on the label, not the photo.

10-10 Chapter activities and reports should be sent to the Chapter Coordinator, Linda Barnes, KJ4FM #43299, 310 Sequoyah Drive, Kingsport, TN 37660-3742.



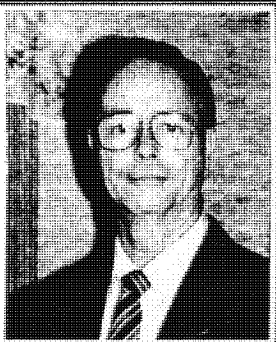
Member
**AMATEUR RADIO
 NEWS SERVICE**

10-10 NET CONTROL STATIONS ALL NETS BEGIN AT 1800Z

Monday (28.380) Dick, K6PZE #1341
 Monday (28.800) .. Harold "Scotty" Scott, WA6TQC #71
 Tuesday (28.380) Bob, AD4DQ #57471
 Tuesday (28.800) Nat, 8P6SA #45858
 Wednesday (28.380) Christine, N7PVL #58018
 Wednesday (28.800) Louise, N6ELK #36654
 Thursday (28.380) Bill, AA6ZW #62075
 Thursday (28.800) Bill, WB6OMH #6608
 Friday (28.380) Dan, WV4Y #39409
 Friday (28.800) Sherm, K6PTF #17977
 Saturday (28.380) Ed, KC4RIY #58203
 Saturday (28.800) Al, W6RNK #92
 Sunday "NEVER ON SUNDAY"

President's Message

Tom Henderson
K4CIH #33233



In this month's article I will try to address some of the questions I have been receiving from the membership concerning the past dues increase. A good many of the questions refer to our balance in the treasury and, if we have that amount, why the dues increase.

Amortization!! An interesting word! Supposedly it lets us know our future debt or, "what's it going to cost me" or something to the effect. This is one of the many items that our Treasurer has to take into account with Life Memberships. Consequently this is one of the reasons the total balances in the treasurers account may appear high. A fairly large sum must be held to pay the yearly membership of Life Members. If we amortize, using 17 years as a figure for life member expectancy, we are looking at \$170.00 for each Life Member for the 17 year period. When you multiply \$170.00 by approximately 1000 Life Members, you can readily see why we have, and must keep, the balance we do.

Another point of expenses is the increase in postage and the increase in printing costs. This coupled with the new mailing of the 10-10 News First Class to USA and Air Mail to DX, has increased our expenses considerably. We have also tried to institute cost saving methods due to increased operating expenses. Most of the Officers and Members of the Board of Directors have gone on line with AOL (E. Mail). Ten-Ten reimburses ONLY the basic charge of \$9.95/month. This has resulted in a drastic reduction in postage and phone expense. Rest assured, those of you who wonder about the dues increase, we are doing our best to keep costs down and still provide as much service to the membership as we possibly can.

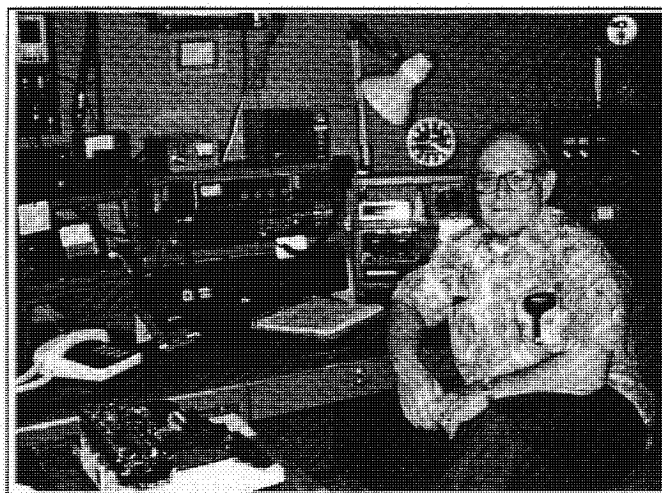
We have increased our scholarships to three in number and the amount to \$1000 each. I am sure everyone out there agrees that giving to deserving youth for educational purposes is certainly a worthy endeavor and exemplifies the true

meaning of helping others. Those selected are HAMS. The scholarship recipients are selected by The Foundation For Amateur Radio, Inc. (FAR). The selections are made by FAR using the guidelines Ten-Ten has set forth. Those who are recipients are requested to send a short biography and photograph for publication in the FAR Foundation's monthly journal as well as in the 10-10 News. Yes, the payment for the scholarships comes out of the treasury, but donations to the scholarship fund help to keep the actual cost to Ten-Ten down. Donations to the scholarship fund are accepted and solicited. These can be mailed to Morrie Goldman, W6EHM #4189, Ten-Ten's Scholarship Manager, at the following address: 21518 Marjorie Ave. Torrance, CA 90503-6814. A personalized certificate of appreciation noting your gift (not the amount) will be mailed to you.

This year's recipients of the two 10-10 Scholarships are: Mr. Stuart Myers, KB8JBK of Oxford Ohio, and Mr. Samuel Wettling, KC4VIL of Glenn Ellyn, IL. Stuart is majoring in Pre-Med and Psychology at Miami University. Stuart was recommended by Samuel Rachlin, K3ALQ #13174. Samuel has been accepted at the University of California where he plans to study Computer Engineering. Samuel was recommended by Warren Geary, K19H #12806. Ten-Ten sends the heartiest of congratulations, to these two fine young individuals, in their effort toward higher education.

I hope this helps to answer some of the questions written to me concerning the dues increase.

.....Best regards, Tom, K4CIH #33233



Alvin Schwartz, W7LAH #66884, of Portland, OR, at his neat station. Alvin has been licensed for over 50 years.

10-10 Scholarship Winners for 1995 Announced

Selected to be the 1995 winners of the two \$750.00 10-10 International Net, Inc. Scholarships were Stuart Meyers, KB8JBK from Oxford, Ohio and Samuel Wettling, KC4VIL from Glen Ellyn, IL.

Stuart is majoring in Pre-Medicine and Psychology at Miami University in Oxford Ohio where he has a 3.73 cumulative Grade Point Average. He has a great respect for his fellow-hams and the hobby. He does his best to help others in return for the kindness, generosity and patience shown to him when he first became licensed. He was recommended by Samuel Rachlin, K3ALQ #13174.

Samual has been accepted at the University of California at Berkeley where he plans to study Computer Engineering. Besides being an Eagle Scout, he has a variety of hobbies and above average SAT scores. He was recommended by Warren Geary, K19H #12806.

At the recent 10-10 Board of Directors Meeting in Tuscaloosa, AL, in June 1995, the Board voted to increase the 10-10 Scholarship Fund program from two \$750.00 per year scholarships to three \$1000.00 scholarships each year. Each year The Foundation For Amateur Radio (FAR) administers the 10-10 Scholarship program along with approximately 55 others from various amateur radio clubs and organizations. 10-10 was pleased to participate in the FAR program for the 55 scholarships it administered for 1995. We will also participate in 1996 with FAR who will administer the three \$1000.00 10-10 scholarships for 1996 along with others. Watch for the announcement of the 1996 scholarship program in the April 1996 issue of the *10-10 International News*. FAR advised that twenty-five percent of the applications filed in 1995 had the signatures of 10-10 members as sponsors. Fantastic response from 10-10!

If you would like to support the 10-10 Scholarship program by becoming a **10-10 Scholarship Volunteer**, please send your donation, any amount, to the 10-10 Scholarship Manager, Morrie Goldman, W6EHM #4189, 21518 Marjorie Avenue, Torrance, CA 90503-6418. Make your check payable to: 10-10 Scholarship Fund. You will receive a *10-10 Scholarship Volunteer* certificate and your name will be listed in the *10-10 News*.

NEW AWARD AND CERTIFICATE GUIDE
AVAILABLE NOW - See page 31 for details

Sunspot Cycle 23 is on the Way

Astronomers at the California Institute of Technology say they have identified the first new sunspot in the next sunspot cycle.

Scientists at Caltech's Big Bear Solar Observatory in Big Bear City, California, photographed the spot on August 12, 1995.

"This makes us happy," said Hal Zirin, professor of astrophysics at Caltech and director of the Big Bear facility. "The sun is a lot more interesting to study when things are going on."

Early in the 11-year sunspot cycle, sunspots appear rarely and at relatively high solar latitudes around 30 to 35 degrees, then increase in frequency and appear at lower latitudes until they reach sunspot maximum, Caltech said. After this peak in activity, the number of sunspots slowly declines, and they appear ever closer to the sun's equator until they reach a relatively quiet phase called sunspot minimum.

The sun has been in a quiet period through much of 1994 and this year, with a few spots showing up near the equator. The new sunspot found on August 12 appeared at a solar latitude of 21 degrees, and its magnetic polarity is opposite to that seen over the last decade, a key to identifying it as "the manifestation" of the start of a new cycle, Caltech said.

Scientists at Caltech said they expected an early beginning to Cycle 23, but not this early. "Sunspots in the new cycle should rapidly become more common and reach a high level of activity in 1998 or 1999," Caltech said.

.....ARRL Bulletin ARLX046

10-10 is a Major Sponsor

10-10 is now one of the major sponsors of The Colorado Bighorn Museum of Amateur Radio. The trustees and directors wish to thank 10-10 for their support of the Museum. This means that all paid-up 10-10 members will receive free admission to the museum when you visit. The museum, with one of the largest collection of amateur radio equipment is housed in a new 11,000 square foot facility in Genoa, CO.

The museum holds the club call of W0WO and 10-10 number 7734 and is usually on the air for 10-10 contests.

SO YOU WANT TO BE A PAPERCHASER!

By

Ed Redwine K5ERJ #11843

Paperchasing, (the collection of amateur radio awards) is a fun part of the 10-10 experience. With new members coming on every day, some are going to want to join the hunt, but are reluctant because they don't know how to get started. With such a large membership, paperchasers are not a large group in numbers, but they are **very** active and can usually be found around 28.345 and 28.825 when conditions permit.

10-10 AWARDS - The awards offered by 10-10 is an excellent place to start the paper chase with 13 categories from which to choose. The *10-10 News* dedicates a full page to listing of all the awards and the managers who handle them. If you are not clear what the requirements are, then send an **SASE (self addressed stamped #10 envelope)** to the award manager in question and ask for a worksheet and award details. All managers are more than happy to oblige.

CHAPTERS - There are well over 100 Affiliated Chapters in 10-10. Some are dedicated to paper chasing and others function more as local social groups. By far the greatest majority welcome outside members and encourage the propagation of their Chapter certificates.

Each Chapter has its own way of joining. With some you have to work **Special Qualifiers (SQ's)** while others you collect a certain number of points or contacts. The cost of membership will vary from \$1.00 and 2 FCS (First Class Stamps) up and usually depends upon the quality of the certificate offered by the chapter.

Periodically, the *10-10 News* will publish a list of Chapters along with net frequencies and times. Nets are an excellent place to meet new friends and gain knowledge of the Chapter. An **Award & Certificate Guide** is available from the **Guide Manager**. Refer to the inside back page of the *10-10 News* for details.

INSTANT QUALIFIERS - Many paperchasers are **Instant Qualifiers (IQ's)** for the basic certificate of many Chapters. Contacting an IQ is all you need to join. Just send details of the contact with the appropriate fee to the **Certificate Manager (CM)** of

the Chapter in question. Then sit back and wait for the mail to deliver your new number! Be sure to read carefully the rules of the Chapter you join. They do differ from Chapter to Chapter.

LISTS - All serious paperchasers have a list that is exchanged containing all the information they have accumulated on all the Chapters they work. Some are shorter than others and they vary widely in style and format.

NUMBERS OVER THE AIR - Why not just give the numbers over the air? Good question that deserves a good answer.

In the beginning days of paper chasing, there were few Chapters and exchanges were easily handled over the air. As the numbers of Chapters grew, so did the lengthy exchanges usually on a frequency occupied as a "gathering place" for paper chasers. To save time and not "hog" the frequency, the list came into use. It is exchanged between stations by mail, **only after a bona fide contact between two members in which the 10-10 number, Call, Name and QTH are exchanged.**

Lists contain the appropriate information of the member, including Call, Name, Mailing Address and Telephone number. Grid Squares and other information is often included in the heading. Most lists show the member Chapters in column form and in alphabetical order. Basic numbers are listed along with current points and any collectible seals for that Chapter. Lists should not be cluttered with unnecessary information that is not needed by the receiving station. Lists should also be "purged" occasionally of Chapters no longer operating.

COLLECTING POINTS - The object of paperchasing is to collect "points" from fellow paperchasers and to use these points to build your own point value in any given Chapter.

It should be noted that these points are "earned" by working the station whose points you are collecting either over the air or on a certificate list after a legitimate contact. It is not **proper or legal** to claim points "you've heard" someone give to others. You **must** make contact with that station in order to "claim" his (or her) points. The same applies to any Chapters "**Specials**" that may be going on.

.....continued on page 6

.....Wanted.....

Scholarship volunteers. Send your donation to the Scholarship Manager (address on page 2). How about \$1.00 for each year you have been a 10-10 member?

So You Want to be a Paperchaser...

continued from page 5

YOUR CHAPTER WORKSHEET - After you have collected points from fellow paperchasers, the next step is to record them either on a worksheet provided by the Chapter CM, or in a data base on your personal computer.

Both methods are entirely acceptable. There are still many paperchasers who do not own computers and consequently do all their paper work with pencil.

Each worksheet should include your Call, your name, your 10-10 number, your basic number for the chapter and your **present** point value. You don't make any brownie points with the CM if he (or she) has to spend extra time trying to find you in a data base.

Be sure to use the Chapters format on your worksheet if you have designed your own. Most all point based Chapters require: 1. The **previous** collected points, 2. the **new** points you are claiming and 3. the **total** collected points. All collectible seals should be listed in columns with appropriate headings.

Those keeping records in long hand should be **extremely careful** to make sure the columns "add up" correctly. Conversely, those with computers should scan their printouts to make sure that the 760 points claimed on a member is not 6760 often caused by the "fat finger syndrome".

BE KIND TO CM's - Certificate Managers are some of the hardest working people in 10-10. They spend countless hours pouring over upgrades that are illegible, poorly submitted, and thrown together. Take some time to make sure your upgrade is readable and neat. You will find a warm spot in the CM's heart. The same goes for any award you apply for whether Chapter or 10-10. Proof of paid up dues should always be included for 10-10 awards. Some Chapters award extra points on an annual basis for proof of paid up dues.

SPECIALS - Many Chapters run **Specials** for their members. These specials may be monthly or even annually but for the most part they are fun and competitive.

If you are included in a Chapter's Special, make it a point to get on the air and give it out. It helps propagate the Chapter and makes you a popular

fellow! Once again, like points, Specials are "**earned**" only after a legitimate contact with the station giving out the Special. You cannot **ethically claim the special just because you heard someone give it!**

Be sure to have your worksheet back in to the CM by the date requested. It's tough to send one back that is far past the published deadline. In times when the band allows DX participation, ample time will be given to include enough time for return mail from the DX stations.

This should be enough information to get you started in paper chasing and maybe remind some of the older paperchasers of some of the things they may have forgotten.

Even though the band is at a low spot in the cycle, contacts can be made virtually every day and that is the real reason, we are here, to keep the band active in periods of minimum activity.

The 95 Summer QSO Party was a good example of heavy activity during a period of low sunspot activity. Everyone was having a ball.

Now, go out there and collect some awards!

Ed Redwine, K5ERJ #11843 joined 10-10 in 1976 and immediately became a paper chaser. He was founder and CH of the Plainsman Chapter out of Lubbock Texas in the late 70's and early 80's, then after moving to Kansas in 1984 founded the Air Capital Tentenners of Wichita where he still serves as Chapter Head and Senior CM. He now serves as a Director of 10-10, Chairman of the Operations Committee and has also served as the Wichita Convention Co-Chairman and Chairman of the 93 Nominating Committee.



Gateway Chapter Contest Scoring Party. Left to right: Al, K0MYD #13977, Bob, K0WEX #8092, John, W0ERZ #5145, Carl, KD0IR #37955, Don, W0RTV #13962, Bob, WB0GGO #3735, Harry, W0JDP #4317 and William, N0WM #2724

New Contest Manager

continued from page 1

Club. He is also the guiding force behind the Colorado Bighorn Museum of Amateur Radio, now headquartered in Genoa, CO.

Don's background is in the communications technologies field where he holds a masters degree in electronics. He owns and operates Eastco Appliance Centers, which he started in 1978.

Don can be reached at Box DX, Genoa, CO 80818.

The Board and the Operations Committee welcome Don to the ranks of our volunteer managers and look forward to a long working relationship.

Our Thanks to Harry Arsenualt for his efforts on behalf of Ten Ten.

HAMCALC for Easy Calculations

continued from page 1

and more.

HAMCALC is a PC structured program of programs in BASIC with its own copy of GW BASIC attached. The 3.5" 1.44 MB disk Murph sends is self contained, but the entire structure can be moved to a hard disk. There are about 100 utility programs covering many of the normal and special calculations hams must make, either day-to-day or occasionally. There are lots of antenna and transmission line entries: I know because I have contributed a few. To give you a taste of HAMCALC, here are a few the program titles of version 10.0. (By the time you read this, there will be more, since Murph is continuously adding to and updating the programs):

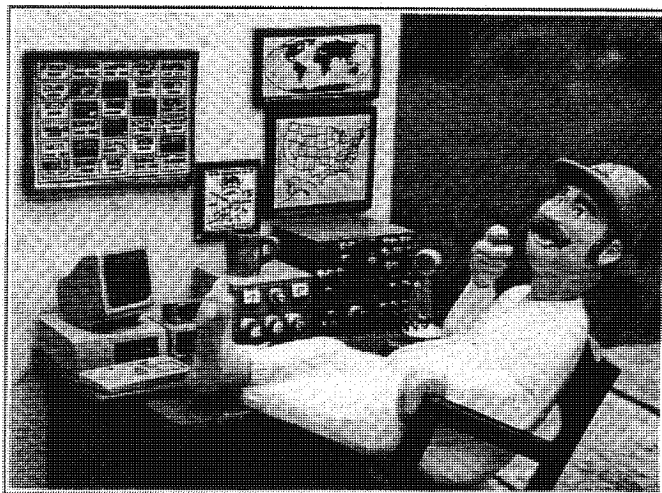
- A.C. CIRCUIT CALCULATOR
- ANTENNA LENGTH CALCULATOR
- AUDIO BANDPASS FILTER
- COAXIAL CABLE CHARACTERISTICS
- COIL DESIGN
- COPPER WIRE
- GREAT CIRCLE PATH
- HAIRPIN MATCH for YAGI ANTENNAS
- HAM SHACK STAIRS
- L/C NETWORKS
- MATCHING NETWORKS for TRANSISTORS
- MOBILE WHIP ANTENNA
- OPEN-WIRE TRANSMISSION LINE
- PI-NETWORK IMPEDANCE MATCHING
- QUAD ANTENNA DIMENSIONS

- SAG IN HORIZONTAL WIRE ANTENNAS
- SATELLITE ORBIT PARAMETERS
- STUB MATCH for ANTENNAS
- S.W.R. CALCULATOR
- TOROID INDUCTOR CALCULATOR
- TRANSMISSION LINE PERFORMANCE
- TRAP DIPOLE DESIGN
- ZENER DIODE VOLTAGE REGULATOR

And there will be more, because Murph never stops looking for new ham utility programs in BASIO. If you have any that you have written or found (without violating any copyrights), why not send a copy to Murph. A copy on disk and a LIST would be appreciated. He will edit the program to fit the screen and print layouts he has developed.

As Murph notes, "This software is FREE, and is not to be sold. Please feel free to copy it and pass it along to your friends." However, if you would like a copy of the most up-to-date version, Murph would appreciate a \$5.00 donation to cover disk and mailing costs. (Please do not send disks and US stamps, as he cannot use the stamps.) You can reach Murph with your requests or your program contributions at this address: George Murphy, VE3ERP, 77 McKenzie Street, Orillia, Ontario L3V 6A6 Canada.

Thanks, Murph, and -73- from 10-10.



A New Home for Homer...

In the summer issue of the 10-10 News we ran a picture of WA6POZ #21274 receiving "HOMER" from K5ERJ # 11843. We felt the picture did not do justice to "HOMER" so we are running a larger picture. Everything in this picture was *hand carved*, taking over 100 hours of work. Once again we thank Ed Redwine, K5ERJ for this donation and for the time spent making a realistic ham radio station in miniature for the auction. "HOMER" now resides in Omaha, NE.

An-Ten-Ten-nas

By L. B. Cebik,
W4RNL, #41159



In each issue of the News, we shall try to clarify a significant cluster of ideas used in antenna work. Our object is to help you make the best decisions about the antennas you buy or build with out imposing our own prejudices on you. The more you understand, the better your choices will be.

No. 8 Raiding the Hardware Store

Home-made antennas have no warranties. We build them, modify them, fix them, and then use the pieces for another project. We move them from the roof to a mast, and from there to the attic.

We fold, bend, staple, and mutilate them with great regularity. We do not have to think like manufacturers when we look for materials for small, experimental antennas. The hardware store will do just fine for 10-meter antennas (except for stock items like coax, ladder line, baluns, connectors, and #14 stranded copper wire).

Think hardware store if you build any of the following: attic antennas, portable or field antennas, experimental or short-term antennas, hidden antennas, "hurry-up-and-get-it-in-the-air-because-the-contest-is-about-to-start" antennas. By the hardware store, I mean anything from the traditional shop to the giant home improvement depots.

The rule of thumb is this: if it is copper or aluminum, then it may be an antenna element; and if it is plastic--especially PVC or its offshoots--then it may be an insulator.

Here are a few examples to get your creative juices flowing.

1. Why tubing? Manufacturers use tubing for at least two good reasons. First, it is relatively strong among available antenna element materials. Secondly, it slips the wind better than most other economically feasible shapes. However, without a good shop, working with tubing is inconvenient. Lining up holes for connectors is a bear if we only have hand tools. We often crush it with both regular bolts and U-bolts. So, for experimental and field antennas, why not use something else.

Angle aluminum is available in a wide variety of sizes. We can choose 1/16 or 1/8" thickness in half-inch or three-quarter-inch widths. I prefer the 1/16" thickness for its lightness and the 3/4" width because I can mount a coax connector right on the element (after grinding off two of the corners).

Some years ago, I put together a collapsible square quad loop made from a combination of angle aluminum for the horizontal members and wire for the vertical. Construction and field assembly were a breeze because all the nuts and bolts went through flat surfaces. Any difference between the radiation of a tube and a complex angled surface was washed out in practice.

Hardware stores also have flat aluminum bar and often you can find aluminum rods. The bar would flap too much as an antenna element, but it makes good connector straps in short lengths. If you can thread aluminum rod, you can link pieces, as I did some time back with a collapsible dipole.

While you are thinking about alternatives to tubing and #14 wire, consider both 300-ohm twinlead and 450-ohm ladder line. You do not have to make folded dipoles out of them. Instead, just connect the wires together at the ends of an element to simulate a fatter wire for a slightly greater bandwidth than you can usually achieve with a single wire. For attic and field antennas, the slight weight difference may be offset by the wider QSY possibilities.

2. Why metal antenna supports? The usual steel mast and steel or aluminum tower is a marvel of engineering, and most handbooks show metal plates using metal hardware to mount a metal mast to a metal boom to metal elements. The operative ideas are durability and lightning protection. For many indoor, experimental, and field operations, these ideas are secondary, at best.

Schedule 40 PVC makes a good partial substitute for steel masting in short lengths. It works easily with hand tools. I have experienced no RF difficulties with it at 10 meters. I have used 1/2" to 1 1/2" diameters for various element support, mast, and boom exercises. The 2-element Yagi used a PVC boom under 5' long, well within the sag limits of the tube.

Schedule 40 PVC gives "nominal" or minimum diameters: the actual inside diameters are greater. 1.25" PVC has closer to a 1 3/8" inside diameter and a 1 11/16" outside diameter. 1" nominal will nest inside 1 1/4" nominal, but not tightly.

.....continued on page 9

An-Ten-Ten-nas

continued from page 8

However, most other sizes will not nest well or at all.

Consider the following portable dipole. The elements on each side of center are 3/4" and 5/8" aluminum tubes that slide into each other for carrying. The center insulator is a 2' to 2.5' piece of 5/8" dowel--a foot or so of antenna element over each end of the dowel. The dowel slides into a hole through the near top of a 2' piece of 1" nominal PVC. The PVC slides over the end of a section of TV masting. 5' sections of the mast put the antenna as high as safe and feasible, with rope guying. The dipole is turnable by hand over 90° for nulling QRM into the element ends. Wherever the tubing fit is too loose, some electrical tape on the inner tube tightens the grip without gluing the assembly together. It all breaks down into a collection of tubes no longer than 5' maximum. Nest what you can; then lash the bundle together with the guy ropes for transport. It is possible to drill a hole and fasten a coax connector to the PVC top mast section, or you can make up a little plate for it from some scrap aluminum.

For wire antenna element spacers, portable quad element supports, and similar light duty functions, try some of the lighter-weight tubing available. Half and three-quarter inch CPVC tubing is available, as is Schedule 315. For both 90° and 45° corners, as well as for section couplings, there are fittings that glue together so permanently that I have never had one fall yet.

3. Flat and angled insulators: Sturdy plastic insulating plates are easy to fashion from thick freezer containers. They are temperature impervious for normal use lifetimes. The sides are either straight up or slightly angled, making good mounting lips. A hacksaw cuts these 4" square containers into handy sizes, and a 5/8" hole saw for wood cuts a perfect coax connector hole. The uses are limitless, but the first use that comes to mind is as a center insulator for either straight wire or folded dipoles.

However, do not overlook round and "squared" plastic bottles for special uses. The semi-rectangular bottles used for some liquids have rounded 90° corners. Cut a pair of round holes (to match a boom, a mast, or an antenna element), one on each surface of a corner section. Squeeze the corner together and slip it over the mast, boom, or tube. Let go, and the corner grips well enough to withstand small loads and winds up to

45 mph. You can use this scheme to space feedline from a boom or mast or to suspend linear loading elements beneath a main element.

4. Wood and the "auto" section: For most experimental, indoor, and field antennas, metal mast-to-boom and boom-to-element plates are not necessary (unless you just happen to have a stock of 3/16 to 1/4" thick aluminum). 3/8" or 1/2" plywood will do as well.

Put away the varnish, because it will not last long in the weather. Instead, look in the auto supply part of any of the X-mart stores for a can of auto body work fiberglass resin liquid. Spread it liberally over the plywood piece (already cut and drilled). Give special care to the edges, where plywood is very porous. Once dry, recheck the hole sizes for easy hardware passage and redrill as needed. If your wood plate is lumpy, sand the surface flat, but not down to wood again. If you slip up, retouch the area. Now your plate is sealed against weather much more perfectly than any varnish I have found.

The one exception is epoxy paint made to seal concrete and similar benches, tables, etc. It does much the same work about as well, but is not always readily available.

Note that I do not use the fiberglass cloth in this process. It is unnecessary for this application.

5. Hardware: For antenna work, use stainless steel hardware (nuts, bolts, washers, hose clamps, etc.) wherever possible. Stock sizes are now readily available in the depot-type stores, and there are in many medium to large cities specialty suppliers of stainless steel hardware. If it is rustable, do not use it for an electrical connection
.....continued on page 29



Les Morgan, NR7B #26928
Avid DX'er and Past Chapter Head, Lilac City Chapter

TenX DX NEWS

By Mike Davidson
KC5CP, #24949



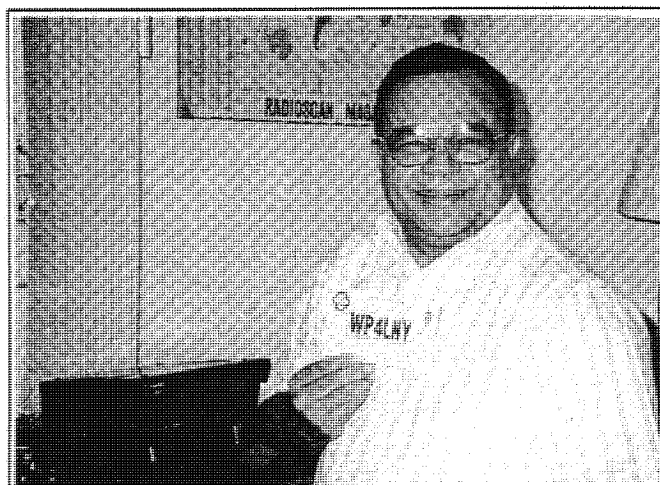
The **best DX news** that I can tell you comes from Cal. Tech University astronomers who have seen the first sunspot of Solar Cycle 23! Scientists at Caltech's Big Bear Solar Observatory photographed the spot on August 12. Early in the 11-year sunspot cycle, sunspots appear rarely and at relative high latitudes, then increase in frequency and appear at lower latitudes until they reach sunspot maximum, Caltech said. After this peak in activity, the number of sunspots slowly declines, and they appear ever closer to the sun's equator, until they reach a quiet period called sunspot minimum. (like the past 2 years). The new sun spot seen by Caltech appeared at a solar latitude of 21 degrees and its magnetic polarity was opposite to that seen during cycle 22, a key indicator of the start of a new cycle, Caltech said! The federal agency NOAA, predicted the summer of 1996 to be the start of the next cycle, thus I expect them to take several months to confirm the start of Solar Cycle 23!

The **1995 Ten-Ten Convention** in Alabama was a great experience, seeing friends that I had not seen for two years and getting some 10-10 business done! I took two weeks off from work to be able to combine a vacation with two conventions. I drove to Arlington, Texas, where I talked about 10-10 to the Republic of Texas chapter at the HamCom Convention. On my way to Alabama, I visited with relatives in Louisiana where my home town is in Cajun country, one hour from New Orleans. My total car mileage was 2020 miles, which equals to 1010 both ways!

I continue to work **stateside short skip** looking for new countries while waiting for a DX opening, and guess what happened while driving to the 10-10 Convention? The band opened several days to Europe! My mobile HF rig developed a sensitivity problem and I could not hear the DX while in the car. When I got back to Houston, I used my four element yagi antenna to work European stations about 000Z in June and July. Several stateside stations told me of similar openings up to July 15 when the band closed to Europe for the summer.

The **biggest DX news** this Summer continues to be the approval by the ARRL for **P5 North Korea** to be the **newest DXCC country**. The recent DXpedition by a group of Finish operators lead by non-member Marty Lane OH6BH, will be followed this winter by another group that should make thousands of contacts if all go according to present plans. Good luck to all and be patient!

Feature DX Station: WP4LNY Puerto Rico by Julio #64747 was worked in the July Summer QSO Party. Julio is an active Technician class op and he has over 100 DXCC countries worked but only 72 confirmed. He needs Montana to complete WAS, so please call him from MT if you are on at 2100-2300Z daily on 28480 or 28280 CW. His station is a Yaesu FT890, to a Cushcraft 3 element yagi, a vertical Astron 99 and a 80 meter dipole. He is in all the 10-10 QSO parties plus Novice Roundup where he was 2nd in his region. He has VP #2825 and a few certificates. QSL to Julio Medina, POBox 19715, San Juan, Puerto Rico 00910-1715.



Julio Medina Cortes, WP4LNY #64747

9X/ON4WW Rwanda by Mark #49103 was active June 4-18. DL7VTM Holger #22401 confirmed Mark operated on ten and possibly gave out his number! This would be the first 10-10 activity from Rwanda. If someone will confirm 10-10 activity, I will update the number of claimed 10-10 countries to # 273! QSL to ON5NT.

XR0Y Easter Island and XR0Z Salas y Gomez by a large group of ops and three team members have 10-10 numbers: **XE1CI Nellie #45888**, **XE1L Luis #18056** and **K0IR Ralph #2609**. I hope you sorted out who was where as I can only account for Nellie on Easter Isl. This trip was unique since many received a notice of being in the log via Email! XR0Z only operated September 7-11 and

.....continued on page 11

TenX DX News

continued from page 10

counts for Easter Isl. QSL to WA3HUP Mary Crider, 2485 Lewisberry Rd., York Haven, PA 17370.

CE0Z Juan Fernandez Island by K0EU Randy #04977 were on the island September 13-30 with two non-members K4UEE and K0IYF. This all mode operation plus satellite, was during the same time as XR0Y. QSL to K0IYF.

Propagation: Solar flux will range from 70-98 in the Fall 1995 which will be a slight increase from the summer flux numbers. As I write this, the Solar flux is 69 the A index 9 and K index 1 which is exactly equal to 3 months ago! Expect sporadic E Layer conditions to be one & two hop skip from 400-1600 miles with fading, when there is no DX skip. This could last 12 more months until Solar Cycle 23 really gets moving. Remember to listen for the beacons (28.2-28.3) when you want to check band conditions. This winter, stations on the US East coast, could hear Europe an average 2-5 days a month if the solar flux gets to 100. Everything depends on how many sunspots begin to show up. If the flux stays 70-90, DX conditions will be poor (1 day a month) to Europe. States west of the Mississippi may not hear Europe at all, if the flux stays under 100. As the spots increase, the Maximum Usable Frequency (MUF) will go up and you could see several openings a month into Europe from the West US. Solar conditions will improve so keep working the short skip and fill in your needs with 10-10 & VP numbers, certificates and counties.

VP2MO Bobby Martin #30307 was seriously injured in a car accident during the evacuation effort caused by the active volcano now on Montserrat. His wife Mae VP2MN was killed in the accident with a military vehicle. They were going to move some radio equipment when the accident occurred. Bobby was airlifted to Antigua where he underwent surgery and is now improving. I have not had a report on his condition since a hurricane went thru the area in early September. Our prayers go out to Bobby and his children. Check 14236 at 2330Z INDEXA info.

CY9 St. Paul Island by AA4VK Ron #12423, W5IJU Vance #63352 and 3 non-members were on the island July 27 to August 2. QSL to WA4DAN.

4S/HB9BRM Sri Lanka by Mario #30935 was active September 14 to October 3. I need it for a
.....continued on page 18

Honor Roll

SCHOLARSHIP FUND VOLUNTEERS

The following 10-10 members have become a **Scholarship Fund Volunteer** by making a donation to the 10-10 Scholarship Fund. They will each receive a **Certificate of Appreciation** for their contribution.

07734	W0WO	The Colorado Bighorn Museum
09902	K0PVI	Don Zielinski
15046	JA4DWZ	Yasu Watanabe
25857	KE9CX	Jim Rausch
32557	KD9XP	Edward Ruchrwein
59428	N2LWL/6	Guy A. DeMarco
64094	N9KUW	Bruce R. Campbell
65432	N1RLO	Joseph T. Fratto

A special thank you to Director Jack Miller, W9WYN #6894, who recruited three Scholarship Fund Volunteers, KE9CX, KD9XP and N9KUW at the Fox River Radio League's 1995 Hamfest on July 23, 1995 in Sugar Grove, Illinois.

I received the first DX contribution from Yasu, JA4DWZ, who donated \$1.00 for each year since obtaining his ham license. I suggest we follow his example. My next contribution to the Scholarship Fund will certainly be a generous one!

You also could become a **Scholarship Fund Volunteer** by sending your contribution to: Morrie Goldman W6EHM #4189, Scholarship Manager, 21518 Marjorie Avenue, Torrance, CA 90503-6418. Make your check payable to: 10-10 Scholarship Fund. You will receive a **Certificate of Appreciation FOR THE YEAR 1995** as an appreciation of your contribution.

**HAVE YOU MADE YOUR
CONTRIBUTION FOR 1995?**

IF NOT - PLEASE DO SO TODAY!

**PLEASE SEND YOUR
CHECK TODAY**

10-10 SILENT KEYS

It is with sorrow that we note the following 10-10 members who are now SILENT KEYS. We extend our sincere condolences to the families and friends of these SK members whose calls and 10-10 numbers will forever be kept in the records of the 10-10 Net.

6 W3MCE	Emil H. Patrick, Amridge, PA
427 K6YD	Fred J. Gartzke, Santa Barbara, CA
1214 K1YXO	Norris B. Hamlin, Farmington, ME
2729 W4ZWZ	Isaac V. Goins, Knoxville, TN
3583 W7LET	Donald G. Morrison, Peoria, AZ
4036 W6ERL	Ernest H. Oman, Santa Paula, CA
4122 KF7QN	Harold S. Statler, Silverdale, WA
4130 W1KEZ	Harold Hooten, W. Melbourne, FL
5799 W1WEE	Floyd W. Steiner, Meriden, CT
6472 W6CIE	Olney B. Medalen, Pine Grove, CA
6998 KB7NZ	Robert H. Skinner, Beaverton, OR
8108 W9EYC	Carl W. Dau, Kenosha, WI
8589 K1HGY	Wilfred B. Forquites, Richmond, VT
9027 W3RMQ	John F. Corkill, Adelphi, MD
9230 K4KNS	Glenn A. Baker, Martinez, GA
10908 W0DGS	William A. Langer, Alexandria, MN
12867 W9PKL	James G. Brown, Akron, IN
13477 K4DOW	George E. Hunt, Columbus, GA
13579 W4TWW	Coleman B. Rowland, Goose Creek, SC
15037 W6LNF	Bernard J. Cline, Los Gatos, CA
15312 K0IN	Irving Geller, Needham, MA
15927 W80TEC	Chester L. Baker, N. Sioux City, SD
16842 W3FCN	J. C. Cochran (Corky), Baltimore, MD
17783 W1WYM	Sidney D. Giber, Hudson, FL
23905 KA1CF	Chester Kadish, Trumbull, CT
24192 W44EBJ	Charles Scott Johnson, Rossville, GA
26739 K4QQL	Hugh G. Prince, Shelbyville, TN
26776 W4IOZ	John G. Hughes, Prattville, AL
28352 W4GFZ	Hans J. Kaufmann, Columbia, SC
29290 W9ZTL	John W. Palmer, Joliet, IL
29998 N6AXQ	Harold L. Burba, Torrance, CA
32204 KA5ESG	Theodore G. Vaky, Houston, TX
32524 W1YUB	Paul K. Herbert, Hudson, NH
33178 N9AQJ	John A. Poltawsky, Rushville, IL
33964 W81ASK	B. Eric Cooper, Stamford, CT
34744 N6CXM	Richard L. Van Zant, Lnywood, CA

34823 KA2BBH	Robert G. Lautenslager, Cranford, NJ
34994 W0URI	Earl W. Furstnow, Floodwood, MN
35862 W5QOU	J. H. Wilson, Mesilla Park, NM
36463 KA4GGU	George J. Barton, New Port Richey, FL
37380 KD4T	Robert E. Borkoski, Chuluota, FL
37504 W2AY	Robert E. Cobaugh, Bayside, NY
37509 W2KF	Kassel K. Miller, Cherry Hill, NJ
38799 W2ANJ	Charles F. Dagutis, Bridgewater, NJ
39210 W5ALS	Claude C. Elkins, Dallas, TX
39784 AA4LO	Charles L. Danley, Moore, SC
40779 W4TXZ	Elisha W. Winfrey, Newport News, VA
41122 W84JFC	David F. Jones, Front Royal, VA
41164 K4CCW	Clifford D. Jones, Freer, TX
41589 KA6IVP	Dermot J. Hartnett, Long Beach, CA
41646 W0MMR	Kenneth M. Fuller, Augusta, KS
42778 K8VIE	Stanley J. Buck, Geneva, OH
45197 W2HRW	William A. Walker, Linwood, NJ
49860 WY8T	Andrew A. Susane, Parma, OH
50263 W87NWE	Edwin E. Perry, Seattle, WA
51137 N2JPA	Richard J. Latimer, Ewan, NJ
52624 N6VGI	Richard D. Kelley, Porterville, CA
54154 NY8E	Edward O. McCann, Cincinnati, OH
55409 K88IFM	Ruth Mojrzszek, Dearborn Hts, MI
55726 N3IMZ	John R. Doane, Longboat Key, FL
56224 N2GXO	Rolf Hohloch, Ridgewood, NJ
58526 K9HOF	Eugene F. Molitor, Aurora, IL
59498 N2JDX	Ralph Famularo, Lake Hiawatha, NJ
60213 K9CXG	Vern O. Holland, Norris City, IL
60826 KR4CT	John C. Davis, Pfafftown, NC
60969 KK6QS	Vaughan R. Baxter, Danville, CA
61100 K80FGI	Roger C. Mason, Storm Lake, IA
61232 N7TRH	Travis W. Patterson, Tonopah, NV
61430 N9MHM	Samuel Tolpin, Northbrook, IL
61995 N3GTN	Donald F. Allnutt, Jefferson, MD
63166 KC6WJL	Russell L. McKellar, Shingletown, CA
63238 KD4QMB	Herbert G. Summers, Lebanon, TN
66485 AA90B	George J. Schlesinger, Colgate, WI

*Please send all Silent Key listings
and/or corrections to:*

Grace Dunlap, K5MRU #218
Silent Key Manager

PO Box 445, LaFeria, TX 78559-0445

*Please include the SK's Name, Address,
Call and 10-10 Number*

Contest Committee Appointed by President

President Tom Henderson, K4CIH #33233, has announced the appointment of a Contest Committee under the direction of the new Contest Manager, Don Zielinski, K0PVI #9902.

The contest committee will consist of Joe Dubeck, NA9A #, Bruce Page, KK55DO #65027 and Don Ward, KK5DO. The Contest Committee will be chaired by the Contest Manager and will be under the oversight of the Operations Committee. Proposed guidelines are: 1) To establish, define and review contest rules and procedures, 2) To recruit Chapters to score contests, 3) To maintain liaison between Chapters and members to increase

contest participation, and 4) To solicit and evaluate suggestions and ideas concerning contesting, and to organize and implement new and improved programs.

Any suggestions for the Contest Committee should be sent to the Contest Manager, address listed on page 2.

Video Tapes Available

10-10 Convention Highlights from the June 1995 Tuscaloosa 10-10 convention are now available on a VHS video tape for \$9.95 postpaid. Order from: T. R. Key, KE4QO #33234, 1019 Orchard Mill Road, Cottdonale, AL 35453.

Chapter Coordinators Column

Joyce Medlen
KE4KGB #66157

Affiliated...No new affiliated chapters this period.

Reaffiliated...No chapters were reaffiliated this period.

No Longer Affiliated...9/62, Beaver Valley, Grinnin Armadillo, Land O' Lincoln, Music City,no reports for 15 months.

In Extremis...Report by 5 December 1995, Appalachian Mountain, Bluebonnet, Cradle of Liberty, Crazy 8, Cypress, Down Under, Electric City, Lindbergh, Michigan Robins, Platte River, Samuel Clemens.

What's New?...The New Guide is printed. When ordering the Guide, make the check/money order for \$6.00 (US) and \$8.00 (DX) payable to 10-10 International. AFTER 1 September address all correspondence, reports and requests for Guides to Linda Barnes, KJ4FM. Linda's address is on page 2.

OCEAN STATE & QUAHOG CHAPTERS... Please note changes in the point system effective immediately. When the personal point value of a member has reached the 15,000 level in either chapter, accumulated points will become divisible by 200 instead of 100. There is no change in seals.

DAYTON/NIANTIC BAY...Niantic Bay members who attended Dayton in 1995, let the CM know and you will be given BONUS points. Don't delay let Pete know today.

NIANTIC BAY...SERIOUS BUSINESS - Pete has been receiving improper Upgrade paper work. He has had to reject them, please fill everything out properly. Effective after the Alabama get together ALL improperly submitted Upgrades will be returned *WITHOUT* action.

Effective 4 July, 1995, the Niantic Bay Chapter of 10-10 was QRT. Peter delivered this message. "It is with much regret that after 10+ years, I am declaring the Niantic Bay Chapter QRT. I have become disillusioned by the decline of paper

chasing ethics in recent years, and feel that the "POINTS FEEDING FRENZY" of "POINTS AT ANY COST" is not only degrading paper chasing, but detrimental to local chapters and Ten-Ten in general".

PEACH STATE...SPECIAL FOR 1995. Beginning 1 May 1995 through 31 December 1995 you will be able to collect the following: Medicine Man for + 50 points (one time only), and upgrade Tomahawks for + 25 points (one time only). Your log format is Call, Name, 1010 #, PS #, Special and Number. Go get that Medicine Man, but not with your Tomahawk. This one should be a lot of fun.

GBTEN...Dave writes that the 1996 Special has now been produced and will be issued from 1 September 1995. Worksheet will carry full entry details. Be careful because dupes found will also be worth points (neat innovation). He is adding two bonus sections to peak interest. The special will run from 1 January 1996 to 31 March 1996. Write for details.

KANSAS TRAILS...This new chapter will be hosted by Frank Hawkins (CH) and James Fortune, KB0EOV (CM). For information regarding the chapter send a SASE to James Fortune, PO Box 3, South Haven, MN 55382. Good Luck in your new endeavor with 10-10 International.

GOLDEN SPIKE...Khalil has taken on the job of trying to save this chapter. We commend his efforts. He is going to need lots of help. At this time the chapter is not issuing certificates or upgrades. He is just trying to hold the nets and keep affiliated. A CM is needed to keep it going and to issue the documentation. A great challenge awaits an adventurous person. Let Khalil know if you can help, even for a short period. If someone is not found in the near future the Chapter will have to go QRT.

COFFEE CUP...This chapter and Steamboat are running a combined net on Thursdays and Saturdays. Listen for them and check in. Don, KA5LQJ has a new address: Donald Saunders, 1342 Glen Oaks Place, Shreveport, LA 71103-3812

LAKE GENEVA...Marcel, F6EAK now uses his PC for RTTY, AMTOR, Packet Radio and SSTV. He is QRV on Packet Radio, send 10-10 message to F6EAK,FRPA,FRA.EU., VIA LOCAL BBS F6PTT-1. He can also be reached on SSTV and is capable of transmitting Martin M1 or Scottie DX. He can move to 28.680 on request.

OUTLAWS ON TEN...Bill wants everyone to know that they have discontinued their weekly net until 1
.....continued on page 14

Chapter Coordinators Column

continued from page 13

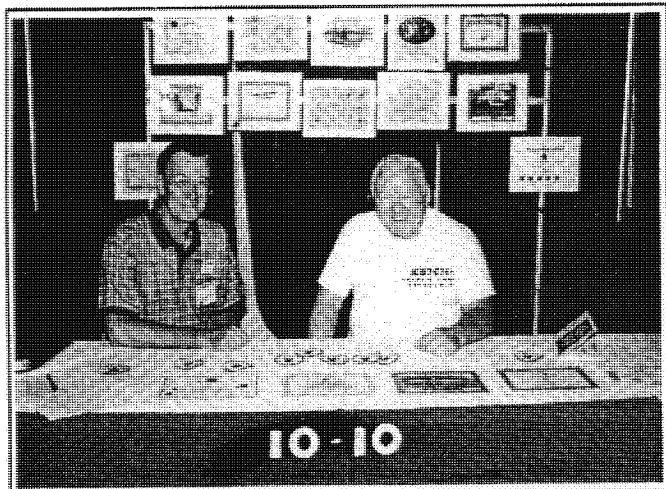
October, due to poor band conditions and other summertime activities. I wonder what a bunch of Outlaws do during the summer? They probably have a COOL hideout. See you in the Fall.

OKIE RELAY...They ran their 28th annual Okie Relay on Saturday, 14 May and a Amarillo team won with the fastest time. If you ask Allen when you upgrade or on the air ways, an extra 5 points will be added to the upgrade. Some changes have been made to their cover sheet, there is no loss of points. Items missing have been incorporated into a bonus column. This was done to make processing more efficient.

Anyone who attended the convention will receive a Okie Relay-AI, # for collectibles points. Those who do not have an Okie Relay # can still apply just send your request to Alan. Alan has retired and is asking all those who have upgraded to send their paper work in. He needs work, so send him lots.

Anyone who attended the convention will receive a Okie Relay-AI, # for collectible points. Those who do not have an Okie Relay # can still apply, just send your request to Alan.

FELINE FRIENDS / RESTORATION PROJECT...The WPC Club recently lost a young member due to a tragic accident. In her honor, they will present the Tara (pronounced Terra) Shepherd Memorial Worksheet. Starting 3 July 1995 contact RP members use one (1) letter from each call (prefix or suffix) to spell Tara Shepherd. Only 1



10-10 was represented at the ARRL Pacific Northwest Convention in Seaside, OR in June 1995 by the City of Roses Chapter. The 10-10 table was manned by Bob, Peschka, K7QXG #5956 (l), and Charles O'Neill, KB7CNV #48917 (r).

letter from each call may be used. Clubs may be used only if they have their own unique call. NO individual call/CS may be used. Certain Stations are Wild Cards, and may be used for one letter. Only 1 Wild Card may be used! There is no time limit. No seal will be issued, but upon completion you will receive 10 points for each year of Tara's Life, ie 150 points. There will be some small changes coming up in this chapter, so watch for details.

Please note the following changes for this chapter: Dropped: The +5 points for upgrading Niantic Bay. Also dropped are the +5 points for upgrading Imperial Dragon and the +20 point Permanent Special Sunshine. Add: Bonus points for upgrading Down Under and GB Ten (+5 each). Two new permanent Specials are Big Wheels (+20) and Car 40 (+40). Feline Friends #100 is worth +10 points. All other Feline Friends remain worth +5 each.

TWIN CITIES..."On The Town" special will run from 15 August to 30 September 1995. Complete as many categories of Twin Cities attractions as possible. Put the calls that you work in the blanks next to each category on your worksheet. Each one will be worth +2 points. For each set of 5 completed, you will receive an additional +5 points. (A set is one of each of the 5 specials in a vertical row to the right of the 4 categories, see worksheet). There are a total of 16 sets, if you complete them all, you receive a +100 point bonus. Upgrades must be postmarked no later than 15 October 1995. Take a trip thru the Twin Cities and see the sights.

OTHER NEWS....New CM, ALL AMERICA CITY is WA4FAT, BAY AREA is WB6RDK, CHIEF SEATTLE is W7JNB, and ARIZONA SUNSET is WB8JET.

FORT MCHENRY/CORNERSTONE...Specials for last half 1995. 1-31 October 1995, Collect Fort McHenry PATRIOT members for 1 point each. Collect Cornerstone CANNON numbers for 5 points each. Upgrades must be postmarked no later than 30 November 1995. **BONUS:** For one time only contacts with Fort McHenry board members during month special is in effect, an additional 1 point will be given to Fort McHenry point total and 5 points to Cornerstone point total. Send all upgrades to CM Don Cramer, AA3CA, 1118 Wynbrook Road, Glen Burnie, MD 21060-7027. Include an SASE.

SHOT...NOVEMBER SPECIAL: During the month of November 1995, collect Discovery award upgrade numbers for 2 points each, and voyager numbers for 1 point each. List collected points in log format, including call sign, SHOT number, Dis-

.....continued on page 15

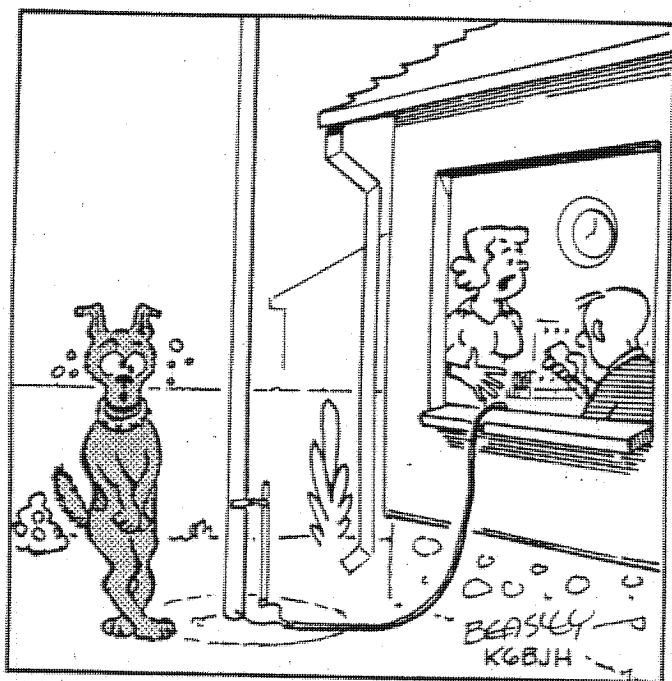
Chapter Coordinators Column

continued from page 14

covery and/or Voyager number(s), and date worked. Submit a list of claimed points along with an SASE by 15 December 1995. Please include your 10-10 number, SHOT number and current point value. Your SHOT point value will be increased by one fifth of the points collected during the special. Take advantage of this opportunity to upgrade your SHOT point value outside of the regular chapter upgrade program. Enough Discovery and Voyager upgrades have been issued so that it is possible for SHOT members to double their point value during this special.

Also, the chapter issued Voyager seals (convention seals) at Tuscaloosa. If any SHOT member who attended the Tuscaloosa convention does not yet have a Voyager seal, they may send CM an SASE to receive one. Send to: Allen Mattis, N5AFV, 5314 Wilton Drive, Houston, TX 77096-5115

KEYSTONE...This Chapter has a new CH, Gary Miller KA6GPC. Some of the chapters members have reached 1000 points and will be retired. These retirees will no longer give away upgrades or points except for their retiree #. FC+100 points, PS+75 points, other 50 points one time only per contact. Gary Miller, KA6GPC, 385 Amberwick Lane, Brea, CA 92621.



I WONDER IF LOADING THE FLAGPOLE UP AS AN ANTENNA WILL BOTHER SPOT

BROKEN HEART...A Mascot has been appointed for the Broken Heart Chapter. This "ELEPHANT" is resting on ONE Bear Bryant Certificate. Contact with this "Mascot" will reward you with a 150 point up grade along with great status as a diligent paper chaser. The Mascot bit tell unless you ask and then you must provide Tom with the Call, BH number, 10-10 number and date/time of contact. The certificate you received at the convention gives you 100 point upgrade, added to you points. BH has a new CH Randy Key, KE4QO.

WINDPOINT LIGHTHOUSE...The chapter has new CH and CM. Dennis Doonan, N9VSL is the new CH and Rick Trapp, KB9HSU is the CM. Good Luck fellows.

GATEWAY...This chapter is scoring the 10-X QSO party for summer and the CW for winter. So join in the fun.

BRANDING IRON II...Wild West 95 Special. This Special will start 1 July 1995 and end 31 December 1995 will all entries must be post marked before 15 January 1996. No entries will be accepted after this date and no dupes are allowed. A total of 2 WC's are allowed but must have WC on basic number. 250 points and a certificate will be awarded for completion of the special or 2 points per person found and worked. All entries will include date worked, call and BI2#. They are also running the W7ZKL Memorial Number special. Dedicated to SK Paul Woods. BIC. holder + 100 points, 10 points each 1 collected in blocks of 10. B.I.2 holder + 25 points 3 points each 1 collected in blocks of 10. All upgrades to KA5VVD, with SASE.

REPUBLIC OF TEXAS...As of 8 July 1995 the following changes have been made to the Certificate Program. Numbers only will be issued of an SASE. Donation increase due to postage and coast of producing a quality certificate.

MINUTEMAN..CORRECTION: This chapter IS still affiliated. Sonny has checked in and is doing fine. Our apologies to them.

TROTTERS AND PACERS...Effective 1 August, 1995, the Raceway Program CM will be John Drozdowski, WB2LLH, replacing Jack Dennis, NN2B.

PESHTIGO FIRE...There are four counties required to be contacted during the first half of CTX level and there are some WC's given out to help out with these areas. 30 CTX's-1 county, 60 CTX's-2 counties, 90 CTX's-3 counties, 120 CTX's-4 counties and receive Firefighter #. All points

.....continued on page 16

Chapter Coordinators Column

continued from page 15

collected are divided by 300. Firefighter #'s are collectable at +1 point each. Commendation #'s are collectable at +5 points each. Send all upgrades to: Jacob Derenne, N9DKH, E1190 Cty Rd X, Luxemburg, WI, 4217-8922

LIGHTHOUSE...The chapter has a new CH: Ernest Orman, 15625 Little Joe Rd., Biloxi, MS 39532

ELECTRIC CITY...SPECIAL: Starting 1 January 1996, the Electric City chapter will start its "Power Station" special. Each month starting with January, a new Power Station will be assigned and be worth a 10 point upgrade. (one time contact per month). To receive the 10 points, simply send your log information to the CM with your next up grade and he will credit you with the additional points. There will be twelve Power Stations for the Year 1996. You should get a charge out of this one, but watch out for black outs.

PORTLAND BRIDGES...The CM has a new address: Dave Becker, K7PRZ, 428 S. Gaylord, Denver, CO 80209.

S.T. LIGHTHORSE BRIGADE...Ray says, "Tuscaloosa attendees receive +10 points when upgrading the first time." He would appreciate D.O.I. of your certificate for his records. Don't forget your dues.

CHATTANOOGA CHOO-CHOO...CLASSIC seal number replaces IQ# for BASIC Membership Card as a part of POINTS UNLIMITED. Collect all CLASSIC numbers for 5 points each. Receive your own CLASSIC number on request (SASE please), or when participating in Points Unlimited. Receive automatic placement in the running for #1 in Choo-Choo TOP TEN. CYCLE 23 numbers now being issued. Must have CYCLE 22 Cert. CERT. Man. Paul Jenkins, One Mitchell Lane, Rossville, GA 30741.

SPEEDWAY...The "NEW" SPEEDWAY CHAPTER "HALL OF FAME" is being launched at 00:01 UTC 1 November 1995. There are three categories of induction as follows: SPORTSMAN OF THE YEAR, YEARLY "TOP TWELVE", and SK'S. Also a "NEW" worked all states program "CANONBALL RUN" will be initiated as soon as they get the remaining needed members in SD. and AK. Sounds like The Race Is On, but watch those curves and stop at all the RR crossings.

SPRINGBOK...Don, ZA6AQS, has more new certificates on the drawing board and will keep you informed on the progress. He can be reached on Packet at ZS6AQS@ZS6AI.TVL.ZAF.AF or ZS6CRT@ZS6AI.TVL.ZAF.AF

REMINDER TO CHAPTERS...To remain affiliated with 10-10, all chapters must file a quarterly report at least once a year. This information is printed in the 10-10 Awards Guide and in the monthly Guide updates. We do not want to have our members waste their time and or money to support a chapter that is no longer active.

All reports in to the editor of the *News* by the 15th of March, June, September, and December. If you want to see information about your chapter in this column, it must be received by the 5th of those months. Chapter information is printed on a space available basis, and sometimes we can't print everything we receive. If you want to be sure the information in the 10-10 Awards Guide is accurate, you should send a current copy of your membership requirements so it can be updated. Remember send all correspondence to Linda Barnes, KJ4FM, address on page 2 of the *News*.

How to Join and Use the New TENTEN-L Maillist

10-10's new Internet maillist is for the discussion of any topic related to 10-10 or to 10-meter activity and operations. Ask questions--maybe someone on the list has an answer. Announce 10 meter, 10-10, or Chapter events. Awards, Chapter specials, changes of address, and lots of other things are all fit for placing on the maillist. They go to every subscriber (over 50 in the first week).

Here is how to subscribe to the mail list. Send an e-mail message to this address: LIST-SERV@LEHIGH.EDU Put nothing on the subject line. If your mail server (AOL, for example) has to have something there, use a single letter of the alphabet. For the text, write the following: SUBSCRIBE TENTEN-L yourname yourcall (Replace the lower case words with your name and call.) You will quickly receive a welcome message with important information on how to use the maillist service.

To send a message to everyone else subscribed, use the address TENTEN-L@LEHIGH.EDU Then compose your message subject and text just as you would a normal message. You will receive a copy of your own message as part of the distribu-

.....continued on page 21

New 10-10 Mobile Award & WAS to Begin January 1996

Whereas: Ten meter operation readily lends itself to mobile operation not only in the size of equipment required, but in the ratio of power vs. distance attainable and, whereas many Ten-Ten members take advantage of this mode of communications, now therefore be it proposed that a Ten-Ten Award for Mobile Operations be established.

Purpose: To recognize and encourage the use of mobiles on 10 meters; and to collect as many different 10-10 numbers from mobiles as possible.

Mobile Defined: A mobile is considered any vehicle equipped with two way radio capability for 10 meters, operated by a 10-10 member within the limits of the issued FCC license. Mobile would include auto, (including two and three wheel road vehicles), nautical and aeronautical. A mobile would be one operating from power supplied by the vehicle and not tied to an outside power source or static antenna.

Rules: The mobile Basic award and upgrades are available to any full member of 10-10 who makes contact with other members who are operating mobile. The basic award level is 25 contacts with the following information: 10-10 number; call, name, location and date of contact. In order to prevent duplication, a copy of the applicants dupe sheet must be included with each application. In addition to a basic number, endorsements will be issued for submissions at the 50, and 75 level and

100 level. After the first 100 contacts, contacts, subsequent requests must be submitted in blocks of not more or less than 100. Only blocks of 100 with each submission will be considered. Only one block of 100 will be considered at with each request.

The 100 level can include the original 25 contacts for the basic. Proof of 10-10 paid up dues must accompany each request. A worksheet is available from the manager for an SASE.

Exceptions: Parking lot nets at Conventions, swap meets or other gatherings are excluded as such contacts do not carry out the spirit and intent of the award. Mobiles enroute to or departing from such gatherings are, however considered legitimate contacts if not included in the aforementioned net.

Starting Date: January 1, 1996. No contacts retroactive to that date.

Cost of the Award: \$2.00 US currency. Cost of Bar endorsements: SASE

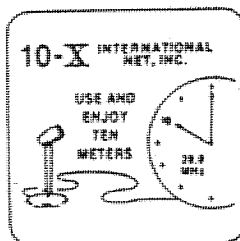
Award Manager: Dave Becker, K7PRZ, 428 S. Gaylord, Denver, CO 88209.

Mobile WAS: Awarded to the full member who works a mobile member in each of the 50 states. Submission must be accompanied by QSL cards indicating (1) Ten-Ten number and (2) location (state) of contacted station. Other QSO info as shown above must be included. A single station may be used for up to five (5) states. Proof of Ten-Ten dues must accompany each application. The member applying for the award must certify that all contacts were made from the a single geographical location, not exceeding a 50 mile radius from the members home location. A worksheet is available from the manager for an SASE. . Cost of Award: \$3.00 US currency.

TEN-TEN STAMPS

ORDER TEN-TEN STAMPS
FOR ALL YOUR
CORRESPONDENCE

144 SELF
STICK
FOIL
STAMPS
\$5.00
POSTPAID



ORDER FROM
10-10 INTERNATIONAL NET, INC.
643 N. 98TH STREET #142
OMAHA, NE 68114-2332

W6OI #109 ON THE AIR

Morrie Goldman, W6EHM #4189
Trustee, W6OI #109 10-10 Club Station

The 10-10 Club Station, W6OI #109, is available to any current (dues paid) 10-10 member or chapter for use as a special event station, Field Day station, etc. Send a written application, including dates of operation, purpose of operation and any other information to: Morrie Goldman, W6EHM #4189, W6OI License Trustee, 21518 Marjorie Avenue, Torrance, CA 90503. Enclose a photocopy of your amateur license.

TenX DX News

continued from page 11

new 10-10 country but given present conditions, we will not hear him on ten in the US! Anyone work him?

V26Z Antigua by Stephen WF2S #45134 will be their from September 17-30. QSL homecall. V26B by four members and others during CQWW SSB Contest October 28-29 and before/after the contest with their own V26 call.

Upcoming Dxpeditons: **I1YRL Italy** by Luc #58966 will be active from 4U1ITU in September and from 3A (Monaco). QSL to Glarey Luc, Via S. Martino 11, 10091 Alpignano, Torino, Italy.

T19JJP Cocos Island by Jose T12JJP #45800 was active from October 4-20 if everything went as planned. He goes to the island for his yearly vacation. QSL to Jose Pastora, POBox 529, Centro Colon 1007, San Jose, Costa Rica.

10-10 ISLANDS ON THE AIR (IOTA):

NA-144 Santa Cruz Island by N6AWD #27773 and W6ED #15824 Sept 22-24. **NA-126 Marsh Isl** by N5UR Buzz #9466 Sept 21-24.

ZS6MPL/N9FIZ by Steve #63496 is now in New York City with his wife Jayne. He has not had much luck in working many stateside stations due to conditions. He wanted to express his appreciation to all his 10-10 friends they were able to work while in South Africa. They found it reassuring to turn on the radio and hear 'home!' The Springbok members really helped them to be at ease with the community and to make them feel at home. They appreciated your friendship and many thanks to 10-10 and Ham Radio, Steve said. QSL Steve Koeller, 245 E40th St #32H, NY NY 10016.

THANKS! Several European stations have helped with the callsigns for the obsolete East Germany Y2- Y6 calls. I have sent the call changes to Jerry WA6POZ. I know DL7VTM Holger #22401 (Y58IO), a life member in Berlin, has not been getting his 10-10 News. Holger and his wife Birgit DL7VTZ # 62276 (Y58AO), Fritz DL7VRO #55523 (Y49RO) and Fritz's daughter Shilke, all visited with me while they were on vacation here in the US. We all went to the New Orleans Int. DX Convention where we had a great time and Holger presented his TN2M/TN4U Congo video there and here in Houston to the Texas DX Society. Fritz DL7VRO is the QSL manager for the group, sorry I only have Holger's address. Holger Hannemann, R.Seiffert Str. 58, D-10369 Berlin, Germany. Berlin Bears still meet weekly on their net frequency with DL7ZR Michael as chapter head. Remember:

German postage is slightly more than \$2 US or 3 IRC's for surface, airmail is \$3! Germany has high postal rates, so less postage could mean 'buro'!

I recently received the **ARRL #1 Honor Roll** plaque for having worked all **332 DXCC** countries that were current as of June. Now that North Korea has been approved, for me to stay #1 HR, I will have to work P5 and get the QSL confirmed. My last two countries were **Z3 Macadonia** and **YA Afganastan**, both had 10-10 numbers! My 10-10 country count is 235 confirmed.

I want to thank everyone for the letters and photos that you have been sending. Thanks to the QRZ-DX, Ohio/Penn DX Bulletins. Please send photos to Mike Davidson, 3518 Bellefontaine, Houston, TX 77025 USA.

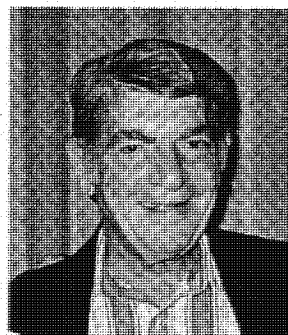
Email to Mdauidson@infosvcs.tmh.tmc.edu.

Good DX & 73. ... Mike Davidson KC5CP #24949

10-10 Reflections

By
Morrie Goldman
W6EHM #4189

10-10 Historian



Twenty years ago, on September 21, 1975, Jim Paine, W6OI #109, became a silent key. In tribute to his devoted service to the 10-10 Net, the memorial station W6OI #109 was established. The amazing growth of the 10-10 Net was always a great source of gratification for the many hours he served as Net Control and Treasurer.

The results of the 10-10 Net Summer QSO Party, July 12-13, 1975, were reported by Grace Dunlap, K5MRU #218, the Contest Manager. Number 1 was WB6PXP, who scored 552/1315. Number 2 was K6SVL, who scored 533/1285. DX Number 1 was VE3EJX, who scored 247/706. The CATT (Cincinnati Area) Chapter was the highest-scoring chapter (2317/6258). This was the first Summer QSO Party and was quite successful, with 224 logs submitted.

Ten years ago, the Fall 1985 10-10 International News cover hams were Carol Hugentober, K8DHK #29588, and OM John, N8FU #16154. Carol and John continue to serve as Area DX Manager and Area 8 District Manager, respectively. We take this opportunity to thank this dedicated team for a job well done.

.....continued on page 23

Paper Chasing Personalities

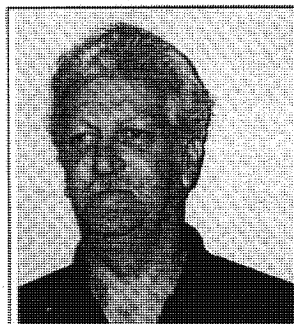
Chuck Albrecht
N0CKW #8105



The paper chasing year of 1995 is nearing its end what with the Tuscaloosa Convention and the Reno gathering now history. We can all look forward to the upcoming Winter SSB QSO Party next February. The band should start shaping up more and more as we roll along toward Sun Spot Cycle number 23. As you will note in another article in this issue, an observatory in California has reported the sightings of "new" sunspots that indicate the next cycle is starting.

SPOTLIGHT

My highlight of 1995 was the visit from Bill, VK4WBH #22187, and his wife Francis in June 1995. This is the second time I've had the pleasure of hosting their stay in the Denver area. Bill and Francis visited here in the late 1970's and had a look at our beautiful Rocky Mountains. This time Alice and I gave them a tour of the Royal Gorge and the gambling town of Cripple Creek. Bill is a true example of a friendly Australian gentleman. It is for that reason I have chosen him for this issue's **SPOTLIGHT**.



Bill, VK4WBH (Wild Bill Hickcock) holds 10-10 number 22187 and joined 10-10 17 years ago. He was licensed in the late 1970's and holds over 200 10-10 awards and chapter certificates. Bill retired from driving railroad trains in the State of Victoria. He was very well known as VK3CBS in Melbourne and when he retired he changed his location to Queensland. As is required in Australia, his call was changed to VK4 prefix and now holds the call VK4WBH. Bill and Francis have four children, all boys and four grandchildren, again all boys.

While in Melbourne he served as Chapter Head of the City of Melbourne Chapter of 10-10. He is a member of the 10-10 Board of Directors.

The highlight of Bill's visit while in Denver was his

reaction to the swaying bridge that spans the very deep Royal Gorge. When it moved, he very quickly retreated back to solid land. Bill's visit was all too short and I look forward to another time when I can show him more of Colorado.

Any items for this column can be sent to me at: 532 Florence Street, Aurora, CO 80010-4227 or via packet at: N0CKW@NECO.CO.UDS.NOAM.

.....73 till next time, Chuck, N0CKW #8105

Wanted - Photographs

Send photos of you or any 10-10 member, or 10-10 activity to the Editor. Address on page 2. Be sure to include identification of persons or activity. B&W or color is ok.

Thank You

Words will never be able to convey the heartfelt gratitude that Bill and I feel to you the members of Ten Ten. Your thoughts, prayers, cares and kind words have helped to get us through the worst ordeal a parent can encounter. The death of our son Chris was such a stupid and senseless act of violence. It is so difficult to accept such a loss and come to terms with it.

Chris was killed by an intoxicated illegal alien who is no stranger to the prison system in the United States. His blood alcohol was .24 which is three times the legal limit in California. He has previously served a prison term in Texas and was subsequently deported. He has many prior arrests, all of them being drug related with one prior DUI. He has been sentenced to the maximum sentence for Gross Vehicular Manslaughter in the state of California. That sentence is 10 years.

With your support and in many cases a very sympathetic ear, you have helped us to survive and go on with life. We will never recover from this ordeal but hopefully somewhere down the road we will come to terms with Chris' death. We take life one day at time now and start the procedure over again tomorrow. I pray that none of you will ever have to know the heart ache of losing a child. I also pray that if you do drink that you do not get behind the wheel.

A special thanks goes to our editor, Chuck Imsande, W6YLJ, for his hospitality during our visit to California for the sentencing. He is an excellent tour guide and a wonderful person. He also deserves thanks for his work in our organization. It is because of people like him that we have endured over the decades and will continue to move forward in the future.

73, Bill and Linda (KJ4FM) Barnes

CONTEST RESULTS

SPRING 1995 CW QSO PARTY

TOP TEN - WORLD

CALL	QSOs	POINTS
1 T14/AA7JM	63	112
2 WA4HMX	65	111
3 KR4OE	61	111
4 WD5HJC	58	105
5 KN4Y	60	104
6 KU4W	54	98
7 N9UKX	58	96
8 AD4TS	52	88
9 N4ZCG	50	88
10 KJ4RV	45	83

AREA DX

CALL	QSO's	POINTS
T14/AA7JM	63	112
ZL1LE	10	18

AREA 1

CALL	QSOs	POINTS
W1RFW	37	71
W1MXI	24	46
KC1FV	21	41
KB1AWE	20	40
K1IEQ	19	38
KA1YHI	18	35
N1TLG	17	33
N1RLO	17	32
KD1YN	17	32
N1QDX	16	32
N1STE	14	28
WA1DUZ	14	28
W1SQM	12	24
K1BIG	11	22
W1SIX	9	18

AREA 2

CALL	QSO's	POINTS
WA2JQK	44	70
KF5UN	36	68
N2EOC	28	50
K2HLC	15	30
N2YBC	12	23
WB2GTG	12	22

AA2KJ	10	19
N5RYR	8	16
KB2RWJ	8	16

AREA 3

CALL	QSO's	POINTS
WK3P	41	74
N3FOG	30	56
N3CZB	8	15
W3EHZ	8	13
WB3ABH	7	13
NI3I	7	11
K3TUJ	5	10
W4KM	3	6
W3QYL	2	4

AREA 4

CALL	QSO's	POINTS
WA4HMX	65	111
KR4OE	61	111
KN4Y	60	104
KU4W	54	98
AD4TS	52	88
N4ZCG	50	88
KJ4RV	45	83
WA4QDM	45	82
AE2L	39	76
K4QFK	40	75
KJ4SJ	35	68
N4ERM	33	64
AD4RP	28	55
KC4AJN	23	45
N4EWG	23	45
N4ANV	22	44
KR4PQ	21	42
KE4DEV	23	41
N3DZC	21	40
KC4RSZ	18	36
AA4PR	17	33
WV4Y	19	31
AD4MG	14	26
K4MAC	14	24
KE4AOF	12	24
AC4VE	12	23
KN4SS	10	20
AD4TL	7	14

N4OJZ	7	12
KQ4TO	6	12
N4FHM	5	10
WP4LNY	7	9
KR4LS	1	2

AREA 5

CALL	QSO's	POINTS
WD5HJC	58	105
K5NE	44	85
W5EIJ	39	72
KB5RKE	33	58
W5CJZ	31	56
N5VAU	19	36
KC5BKT	20	35
N5VAV	15	29
N5FTF	15	28
KC5CP	14	25
WA5JDM	7	14
WD5BFO	7	14
AA5XQ	6	11
N5XYN	4	8
WDBJKV	4	8
AF5A	3	6
KC5AQU	2	4

AREA 6

CALL	QSO's	POINTS
N6BUC	8	14
WA6VLS	6	11
K6PZE	4	6
K6EHA	1	2
K6PBP	1	2

AREA 7

CALL	QSO's	POINTS
AA7FK	2	3

AREA 8

CALL	QSO's	POINTS
W8PJY	20	37
W8JSM	9	15
W8KVU	4	8
W8LBQ	3	6

AREA 9

CALL	QSO's	POINTS
N9UKX	58	96
AA9BJ	28	53
AK9Y	25	49
W9UW	21	37
WA9OFH	20	39
N9IVO	19	37
W9WYN	18	36
KC9OZ	18	30
WA9TWE	15	29
KD9XP	15	29
KE9WZ	12	24
W9ETU	9	18
N9RZQ	9	18
N9SRY	9	18
ND9Y	8	16
W9HOT	7	14
KB9GVY	5	10
KF9TB	4	8
N9JZY	4	8

AREA 0

CALL	QSO's	POINTS
N0BZM	43	73
N0WM	20	39
W0RTV	19	36
WB0RHR	18	33
KD0IR	14	26
K0PVI	11	17

Thank You

The Feline Friends/
Restoration Project
Chapter scored the
Spring CW QSO Party.

We thank Janis,
VE7AAP #50407 and
Garry, VE7ACM
#30939 and all who
helped them in the
scoring of this contest.

CONTEST RESULTS

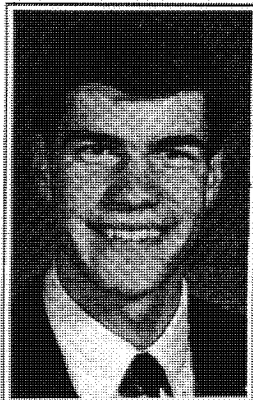
SPRING 1995 SSB QSO PARTY

AREA 8			N9FXS 81 153			N9TLK 5 9			N0HBH 12 22		
CALL	QSO's	POINTS	N9BSS 77 153						KB0GEC 5 7		
WD8MQJ	140	263	KA9AMQ 77 147			AREA 0			AREA DX		
W8KVU	113	221	N9UZO 71 138			CALL	QSO's	POINTS	CALL	QSO's	POINTS
W8WVR	116	210	WA9OFH 70 136			K0HOF	153	279	VP2VF	714	1217
KB8FGM	107	200	KE9CX 68 133			WB0CON	110	203	LT5Y	381	709
W8JSM	98	183	KB9FIV 63 126			N0YYO	104	190	J37VG	287	512
KB8PNO	97	173	KF9TB 64 123			W0RTV	74	138	LU6HSV	249	448
N8KOJ	77	145	WA9AUW 61 121			W0ERZ	72	138	YV6CAX	243	439
W8LBQ	67	130	WA9KIN 61 120			K0MYD	71	133	KP4XN	223	406
WD8JKV	66	128	WA9OHU 61 119			WB0RHR	61	118	LU8ADX	159	295
N8GBE	59	115	K9RKU 61 118			K0WEX	40	80	KP4HX	123	233
NU8U	34	66	KI9H 59 116			N0CKW	39	72	WH6CQH	133	200
K8DHK	31	62	KB9HGH 62 115			KF0EX	35	64	HP6AYV	100	179
N8FU	30	60	AI9U 58 113			KB0ADI	34	63	KP4UK	85	158
KC8ND	25	49	W9ETU 56 109			KA6TRF/0	32	62	ZS6NB	83	121
W8IIQ	22	44	WD9GIG 55 106			W0DRV	30	59	6YBDA	62	108
WC8E	21	40	N9OPV 60 105			WB0GFV	28	56	CE3AF	53	96
KB8EBX	18	35	KA9MOM 50 99			KB0MZE	29	52	VE7IDV	37	66
WD8MZD	16	32	WI9X 53 96			K0PVI	28	48	ZL1KQ	31	58
WB8BUQ	13	24	N9ASC 47 92			KF0ZJ	27	48	KH6DRT	25	48
N78E	9	18	KA9VXM 44 87			WB0GGO	26	48	ZL1BZK	21	41
AREA 9			W9KCM 42 82			KD0IR	23	44	VP9IX	16	36
CALL	QSO's	POINTS	N9BTF 37 73			W0POF	18	35	JH1UUT	25	32
WA9TPQ	202	367	K9EHP 35 66			KG0TI	19	32	VK3IFM	19	32
KE9WZ	164	313	N9KBJ 34 66			N0WM	16	31	VK2MJV	16	26
KC9OZ	158	308	N9AAI 35 65			WB0BJL	17	30	VE7XO	12	24
NA9A	157	298	WA9ZNB 35 65			W0JDP	12	23	G3MDH	7	12
WD9CYC	159	287	KE9QW 30 60			<div><h3>New TENTEN-L Maillist</h3><p><i>continued from page 16</i></p><p>tion. If you receive a bounce-back message saying your message is undeliverable (but you received your own copy from Lehigh), it is because someone else's address was bad or blocked, and the receiving service sent a return message through the listserver. If you received your own copy from Lehigh, then everyone else did also.</p><p>If you read a message from TENTEN-L and want to respond, you have two choices. If the reply is suitable only for the individual who sent the original message, then reply to him or her as a direct e-mail message. If the information you want to send might be useful to some others on the list, then</p><p>.....continued on page 28</p></div>					
KE9VK	146	283	KB9FGD 29 58								
N9KLH	125	226	K9KKX 28 56								
WA9RIJ	117	226	N9KBI 28 54								
NE9R	119	218	N9SRY 28 53								
W9YMN	105	206	KA9QDK 23 46								
N9FWM	104	200	KB9HPT 23 45								
KD9XP	99	196	WI9Z 23 45								
WD9IUC	99	195	WD9HQT 20 40								
N9RZQ	99	188	KB9AGV 15 29								
WA9TWE	95	185	KB9GVY 14 28								
AK9Y	98	180	ND9Y 14 28								
N9LWN	90	179	KA9Z 9 18								
WB9DOF	86	175	KA9MTY 9 17								
N9VKE	89	170	N9TLJ 9 17								
N9IVO	88	169	KA9MXM 9 16								
WD9AQL	83	163	N9VSL 9 16								
W9PQH	83	157	KF9XL 7 12								
N9KUW	79	157	WA9SFH 5 10								

A Letter From One of the 10-10 Scholarship Winners

"To the members of 10-10 International Net:

My family and I thank you deeply for the \$750.00 scholarship your organization awarded me this year. With such aid, the financial burden of college is eased on both my parents and myself. I feel fortunate to be going to one of the nation's best computer engineering schools at the University of California at Berkeley.



My first experiences with ham radio were with my grandfather (W0MJP) in Iowa. As a young child I would sit by him for hours in fascination, listening and watching him operate his radio equipment. My grandmother (W0NRR) and uncle (KG0MV) have also been hams for many years. However, it was not until the age of 13 that I finally got my license. My parents and I set up a Novice class for Boy Scout Troop 46 in Knoxville, TN. Some members of the Radio Amateur Club of Knoxville came each week and taught us the ins and outs of amateur radio, as well as International code. After completing this class, my entire family became licensed operators (KC4VIJ, KC4VIK, KC4VIL, KC4VIM). Since then I have spent many sleepless hours calling CQ DX during field days both in Knoxville and Glen Ellyn where I earned my Technician license. Through ham radio I even got my first job. A scoutmaster at Troop 44, here in Glen Ellyn, owned the Ham Radio Toy Store which is located in a neighboring suburb. He offered me summer employment because of my background in ham radio, a job I quickly accepted. I have also given presentations for various scout troops to spread the word about ham radio and to teach them exactly what it is.

I would like to thank all of the members of your group one more time for this scholarship.

Sam Wettling, KC4VIL"

CORRECTION

In the July issue of the *News* on page 14, under **OTHER NEWS** in the Chapter Coordinators Column, the new CM of the CHIEF SEATTLE CHAPTER was listed as W7JNB. Not correct. The CM of the Chief Seattle is Louis Navarre, W7QMP #13346.

Dave McCardell Named New Chapter Coordinator

The Operations Committee is pleased to announce the appointment of **Dave McCardell, WD4EWB, 18760**, to the position of **Chapter Coordinator** effective October 1, 1995. McCardell replaces **Joyce Medlen, KE4KGB, 66157**, who resigned her duties in order to attend to family matters.

Dave is no stranger to 10 meters. Since joining Ten Ten in 1977, he has been an active participant on the air and at various meetings and conventions over the years. Many will remember working Dave on the air or meeting him at one of the functions.

An electronics technician for the past 25 years, Dave works for Bell South Technologies as a Central Office Supervisor. His technology degree is from Chattanooga State Technical Institute in electronics.

In addition to Ham Radio, Dave enjoys fishing, camping and traveling.

Dave can be reached at Box 246, Harrison, TN 37341.

The Operations Committee and the Board of Directors welcome Dave aboard. We would also like to take the opportunity to send a heartfelt "Thank You" to Joyce Medlen for the time and effort she has given on behalf of Ten Ten.

Award and Certificate Guide Editor Wanted.....

Due to the resignation of Joyce Medlen, KE4KGB #66157, 10-10 is looking for a replacement **Awards and Certificate Guide Editor**. Joyce found it necessary to resign due to health problems in her family. Her term as Award and Certificate Guide Editor, and Chapter Coordinator, although short, was a very successful one. She has updated the Guide, and it is now available. See the Chapter Coordinators Column for details.

If you would be interested in accepting the volunteer job of Awards and Certificate Guide Editor, please send a brief resume, to Linda Barnes, KJ4FM #43299, 10-10 Director, 310 Sequoyah Drive, Kingsport, TN 37660-3742. The only requirement is you have the necessary time to maintain the guide and a computer. Linda can give you necessary details.

CW Calling Frequencies

a trial for 10-10 contacts.....

By L.B. Cebik, W4RNL #41159

As a trial, 10-10 will adopt the following CW calling frequencies: 28.070 and 28.120. Especially during these low sunspot years, CW 10-10ers might focus their initial activity around these frequencies.

The frequencies are near, but offset from, the long-standing QRP 10-meter calling frequencies of 28.060 and 28.110. You may want to give a listen on those frequencies as well.

Calling frequencies are not proprietary: we do not own them. Their purpose is to allow us to focus our attention and perhaps make a few more contacts. If someone else is on the frequency, QSY a bit and try there.

Good courtesy calls for the following procedure. If you make contact with someone on the calling frequency and signals are strong, move off by a few kHz to complete the contact. If signals are weak, it may be best to stay right there. If you hear someone using the frequency, do not cuss or scream, but move up or down a couple of kHz, and try there. Everyone who uses calling frequencies tunes above and below the focal position.

If these frequencies work out as the sunspots return, we may make them "permanent." If not, let us know what would be better, and we can try it. Our object is to make it easier for CW 10-10ers to make contacts with each other and with others. I'll be listening there during the CW contest.

New Life Members

It is with pride that we honor the following 10-10 members who have become *Life Members* of Ten-Ten during the period through September 10, 1995.

04588	K7ZQR	V. E. Bryant
38060	K5KTO	Robert M. Crites
43046	WA1INL	Samuel Banks
52920	KB0EOV	James Fortune
66153	KE4AOF	Howard G. Ling
67801	WB5YYX	Robert A. Scupp

You too can become a *Life Member* of 10-10.
See the details on page 31.

10-10 Reflections.....

continued from page 18

The results of the Summer QSO Party on August 3-4, 1985 were also reported in the Fall 1985 10-10 News. Nubmer 1 was WB2MAN (SK), who scored 1151. Number 2 was WB1BVR, who scored 1088. DX Number 1 was VE3MKM, who scored 402. The City of Lights Chapter was the highest scorer with 12,464 points. The results were scored by the Houston SHOT Chapter, reporting 547 logs, received for a total of 125,714 points.

I had the opportunity to study the early log books of Ed Corliss, K5DIT #50, forwarded to me by our Editor. The first meeting of the 10-10 Net was held on April 29, 1962. Ed was teaching at Sheppard Field, Texas, and moved back to Temple City, California on June 11, 1962. One week later he was working the original founders of the 10-10 Net on 28.8 Mhz. Eagle K6ZPW was net control and Ed logged the following 10-10 pioneers: Irv K6PWO, Hal K6THM, Win WA6CBJ, Mel K6JWY, Jay WA6CQI, Sandy WA6KMC, Ted W6TVD, Whitey WA6ZZJ, Hal W6WFN, Earl W6VDS, Claude W6LRY, Dunc K6LHA, and Joann WA6QKC, all in 1962. These were all members of the 10-10 Net, but 10-10 numbers were not assigned until four years later, when Ed K5DIT received #50.

WANTED

We need chapters who are willing to volunteer to score 10-10 contests. If your chapter is willing to volunteer for this activity, drop a note to Don Zielinski, K0PVI #9902, PO Box DX, Genoa, CO 80818-0119.



Part of the gang that attended the 7th annual Hill Country Gathering at the home of Jack, N4NF on June 11, 1995. From left to right: Bill WD5EDR #23693, Emile, WB1DBZ #26001, Allen, N5ANV #27571, Robert, WA5JDU #3017, and Ray, N5DAS #35877. A total of 19 were in attendance.

CONTEST RESULTS

SPRING 1995 SSB QSO PARTY

TOP TEN - WORLD

CALL	QSOs	POINTS
1 VP2VF	714	1217
2 N2EOC	582	1035
3 KD4GW	542	935
4 KQ4PK	417	742
5 KE4FLI	402	731
6 LT5Y	381	709
7 KC6QXU	375	677
8 KE6HAX	333	593
9 WB6NFO	312	576
10 WA5JDU	301	526

AREA 1

CALL	QSOs	POINTS
KB1BIG	224	409
W1SQM	224	409
K1IEQ	216	398
KA1YIY	210	386
KC1FV	203	377
WW1E	189	337
N1TLG	169	316
N1API	168	308
KA1MLC	167	308
WB1GIC	162	299
KD1LF	144	261
WA1DUZ	138	257
KA1TFU	145	253
KA1YHI	132	250
WA1VOA	133	246
KA1RVY	123	227
N1STE	105	197
KB1AWE	102	192
N1QDX	94	183
W1MXI	91	174
W1RFW	90	170
K1KZR	84	157
K1TXU	68	128
W1SIX	65	123
WB1DVR	45	85
KA1ULN	42	76
KB1ALX	39	76
WA1EBJ	37	72
N1NNI	36	69
KD1NE	36	64
K1HTN	28	54
WW1A	23	44

KB1BGW	21	40
KD1TF	20	40
KA1CRA	7	14

AREA 2

CALL	QSO's	POINTS
N2EOC	582	1035
WA2SUH	156	274
WA2JQK	145	251
N2EZL	115	201
WB2COL	109	193
AA2AH	95	171
KF2NX	61	116
K2HLC	57	107
WB2VSZ	53	102
AA2KJ	52	92
N2YBC	47	85
KB2QKK	44	81
KF2XF	42	78
WB2LLH	36	67
WB2HIW	35	65
WB2WGR	31	59
K2HCP	30	53
KB2RWJ	24	45
WB2GTG	24	44
KB2MRI	22	43
N2SHP	20	38
N2LQQ	18	32
KB2SEO	13	25
KE2AG	12	23
WB2STV	12	23
N2XXB	10	20
W2KZE	9	18
WB2ZSW	6	12

AREA 3

CALL	QSO's	POINTS
K3TC	261	480
N5OKR/3	221	391
KC3PZ	195	327
WA3ELE	146	268
KB3AUG	139	252
N3GZE	129	234
AA3CA	104	191
WY3T	91	170
ND3G	79	151
N3BLJ	77	150
K3TUJ	74	137
KZWT	73	132

WB3MA	56	103
KA3NMB	47	90
N3LQQ	42	79
WB3EAW	36	70
WB3AEX	33	64
N3DDV	33	61
KA3AVB	33	56
KA3SBO	24	47
KA3YAH	25	46
N3JKS	25	45
NA3H	19	36
KA3QOY	19	36
K3VOA	21	35
KA3JKP	14	25
K3OAH	12	24
N3KSB	12	22
W3IEW	11	20
K3ZNB	11	20
WA3YJA	10	20
WA3JXW	9	17
W3DCN	7	14
KB3AFT	7	11
N3PJO	3	6

AREA 4

CALL	QSO's	POINTS
KQ4PK	417	742
KE4FLI	402	731
K4HTU	218	401
WP4LNY	216	386
W4WKQ	212	383
N4ANV	199	378
KE4BJE	197	371
WB4EVH	202	369
AA4UF	208	346
N4UGH	181	346
AB4HR	171	315
NK0S	171	313
KL7NL	156	294
KD4DNA	156	293
KC4TBS	143	273
KZ0X/4	139	263
K4PXO	133	245
KC4MAI	136	243
KC4ZLB	130	237
KR4OE	129	236
N4ZCG	124	229
AE2L	110	218
KC4SDU	120	217

KE4BJD	112	216
WA4HMX	121	214
N2EJO	109	209
WB4GVZ	113	203
K4QFK	106	203
KN4SS	103	195
KH6OE/4	103	192
KE4CTT	100	192
KJ4RV	101	191
WA4QDM	100	186
KN4RI	97	184
KC4ZSY	93	174
KC4ZTC	91	171
N4LBB	90	168
KD4GUA	90	167
N4FBY	87	165
KS4IB	86	164
N4GQM	89	161
AD4TS	89	156
WD4BOW	76	150
KD4IBI	75	135
KE4KGB	70	132
KR4PQ	66	124
KC4OPB	23	122
KO4PI	70	120
AD4RP	62	119
WD4EWB	59	116
N4EFV	62	115
WA4YMD	62	115
KFN4	56	109
KJ4SJ	56	107
KA4YIP	55	107
N4EWG	55	105
KE4BPL	53	105
N4KCC	52	103
N4DTB	53	101
KE4KQX	52	100
N4ERM	50	97
AA4PR	50	95
N4FHM	48	91
KA4RVZ	48	90
WA4LZD	45	88
KC4RIY	45	88
AB4WU	42	84
W4LPL	43	81
KC4JAN	42	81
KE4DER	42	79
KB4WIN	41	79

CONTEST RESULTS

SPRING 1995 SSB QSO PARTY

KR4LS	39	76	N5FTF	76	150	W5EFB	19	37	K6QWH	60	114
KD4EFJ	39	72	WB5PNL	77	147	N5POS	19	37	KE6FJB	46	90
KC4RSZ	38	72	KG5NO	70	139	KB5OHC	49	32	KC6SEH	48	88
N4EKD	37	71	KC5BGK	76	135	N5ANN	16	32	WA6OCP	47	86
KE4MJP	37	71	N5YLE	71	133	N5QFN	14	28	KB6DXR	44	86
KE4CFC	35	70	N5NHY	70	132	AA5WC	13	25	KC6DMQ	43	82
K4MAC	35	70	N5VAU	68	132	N5AFB	13	24	KB6SWH	42	81
WA4TOJ	35	68	KB5DQX	64	125	KB5NVX	13	24	KB6SWI	42	81
KD4MHH	37	67	WD5BFO	61	119	WC5S	13	22	N6YSQ	36	69
WB4WZH	35	67	N5XYN	59	114	KB5JW	11	22	N6FZS	31	59
KU4W	33	64	W5EIJ	58	114	KB5OYV	11	22	K6VXY	29	55
W4PNC	32	64	WA9IES	58	112	WB5VEV	11	22	WA6HXE	25	50
K4HHW	32	62	KC5BFM	61	111	K5HGL	11	21	N6SVD	25	49
AD4TL	31	61	W5UFA	54	102	WB5FII	10	19	AC6FU	25	48
W4EHF	30	58	W5NDK	51	99	W5SRQ	10	19	KC6KRS	22	44
KE4LJS	28	56	AF5A	49	97	AD5F	6	11	KE6JZF	23	43
WV4Y	29	55	KJ5L	46	91	N5MOO	5	10	KA6VQV	21	42
W4WJV	27	54	KB5NAK	46	90	KK5DO	4	8	WA6MWS	21	42
KE4HBK	27	53	KB5BTB	48	88	N5RYR	4	8	KG6PY	19	36
KC4FC	22	44	KJ5JP	45	88	KC5DCP	3	6	KN6ZT	18	36
AD4MG	24	41	KA5WDV	43	86	KB5VV	2	4	KE6KL	18	35
N4QJZ	20	40	KB5YVW	42	82	AREA 6					
KD4IGP	19	37	WA5HWI	41	80	CALL	QSO's	POINTS	N6SLE	18	35
WA4FWH	18	36	W5CJZ	40	80	KD4GW/6	542	935	KD6LWM	14	27
KB4WC	13	25	KK5W	40	78	KC6QXU	375	677	KD6HJU	10	20
KD4TYE	12	24	WD5HJC	41	75	KE6HAX	333	593	KI6OY	9	18
KN4XP	12	24	WC5L	37	74	WB6NFO	312	576	WA6TDL	7	14
W4KM	11	21	WD5EDR	33	65	KE6AGR	257	481	KB6DLT	3	6
WA4NOW	11	21	AA5XQ	32	64	KB6NAN	262	462	KD6PRC	2	4
AD4QU	4	7	KF5CA	31	60	W6YLJ	234	446	AREA 7		
KQ4TO	1	2	N5ACH	29	58	KC6NDG	174	328	CALL	QSO's	POINTS
AREA 5			KA5VVD	32	53	W6KVA	170	307	KI7RK	184	342
CALL	QSO's	POINTS	W5RAN	30	51	WB6RDK	168	302	VE5KM/W7	70	137
WA5JDU	301	526	KC5AJX	26	51	KF6VU	163	285	KJ7CY	65	112
N5VAV	252	452	K5NE	25	49	WB6NYM	155	282	KC7BNE	56	95
KC5CP	232	407	KC5HCF	23	46	K6EHA	121	230	KB7EQW	51	95
KB5UNX	197	364	KD5ZD	23	46	N6TXT	120	219	AA7FK	51	92
N5QVS	181	319	WA5RNV	24	44	WA6VLS	99	185	K7PRZ	48	89
WJ5O	155	279	N5QXC	22	44	KB6DLN	88	169	KJ7AT	44	85
KC5BYT	133	246	N5SCCA	23	42	WA6YRL	81	146	N7HDB	41	81
NX5T	135	242	N5DIU	21	42	KB6UW	79	142	N7QOZ	42	76
N5DAS	119	225	WA5KYO	21	42	K6IQY	75	141	WB7TIR	29	55
KC5AQU	108	211	KJ5AE	19	38	WB6AOJ	68	139	KB7RFN	29	53
W5GVP	99	190	K5HWQ	19	38	KB6YX	73	138	WB7SYO	26	50
KB5ZPA	96	182	N5XJD	24	37	KB6AN	73	138	KA7CII	25	50
N5WYR	86	168	AF5W	20	37	KK6GN	66	125	N7QHC	6	12
WA5JDM	78	151	AB5CY	19	37	KD6MXL	60	114	N7JCZ	6	11

10-10 AWARDS

AWARDS ISSUED THROUGH 31 AUGUST 1995

TOP TEN HONOR ROLL

Allen Mattis,
N5AFV #27571

CALL	10-10#	# CONT
1 WA5JDU	3017	22,400
2 W0RWC	518	19,400
3 WB1DBZ	26001	18,300
4 PJ2WG	27999	17,000
5 K5MRU	218	16,400
6 W4WKQ	33299	15,600
7 WB7NUU	17416	11,800
8 WA9LIC	1599	11,600
9 N5CUQ	40	11,400
10 K0PVI	9902	11,200

1000 BAR

Allen Mattis,
N5AFV #27171

CERT #	CALL	10-10 #
1396	KA0NZG	49076
1397	KF0ZJ	55241
1398	K3BBI	53487
1399	KA1YHI	63915
1400	KA3WWG	56860
1401	KE4QQR	66995
1402	N9RDZ	62997
1403	WB2KEK	36320
1404	KE9QW	31113

2500 BAR

360	K4NF	50708
361	WB7UZO	42266
362	K5ERJ	11843
363	N0GIV	42644

5000 BAR

70	K7OMK	01407
71	N6GDS	36046

WORKED ALL CONTINENTS

Mark Taylor Murphy,
KC4HIT #57448

CERT#	CALL	10-10 #
470	KD4IGP	63226

VP AWARDS

Glen Harding,
K7OMK, #1407

500 BAR

VP #	CALL	10-10 #
2831	KP4XT	64790
2332	WA8TPP	64842
2833	N7OQW	62582
2834	KK5DO	65027
2835	KD1NE	61699
2836	KB5AYF	65048
2837	KS4FT	65691
2838	N9SXM	65382
2339	KE4MLA	66952
2340	KR4JY	64404
2341	KN4RI	08004
2842	KE4KRT	66137
2843	WD5BTY	55881
2844	N9UKX	66423
2845	N3OWF	64522
2846	KA3VDN	56869

VP AWARDS

Carl Fisher
W0HIK #40678

VP-100

CERT#	CALL	10-10 #
352	KE6AGR	64951
353	KQ4PK	63201
354	KC5BFM	65043
355	WD5HJC	21786
356	KE4QOR	66995
357	N1PDV	63955
358	AC5BI	24936

VP-200

172	KE4AAZ	65767
173	KA5GLZ	50356
174	KQ4PK	63201

VP-300

103	KC5BKT	64386
104	N0GIV	42644
105	W4WKQ	33299
106	N5EJS	01525
107	KE4AAZ	65767

VP-400

66	N9KLH	58657
----	-------	-------

67	KA1TFU	52461
68	KE4CRU	65133
69	W0HIK	40678

VP-500

41	N0GIV	42644
42	KBOADI	46055
43	KA1TFU	52461

COUNTY HUNTER AWARD

Alice Jenkins,
NR4R, #31223

100 COUNTIES

CERT#	CALL	10-10 #
376	KA1HUS	35324
377	AB7IZ	66835
378	N1PDV	63955

200 COUNTIES

KA1HUS	35324
KA3VDN	56869
KD4IBI	61844
N1PDB	63955

300 COUNTIES

WD5HJC	21786
KA1HUS	35324

400 COUNTIES

K5ERJ	11843
KA1HUS	35324
W0HIK	40678
KE4AAZ	65767

500 COUNTIES

66	W0HIK	40678
87	KC4UM	26713

600 COUNTIES

WA2OIZ	21511
N5NRO	51350
KA1TUF	52461

700 COUNTIES

KE9MA	46709
KB5UNX	64337
KC5BKT	64386

800 COUNTIES

AA1KS	56510
-------	-------

900 COUNTIES

AF5W	11616
------	-------

1000 COUNTIES

16	W5EIJ	11732
----	-------	-------

1400 COUNTIES

K1WQU	02225
-------	-------

OM/XYL

AWARD

Elaine Nickoloff,
N8CBE #30409

BASIC - 10 TEAMS

CERT #	CALL	10-10#
372	K5ERJ	11843
373	KD5ATO	59716

25 TEAMS

372	K5ERJ	11843
-----	-------	-------

50 TEAMS

291	KC4LOR	56976
315	KD4CPB	60750

PREFIX AWARD

Rex Holford,
KF0YF #20423

100 PREFIX

CERT#	CALL	10-10 #
188	K1IEQ	31363
189	K6PZE	01341
190	WA5HWI	63313
191	KA1TFU	52461
192	KA7ICF	46221
193	K6EHA	65801
194	KJ6HY	57257
195	KC4ZLB	65652
196	W9MVP	50644
197	WX7M	62539
198	KB5AYV	65048
199	KA1FUE	51298

continued on page 27

10-10 AWARDS

AWARDS ISSUED THROUGH 31 AUG 1995

100 PREFIX

continued

200	KD7UZ	13825
201	AC6FU	10937
202	KC4ZSY	66192
203	KC4ZTC	66186
204	OZ1ACB	36953
205	KC1FV	45274
206	W8HFK	24023
207	N3CZB	37486
208	KD4IGP	63226
209	WA8TPP	64842
210	KN4RI	08004
211	AB7IZ	66835

200 PREFIX

91	N9FWM	44484
92	KA1TFU	52461
93	K1IEQ	31363
94	WA5HWI	63313
95	KE4BPL	65136
96	KA7ICF	46221
97	KB7DGZ	46235
98	W9MVP	50644
99	WB6JVP	63117
100	AF5W	11616
101	WD5HJC	21786
102	WX7M	62539
103	KA1FUE	51298
104	KD7UZ	13825
105	AC6FU	10937
106	PA3EUC	18450
107	VE3FSV	19850
108	KC1FV	45274
109	W8HFK	24023
110	KG8HW	62839

300 PREFIX

65	AC6FU	10937
66	KC1FV	45274
67	KJ4RV	37776

400 PREFIX

29	K1IEQ	31363
30	KF4FP	32338
31	KA1TFU	52461
32	AF5W	11616
33	KA1FUE	51298
34	AC6FU	10937
35	KC1FV	45274

500 PREFIX

20	WB5SKQ	11825
21	K1IEQ	31363
22	AF5W	11616

600 PREFIX

13	N6GDS	36046
14	WB5SKQ	11825
15	AF5W	11616

700 PREFIX

8	KC5CP	24949
9	WB5SKQ	11825

800 PREFIX

6	KC5CP	24949
7	WB5SKQ	11825

900 PREFIX

3	WB5SKQ	11825
---	--------	-------

WORKED ALL STATES

Susan Brackeen,
KA1CAD #29600

CERT#	CALL	10-10 #
2290	KB4VLO	60721
2291	KD6HWD	62038
2292	N9KLH	58657
2293	KF0ZJ	55241
2294	KB6RKR	43529
2295	K5ERJ	11843
2296	AC5BI	24936

NEXT CONTEST FALL CW QSO PARTY

0000Z 21 October
2400z 22 October

Crazy Eight Chapter 16th Annual QSO Party

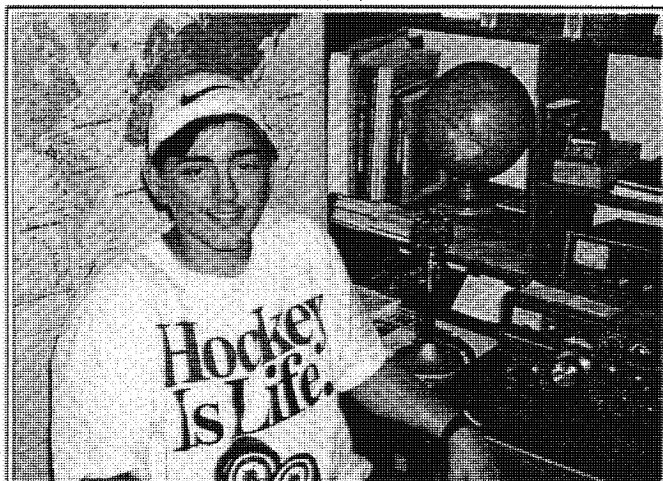
The Crazy Eight's 16th Annual QSO Party is scheduled for 0000Z 11 November through 2400Z November 12, 1995. In this contest log the Call, Time, Name, State (or Country), 10-10 number and Crazy 8 number, if any. Score one point for QSO, plus one point for 10-10 number, plus one point for Crazy 8 number, for possible 3 points per contact. All contacts to be on 10 meters, phone or CW.

The award is a red seal and two points for your Crazy 8 certificate to the winner in each US call area and Canada. Also a DX award to the DX winner.

Send results to Bob Ross, KA3AVB #25732, 2431 Hampton Avenue, Allison Park, PA 15101, before 4 December 1995.

Meet Bryan Kosezuk, N3TSL, #66558

Bryan Kosczuk, N3TSL #66558, is a 14 year old 10-10 member that holds an Advanced class license. He has passed his 20 wpm code for the Extra and is studying his Extra theory. It is Bryan's goal to becoming passing his Extra by the age of 15. Bryan has been playing ice hockey since age 8, and plays as a defenseman on his high school hockey team, where he served as co-captain last season. He also has a keen interest in the martial arts, taking karate lessons since he was 6. He is now a Black Belt and instructs private lessons. He is also an active member of the Chesnut Ridge Amateur Radio Club. Way to go Bryan! It is an honor to have 10-10 members such as Bryan as a part of the 10-10 organization.



WINTER SSB QSO PARTY

February 4-5, 1995

CHAPTER SCORES

Chapter	Logs	Contacts	Score
Possum Trot	42	3661	6861
Battle Road	27	2927	5032
City of Lights	35	2343	4529
Republic of Texas	37	1990	3739
Golden Bear	14	1502	2724
Steel City	18	1309	2542
Ft. Mc Henry	17	1223	2221
Old Dominion	17	1043	1911
C.A.T.T.	17	983	1881
Bay Area	12	945	1726
Trotters & Pacers	9	882	1593
Suncoast	12	705	1327
Brooklyn Bridge	11	643	1142
Windfarms	11	692	1134
Houston Shot	11	597	1090
Bauxite	12	512	974
Light Horse Brigade	5	522	950
Gateway	9	494	926
Egyptian Radio Club	4	275	806
White House	3	324	603
SFVRC	1	312	576
Cypress	2	305	566
Eagle Watch	2	328	563
Nutmeg	2	188	441
Colorado Centennial	5	224	408
City of Roses	6	221	404
Grinning Armadillo	3	218	401
Choctawhatchee Bay	1	212	383
Cradle of Liberty	5	195	363
Pirates of the Mississippi	2	187	341
Mass. Minute Man	1	189	337
Certificate Chasers	2	164	308
Crazy 8's	7	154	283
Niantic Bay	1	144	261
Hudson Valley	1	145	251
Alli's	2	158	248
Chattanooga Choo Choo	2	111	219
Mokan	3	102	192
Springbok	1	100	192
Air Capital	1	104	190
Wiregrass Peanut Pickers	3	95	190
Branding Iron	3	79	132
Milwaukee	5	65	120
Down Under	2	52	99
Platte River	2	32	55
South Texas	1	24	44
City of Melbourne	1	19	32
Great Lakes	1	13	24
Chief Seattle	1	6	12
Lindbergh	1	6	12

SPRING CW QSO PARTY

April 22-23, 1995

CHAPTER SCORES

Chapter	Logs	Contacts	Score
Possum Trot	14	532	1006
Battle Road	15	266	520
Old Dominion	7	229	410
Bauxite	7	204	374
Steel City	10	156	290
Republic of Texas	9	103	195
City of Lights	6	112	175
Brooklyn Bridge	6	86	164
MO-KAN	2	61	106
Gateway	3	55	101
Fort McHenry	3	48	88
Trotters & Pacers	2	43	80
Hudson Valley	1	44	70
C.A.T.T.	4	36	66
Cradle of Liberty	1	30	56
Suncoast	2	26	43
Huston Shot	1	14	25
Down Under	1	10	18
Colorado Bighorn	1	11	17
Bay Area	1	8	14
Golden Bear	1	6	11
Keystone	1	4	6
City of Roses	1	2	3

New TENTEN-L Maillist

continued from page 21

you can reply to TENTEN-L. Or both, by using one of the two addresses as a CC.

That's all it takes to participate. We are all experimenting as we try to discover the kinds of things most usefully put on the list. Do not be afraid to contribute an idea, ask a question, or make an announcement--or even discuss band conditions. The welcome message you receive will tell you some other things you can do with the list, and we shall be adding interesting files in coming months in the TENTEN-L archives. *The sunspots never set on Internet.*

555 Net Back on the Air

The 555 DX Net begins again on Sunday November 12 on 28.555 at 1400Z to 1530Z. This weekly net will be hosted by KC5CP or a east coast station. On contest weekends (10-10 or ARRL 10 meter contest) there could be no net. Poor conditions last year closed the net at the end of February. Listen for the 555 DX Net every Sunday on 28.555.

treasurer's report

Keith Schlottman
K17RK, #63324

STATEMENT OF REVENUES & EXPENSES

First Quarter 1995-1996
April 1, 1995
June 30, 1995



REVNUE	1st QTR	Y-T-D
Membership Dues & Fees	12,394.	12,394.
Scholarship Donations	120.	120.
Royalties & Interest	<u>1,125.</u>	<u>1,125.</u>
TOTAL REVNUe	13,639.	13,639.
EXPENSES		
Postage & Printing for the <i>News</i>	7,380.	7,380.
Operating Expenses	3,144.	3,144.
Administrative Expenses	<u>6,362.</u>	<u>6,362.</u>
TOTAL EXPENSES	16,886.	16,886.
REVENUES OVER OR (UNDER) EXPENSES	<u>(3,247.)</u>	<u>(3,247.)</u>

QRM FROM THE TREASURER...

You may have noticed a change in the format of this quarter's Treasurer's report. My hope is that the information presented above will be meaningful yet concise.

As a dues paying member you have the right to know exactly how your money is being spent, which is why we publish the Treasurer's report each quarter. However, the figures alone do not reveal the complete story behind the financial operations of Ten-Ten International Net, Inc. For example, do you realize that Ten-Ten has no paid employees? All of the Officers, Directors, Area Managers, Awards Managers, Net Officials, and other hard working hams whose names and calls you see in the *News* are completely volunteer. These individuals spend many hours per week working to make Ten-Ten the best amateur radio organization it can possibly be, without any form of compensation. In fact, many of us provide use of our computers and other office equipment without charge. This is why we are able to keep our dues so low! If you compare Ten-Ten's dues to other ham clubs, I think you will agree that we are getting a real value for our money.

Ten-Ten is a non-profit organization. We have no

assets other than cash. This cash is entirely earmarked for use in providing services, including the *News*, to our members. We have segregated certain funds into interest-bearing certificates of deposit in order to cover our obligation to Life Members, who have the right to receive membership benefits for many years to come.

Your Directors have been carefully analyzing expenses during the past year, searching for ways to keep them low and even reduce them. One idea that has proven to be a considerable money saver was to reimburse Officers and Directors for basic e-mail service, which has resulted in significant savings on postage and telephone. The math for this is easy: If a Director made just two mailings a month to each of the other Officers and Directors, postage costs would be over \$10.00. The maximum e-mail reimbursement is \$9.95, and several of the Directors have even lower rates (some even have free on-line access). Being on-line has provided several side benefits as well. There is a great deal of planning for Ten-Ten flowing through the Internet these days, and I think you will notice some very positive results in the near future.

An-Ten-Ten-nas

continued from page 9

out of doors. Beware, for example, of those little wire-end rings: most turn to rust in a few months.

For hardware that does only mechanical, but not electrical work, clear sprays can extend their useful lifetimes. Of course, such coatings take the hardware out of the secure grounding system. So if you need a ground lead from your antenna boom to the rod in the earth, run a separate flat braid. Do not rely on coated or rustable hardware for this job.

This is just the start. If you like to play with experimental antennas, especially for 10 meters, just wander around a hardware depot. Buy a few fittings that look promising and cheap just to stare at in your leisure. I am sure you will find a use for some of them in your next project. Remember: antennas do not have to look like commercial versions to do the job you need them to do. They just have to be electrically and mechanically sound enough as antennas and convenient enough relative to your situation.

Now where was I? Ah, yes. This elbow joint just fit over the end of the tube for my bedspring helical J-pole antenna.

10-10 AWARD INFORMATION

To apply for any 10-10 Award, Proof of paid-up membership is mandatory. A copy of your membership card or address label from the latest copy of the *10-10 International News* must be sent with your application.

An application listing the rules for each award is available from the Awards Managers listed below. Please send a request with a #10 (business size) envelope, stamped, self-addressed, with one unit of first class postage to the Award Manager for the Award you are interested in obtaining. Please no phone calls to Award Managers for an application or list of rules

BAR AWARDS

Work 100 10-10 members on the air and exchange call, name, location and 10-10 numbers. List these 100 numbers in numerical order, along with call sign, date of contact, name, and QTH (State or Country). The BAR Awards do not require an "official" application form, just a list as noted above. Send BAR applications to the following BAR Managers:

BAR APPLICATIONS 100-900

Glen Harding, K7OMK #1407 PO Box 133
Garden City, SD 57236-0133

BAR APPLICATIONS 1000+

Allen Mattis, N5AFV #27571 5314 Wigton Drive
Houston, TX 77096-5115

CERTIFICATE OF AWARD

A *Certificate of Award* is available when attaining the 1000, 2500, 5000 (and for each additional 2500) BARS at a cost of \$2.00 plus two first class stamps. Send your *Certificate of Award* application to the 1000+ BAR Manager. (Note: Plaques have been replaced by Certificates. Plaques are no longer available.)

INTERNATIONAL 500 OF THE WORLD

With the 500 BAR comes an Honorary VP Number, membership in *International 500 of the World*. A certificate is available for the International 500 of the World for \$1.00 plus 2 first class stamps. Once the 500 BAR is attained, you may go after the following awards:

VP CERTIFICATE

Contact 100, 200, etc. 10-10 members with a VP Number and submit a list in numerical order, VP#, 10-10 #, call, date of contact, name, and QTH. Make a statement that all contacts were made over the air and not copied from a list. An official application is not required for this award. Send your list to:

Carl Fisher, W0HIK #40678 5 Angelina Drive
Augusta, KS 67010-2262

LUCKY 13 CERTIFICATE

Glen Harding, K7OMK #1407 PO Box 133
Garden City, SD 57236-0133

VP WORKED ALL STATES

Carl Fisher, W0HIK #40678 5 Angelina Drive
Augusta, KS 67010-2262

CONTINENTS AWARD

Mark Taylor Murphy, KC4HIT #57448 108 Old Country Lane
Claremont, NC 28610-9561

COUNTRIES AWARD

Alice Jenkins, NR4R #31223 One Mitchel Lane
Rossville, GA 30741-4834

COUNTRIES AWARD

Alan Sherman, K1AS #10781 44 Polly Avenue
Danielson, CT 06239-2229

OM/XYL AWARD

Elaine Nickoloff N8CBE #30409 5383 Atherton Road
Burton, MI 48419-1531

WORKED ALL STATES AWARD

Susan Brackeen, KA1CAD #29600 Route 5 - Box 132-0
Boonville, MS 38829-9805

WORKED ALL STATE CAPITALS

Paul Johnson, N4JII #37708 2311 CCC Road
Dickson, TN 37055-4230

WPX (PREFIX) AWARD

Rex Holford, KF0YF #20423 916 McKenzie
Council Bluffs, IA 51503-1028

Attention Moms and Dads

Do you have a boy or girl under the age of 14 that has their ham license, and their 10-10 number? The *NEWS* would like to do a series of stories on our younger members, *The Future of Amateur Radio*.

Send information, including a picture, about your "young ham" to the Editor, address on page 2.

10-10 QSO PARTY NEWS 1996 CONTEST SCHEDULE

CW CONTESTS

Spring - 4-5 May 1996
Fall - 26-27 October 1996

SSB CONTESTS

Winter - 3-4 February 1996
Summer - 3-4 August 1996

For detail 10-10 contest rules and a contest dupe sheet, send a #10 SASE with one first class stamp to: Don Zielinski, K0PVI #9902
Contest Manager, PO Box DX, Genoa, CO 80818-0119

Membership Information and Services

The following information is supplied to provide a ready reference on how and where to send your 10-10 dues, and where to order items offered by 10-10.

Make all checks payable to 10-10 International Net, Inc. Do not send cash. All DX are reminded that money amounts are quoted in US Dollars. DX members please pay by International Postal Money Orders.

NEW MEMBERSHIPS

New member applications should be sent to the Area Managers listed below. Dues for 10-10 membership are \$10.00 per year for members with a USA ZIP code and \$13.00 per year for DX. You may pay your dues for multiple years. A membership application is included in the 10-10 Information Manual.

AREA MANAGERS

Area 1 District Manager

Al Kaiser, N1API #25468
194 Glen Hills Road
Meriden, CT 06451-3832

Area 2 District Manager

Larry Berger, WA2SUH #407
9 Nancy Blvd.
Merrick, NY 11566-3119

Area 3 District Manager

Chester Gardner, N3GZE #44119
9028 Overhill Drive
Ellicott City, MD 21042-5221

Area 4 District Manager

Stephen P. Sites, KC4LOR #56976
13605 S. Dixie Hwy. #136-494
Miami, FL 33176-7252

Area 5 District Manager

Grace Dunlap, K5MRU #218
(October-June) PO Box 445
LeFeria, TX 78559-0445
(June-October) PO Box 13
Rand, CO 80473-0013

Area 6 District Manager

Dick Rauscher, W6ANK #1931
4371 Cambria Street
Fremont, CA 94538-1203

Area 7 District Manager

10-10 International Net, Inc.
643 N. 98th Street #142
Omaha, NE 68114-2332

Area 8 District Manager

John Hugentober, N8FU #16154
4441 Andreas Avenue
Cincinnati, OH 45211-2622

Area 9 District Manager

Jim Williams, N9HHU #42712
240 Park Road
Creve Coeur, IL 61610-3952

Area 0 District Manager

10-10 International Net, Inc.
643 N. 98th Street #142
Omaha, NE 68114-2332

Area DX Manager

Carol Hugentober, K8DHK #29588
4441 Andreas Avenue
Cincinnati, OH 45211-2622 USA

All correspondence regarding membership services should be addressed to:

10-10 International Net, Inc.
643 N. 98th Street #142
Omaha, NE 68114-2332

DUES RENEWALS

10-10 dues are \$10.00 per year for members with a USA ZIP code and \$13.00 per year for members with a DX address.

All USA members (those with a USA ZIP code) send dues renewals to the following address:

10-10 International Net, Inc.
643 N. 98th Street #142
Omaha, NE 68114-2332

DX members send dues renewals to:
Carol Hugentober, K8DHK #29588
4441 Andreas Avenue
Cincinnati, OH 45211-2622 USA

FAMILY MEMBERSHIPS

Family Membership consists of a primary member and one or more relatives who qualify as a 10-10 member and who reside at the same location and postal address. Family Membership run concurrently with that of the primary member. Add \$3.00 for each additional Family Member for each year.

LIFE MEMBERSHIP

Life membership is available to USA members for \$250.00 and for DX members for \$325.00. Senior Life Membership is available for those over 65 (with proof of age) for \$85.00 US members and \$100.00 for DX members. Send all life membership applications to:

10-10 International Net, Inc.
643 N. 98th Street #142
Omaha, NE 68114-2332

ADDRESS CHANGE

Send all change of call, name and address to the following address:

10-10 International Net, Inc.
643 N. 98th Street #142
Omaha, NE 68114-2332

10-10 INFORMATION MANUAL

The 10-10 Information Manual, a 36 page manual of everything you would want to know about 10-10 is available for \$1.00 postpaid (USA or DX). Send your order along with a return address label (no SASE) to:

Mike Elliott, KF7ZQ #54625
10-10 Information Manager
9832 W. Gurdon Court
Boise, ID 83704-4080

SCHOLARSHIP DONATIONS

Donations to the 10-10 Scholarship Fund should be sent to the following address:

Morrie Goldman, W6EHM #4189
10-10 Scholarship Manager
21518 Marjorie Avenue
Torrance, CA 90503-6418

Make checks payable to: 10-10 Scholarship Fund.

10-10 STAMPS

10-10 stamps that can be used on QSL cards and correspondence are available for \$5.00 per 144 stamps. Send your order to:

10-10 International Net, Inc.
643 N. 98th Street #142
Omaha, NE 68114-2332

AWARD & CERTIFICATE GUIDE

The official Awards and Certificate Guide of 10-10, along with complete chapter information, is available for \$6.00 USA ZIP codes and \$8.00 to DX. A monthly update is also available for \$10.00 per year USA and \$12.00 DX. Send your order to:

Dave McCardell, WD4EWB #18760
10-10 Chapter Coordinator
PO Box 246
Harrison, TN 37341-0246

10-10 ROSTER

The complete 10-10 membership list is available in hard copy or computer disk. The hard copy is printed on both sides of 8-1/2" x 11" paper 3-hole punched. The roster lists 10-10 number and call. SK's are identified. It is issued once each year in January. Cost of the printed roster is \$11.00 US and \$14.00 DX postpaid, and is available only by advance order.

10-10 offers two different Rosters-on-Disk. One, known as XXIQ will search for call if 10-10 number is known and for 10-10 number if call is known. XXIQ is available on either 3.5" (1.44MB) or 5.25" (360K) floppies. It will run on IBM compatible computers. Cost is \$5.00 per quarterly issue or \$17.50 per yearly subscription for US members. DX cost is \$7.00 per quarter or \$25.00 per yearly subscription.

The other 10-10 Roster-on-Disk is known as XXIP and is available only on 3.5" (1.44MB) disks. It is contained on 3 disks and requires DOS 3.3 or later and 16 MB of hard disk. This program will locate 10-10 number, call and will display Name, Address, City, State (or Country), membership status, expiration date, SK status and will print address labels. The price of XXIP is \$10.00 per quarterly release for US members and \$13.00 per release for DX. Order 10-10 Roster-on-Disk from:

10-10 International Net, Inc.
643 N. 98th Street #142
Omaha, NE 68114-2332

Be sure to note which program you are ordering and the disk size if ordering XXIQ. Quarterly releases are issued in January, April, July and October.

FCC FORM 610

The latest issue of the FCC Form 610 is available from 10-10 for an SASE. Send your request and an SASE with one first class stamp to:

Mike Elliott, KF7ZQ #54625
9832 W. Gurdon Court
Boise, ID 83704-4080

INSIDE

An-Ten-Ten-nas	8
Award Information	30
Awards	26
Chapter News	
Coordinators Column ...	13
Crazy Eight QSO Party	27
Contest Information	30
Chapter Scores	26
Contest Committee	12
New Manager	1
Spring CW Results	20
Spring SSB Results	25
DX News	10
HAMCALC	1
Membership Information ...	31
Mobile Award	17
New Life Members	23
Paperchasing	19

President's Message	3
Reflections	18
Scholarship	
Honor Roll	11
Scholarship Winner	22
1995 Winners	4
Silent Keys	12
Sunspot Cycle 23	4
TENTEN-L	16
Ten X DX News	10
Thank You	19
Treasurers Report	29
Want to be a Paperchaser ..	5
W6OI on the Air	17
Young Ham, N3TSL	27

CALENDAR

Fall CW..... 21-22 October

10-10 Membership Information

10-10 membership information is available to any amateur who is interested in joining the 10-10 Net.

If you know someone who would like to learn more about 10-10 suggest that they send \$1.00, 2 first class stamps and an address label to Mike Elliott, KF0ZQ #54625, 10-10 Information Manager, 9832 W. Gurton Court, Boise, ID 83704-4080

They will receive the 10-10 Information Package which consists of a copy of the latest issue of the *10-10 International News*, along with a copy of the New Member Brochure.

----- Complete and tear off here. Attach to front of your contest log. -----

Cover Sheet

FALL CW CONTEST - 0000Z 21 October - 2400Z 22 October 1995

Chapter Assignment: _____

Total contacts with 10X #: _____ X2 = _____ Points

Total contacts without 10X #: _____ X1 = _____ Points

SEND LOGS TO:

Feline Friends/
Restoration Project Chapter
3528 11th Avenue
Port Alberni B.C. V9Y 4Y7
Canada

Total Contacts

Total Points

Home Area

Logs must be postmarked no later than 25 November 1995

Include this cover sheet and the mailing label on it OR a cover sheet of your own (follow the format of this one) and a copy of your current Ten-Ten membership card as proof of Ten-Ten membership for awards.

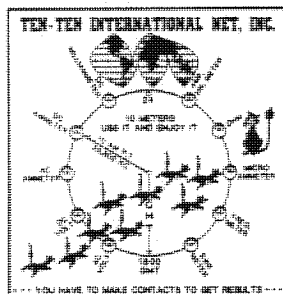
10-10 International Net, Inc.
643 N. 98th Street #142
Omaha, NE 68114-2332

Forwarding and Address
Correction Requested

TIME TO RENEW? EXPIRATION DATE
IS ON MAILING LABEL BELOW.

FIRST CLASS

FIRST-CLASS MAIL
U.S. POSTAGE
PAID
OMAHA, NE
PERMIT 1799



15984 W80KIN 111997
WALTER E. BRIANT
2810 S. MALLONIE DR
KANSASFIELD WI 54449

october 1995 (Fall)