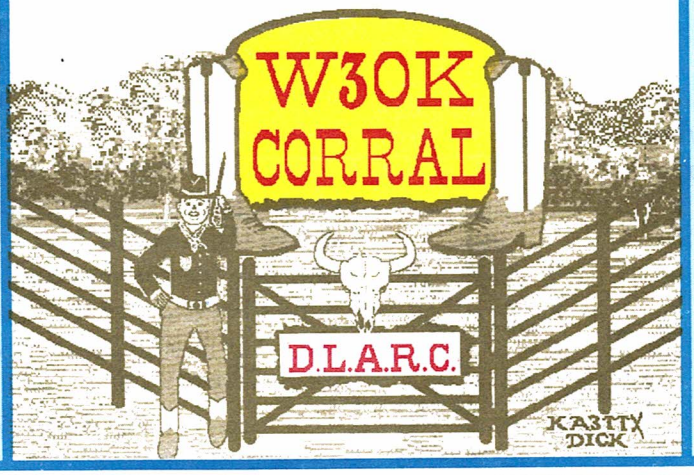
DELAWARE-LEHIGH AMATEUR RADIO CLUB, INC. W3OK

October 1995



SPECIAL SERVICE CLUB
ARRL Affiliated Club

PA QSO PARTY OCTOBER 14-15

DLARC meeting October 5th

Kiva Hall, NCC

Ray, W3TDF to speak

What is the most important October activity for the DLARC, other than elections, naturally it is the PA-QSO Party. The 14th-15th weekend is when, and the Trophy is the objective.

DELAWARE-LEHIGH PA QSO PARTY 1995 Amateur Radio Club Inc

At our October 5th club meeting we will have Ray, W3TDF, giving tips on how to make it the most productive, and fun session for you.

Note, the recent long drought is predicted to have an adverse and devastating affect on the Fall foliage, so this year you can pass up that trip and spend time helping your club, the DLARC retain that Trophy that we have had for the past 3 years.

This October program is primarily meant for the newer participants and those who haven't put much time at it. Most of us are using the computer logging program, which is the greatest thing that ever happened to contest logging. Ray will go over the little tips for the most effective usage of the K3CP/WA3T logging program. He will also touch on band/mode usage for the greatest productivity. If it's just a few hours that you can operate, then why not make the most of them? He will also touch upon hand logging and will have logs and entry sheets for handouts.

Slate of Executive committee presented

The **DLARC** Nominations Committee, headed by **Van/K3CP**, presented its slate of nominees for the Executive Committee (Officers and Board of Directors) at the September general meeting of DLARC. The slate presented and accepted was:

OFFICERS

President:	**Tom Frobase**	**N3LLL**
Vice President:	**Joe Chuk**	**W3JD**
Secretary:	**Bob Gerst**	**N3OLH**
Treasurer:	**Dick Dech**	**KA3MOU**

BOARD OF DIRECTORS

(5 members to be elected)

Ray Bilger	**W3TDF**
Don Curtis	**W3LR**
Bob Dickinson	**W2CCE**
Chris Hornaman	**NU3L**
Robin Moseley	**WA3T**
Don Reamer	**KA3JWE**
Barry Vogt	**N3NVA**
George Wieland	**N3SQD**

Since there were no nominations from the floor there was no opposition for the officer posts, and the four officer candidates have won by acclamation; no voting will be necessary for these offices. Congratulations to the new officers.

The Prez Sez

by Bob, KE3AW

It's true. Time flies when you're having fun, and for me these past two years have flown by. These have been two good years during which a variety of awards and recognitions marked DLARC accomplishments. We had numerous successes by DLARC as a whole, and by individual members in many amateur radio activities. A review of the W3OK newsletters will verify this fact quickly.



If club membership also is a measure of success, then we have been successful, because this also has been a time of continued growth in DLARC membership. The growth may well be due to our work at public awareness of amateur radio, since we have no membership drive, nor a goal of a larger club in mind. Those who join do so for the value DLARC provides and their membership is appreciated.

Field days, hamfests, public service events, license classes, demonstration and special event stations, and our program of donating amateur radio books to libraries all proved effective in raising the awareness of our local public to the hobby of -- and the potential of -- amateur radio. But these are the high profile activities. They are hardly characteristic of other important amateur radio activities of contesting, DXing, rag-chewing, packet radio, or other radio happenings in the home-base ham shack. Nor do they represent the technical committee's tireless and important "hours on the hill" keeping our repeaters functioning and improving. These "lower profile" activities, and the accomplishments in them also are recognized with equal significance in DLARC.

With a club as large as ours, in a hobby as diverse as amateur radio, new challenges continually arise within and outside DLARC. We must continue to keep our club lines of communication open, and appreciate each other's particular radio interests. We encourage all members to take full advantage of club programs and activities to whatever degree their interests in amateur radio and available time permit.

We have worked to improve our club, and I am proud to have been a part of that effort. I appreciate the support and wisdom of the executive committee. Likewise I appreciate the support and input from the general membership aimed at club-oriented advancement, and club efforts to help individuals succeed in their personal amateur radio goals. I am confident the future officers and boards of directors will go forward from this point, continuing to improve DLARC, and dealing with perennial and new issues on behalf of the members. For me it has been a privilege, a pleasure -- and yes, fun, too -- as it should be in a hobby -- to serve in this post. Thanks for my opportunity to serve DLARC.

73, Bob/KE3AW.

Delaware Lehigh Amateur Radio Club, Inc. Safety Rules

by Chris, NU3L



The following rules have been adopted by the Executive Committee. They are designed to protect club members and ensure the safety of the general public.

All activities:

Safety belts must be worn and used by anyone climbing a tower for any purpose.

Ground crew members working below a tower on which someone is working must wear hard hats.

All transmitting equipment must be properly grounded.

All equipment must be disconnected from voltage mains or generators if maintenance work is to be performed.

No one is to operate any radio equipment during storms where lightning is present. All equipment should be disconnected if it can be done safely.

When a temporary station installation is to be made where access by the general public is possible:

Antennas must be erected in such a manner as to prevent accidental contact. This applies primarily to vertical antennas but might also include the ends of inverted vees or the lower segment of a delta loop and other low installations.

All equipment must be in closed cabinets if dangerous voltages are present.

de Chris NU3L for The Executive Committee

Just the minutes

September 7, 1995

by Bob, N3OLH, Secretary

The September meeting of the Delaware-Lehigh Amateur Radio Club was called to order at 7:35 P.M. in Kiva Hall of the Northampton County Community College on Thursday September 7, 1995 by Bob Green, KE3AW, the Club President. Approximately 74 members and guests were present.



Before the business meeting began, Bob announced that the evening's 50/50 drawing would include some additional prizes; a dual band magnetic mount antenna, a 1995 International Call Book and some computer disk storage boxes.

Amy, KD3TI, moved to approve the minutes of the August Meeting as printed in the September issue of the W3OK Corral. The motion was seconded by Ray, W3TDF, and approved by the membership.

The Treasurers report was presented by the Club Treasurer, Dick, KA3MOU. The report showed a cash balance of $7,630.65. Dick also reported that preliminary results of the 1995 Hamfest provided the Club with a net profit of approximately $3,047.36. Clarence, W3PYF, made a motion to accept the Report. The motion was seconded by JP, N3GWR, and approved by the membership.

A report on the 1995 Hamfest was presented by the Hamfest Co-chairman Chuck, KD3SQ. He compared this year's results with those of the prior years. Chuck also thanked all of the members who helped and those who attended the event. Bob asked that members who have suggestions on how we can improve future hamfests submit them in writing to Chuck or to him.

Bob told the group that the officers are thinking of ways to use the Hamfest profits. Some of the proposals are: additional equipment to be purchased and added to the loan program, additional equipment for Field Day and/or emergencies, the establishment of a Club Library and some type of a scholarship fund.

Bob reminded the members that Club jackets are available and can be ordered from Dick, KA3MOU. He also read an article from the ARNS newsletter that said that the Lehigh Valley American Red Cross awarded Clarence, W3PYF, its Clara Barton Honor Award for meritorious volunteer service.

Applications for membership were received from
Christopher Schafer, N3VTZ;
Homer Wentz, Jr., N3VPA;
David Reiger, KB2VML
Joshua Parris, N3VSA.
Carl, AA3IX, made a motion to accept them as new members. The motion was seconded by Ray, N3RBK and approved.

The Repeater Committee reported that there is still a problem with the receive side of the 440 repeater and that linkage will follow after the problem is solved. Tone output on the 70 machine has not yet been accomplished. There will be a session to train control operators, information will come at a later date.

The Nominating Committee Proposed the following slate of Officers and Executive Committee members to be voted on at the October Meeting

President, Tom Frobase, N3LLL;
Vice President, Joe Chuk, W3JD;
Secretary, Bob Gerst, N3OLH;
Treasurer, Dick Dech, KA3MOU.
<u>Executive Committee</u> (5 to be elected)
Ray Bilger, W3TDF;
Don Curtis, W3LR;
Bob Dickenson, W2CCE;
Chris Hornaman. NU3L;
Robin Mosley, WA3T;
Don Reamer, KA3JWE;
Barry Vogt, N3NVA
George Wieland, N3SQD.

Ray, W3TDF motioned to close the nominations. The motion was seconded by Amy, KD3TI and was passed.

Bob reported that the Club's annual picnic was a success and asked the members to thank Jeff, N3QZT, Dick, KA3MOU and Ray, N3RBK for their tremendous efforts.

George, AA3JU, reported on the Club sponsored Special Event Station held on August 26 in conjunction with the Blue Valley Farm Show. In spite of numerous antenna problems those who helped out had a good time and that the had about 100 contacts.

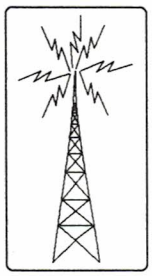
Bob reminded the members about the evening's program, RF Detection by Flyover, would be presented by Bob, W2CCE.

The meeting was adjourned at 9:30 p.m.

de Bob, N3OLH, Secretary

Eve's Gone Fishin'.... Barefoot in the Pileups

from the Internet



I've sometimes found myself comparing calling CQ with fishing. You cast out your CQ "bait" and you never know who will bite. Perhaps a small fry in the next county or the big one, a DX from say, Argentina. I love taking my boys fishing, and used to take my youngest boy CQ fishing. I'd take the baby upstairs, grab some toys out of his room, set up a blanket on the floor of my "shack" and play with him between CQs. My wife and I have a high -tech mode of communication developed if I get a nibble on my CQ bait. If there's a response, I stomp three times on the floor and she comes up to take the baby so Dad can play radio for a while.

Back to that DX contact in Argentina. It was one of those faint signals, and the band was fading up and down. We exchanged call signs, locations and signal reports. Then gave our names phonetically. I said "Sierra- Tango- Echo- Victor- Echo." The band must have faded at the beginning of the transmission because all he copied was the "Echo- Victor- Echo." He began calling me Eve. I tried to correct him, but the band faded completely before I could. I'm noted for having a deep voice, so I must have sounded like a strange Eve to him. If you ever happen to talk with Eduardo Bianchi, LU8DIO, say hello to him from his friend, "Eve" in Indianapolis.

As I got more experience on the air, I also began to understand more ham lingo. The first time I heard the term "pileup" I was at an amateur group meeting where the speaker was demonstrating a digital signal processor. He said it would help in those "pileups. " I had no idea what it was. Then he played a tape of a sideband pileup. All those voices at once, mass confusion. Since then I've participated in a few pileups and even "busted" a few. On the other hand, I remember the first time I heard a CW pileup. My first impression was how beautiful it sounded. All those tones running together made me think of the twinkling of falling snow. I truly admire hams who can manage such a pileup. To be able to pick out a call sign amongst all those cascading tones is quite an accomplishment.

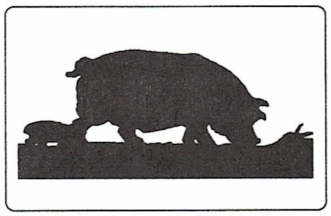
Another one of my early contacts described his operating conditions after I complimented him on the strength of his signal. He told me about his beam antenna on a tall tower and that he was "barefoot. " Barefoot? He had already told me he was in Florida, and it was Duly, after all- so what if the guy wasn't wearing shoes? What did that have to do with how his signal was getting to Indiana? I knew what a linear power amplifier was, but not until the next day did I find out the connection with the presence or lack of foot attire.

de Steve, KF9ZA

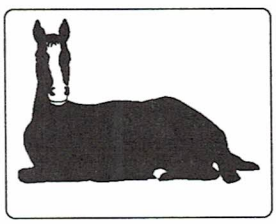
The 50th annual Blue Valley Farm Show Special Event station.

by George, AA3JU

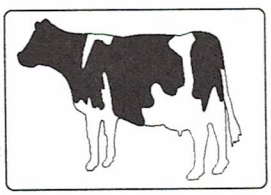
The crew for the Blue Valley Farm Show Special Event station arrived dutifully at 6:30 am on Saturday August 26th in Bangor, PA. As team leader, I counted heads and found one extra helper. **N3IYX** was there with the radios, **KB3AZR** was there with the banner, **N3NVA** had the VHF stuff ready to go, of course I was there with the table and the tent, but who was this **Murphy** fellow and what exactly was in that bag he was carrying?



Soon we found out what was in Murphy's bag. It was a swell collection of gremlins, bugs and nasty little tricks. He unleashed them all in spurts through out the day. Antennas failing, radios that malfunctioned, coax that mysteriously shorted out, and a busted 17" VGA monitor. Needless to say we had a few problems. But in the truest spirit of ham radio we pulled together and got the show on the road.



With the tireless efforts of **N3SQD** (especially) **N3IQD, KE3AW, N3JGX, K3ANS, N3SWA,** and others not mentioned, we put the show on the road. And we did show the public the very best face of ham radio, which is, of course the ability to overcome adversity. And a special treat was in store for Morse code fans! We decided to make a few CW contacts, and lo and behold we ended up on the receiving end of a dual pileup, one over the air and one in front of the table. Seems that the public had for the most part never actually seen anyone actually operate CW before. And that was interesting to them. So all in all it was a pretty successful day



. Just please one favor: If you see that Murphy fellow please trip him for me?

de George AA3JU

Building a Better Ground System (for poor soil areas)

(part 1 of 2)

by Steve, K3DEM

In April of the last three years, I've distinctly noticed a loss of effectiveness in my HF ground system. RF would creep into my audio, telephone, EMI skyrocketed, and receiver noise increased. The reason - no rain. The clay soil where my ground rods were was liked rock. Not to worry. The solution - a ground treatment strategy. It is time-consuming, but very reliable and is based upon designs dating back forty years plus, updated and shared by cooperative engineers from the Polyphaser and Industrial Communications companies.

If you'd like a better ground for your shack, follow along. First, dig a 3 ft. deep by 2 ft. wide hole

with a post hole digger or shovel. Keep soaking this area while you do the rest. (For at least a week).

Obtain a 10 ft. by 1 1/2 - 1 3/4 inch copper pipe (medium thickness) and a 30 - 36 inch hollow length of 1/4 - 1/2 inch thick PVC about 3 or 4 inch diameter with the end hacksawed to a point. Every 3 inches from this point to 6 inches from the top end was drilled with a 1/4 inch bit through the pipe - each pair of holes perpendicular to the last set.

A week of casual soaking permitted me to twist the pipe into the soil (water always works downward) without a hammer. Work the rod down about a foot and pull out, rinsing the mud off each time so the pipe will literally free fall into the hole. Pour about an inch of stones, gravel or cinders in the bottom of the hole; work the pipe in. Try to work some stones around the pipe's side near the bottom.

Now similarly drill perpendicular 3 inch spaced holes in the PVC up to 6 inches from the top. These holes may be wider than 1/4. Sprinkle about an inch of stones at the bottom of the 20 - 36 inch hole and rest the PVC on top of them right next to the copper pipe. Fill the hole with soil leaving the PVC extending 6 inches above the surface. You can cap it temporarily to protect from leaves, pine brush, etc. and even paint if so inclined.

Now fill the PVC pipe with either magnesium sulfate, (Safest for nearby plants) rock salt or copper sulfate. You can also put some in the copper pipe to get the system kick-started. Soak it up well and make this part of your ham station maintenance.

Any good ground rod requires a well - connected heavy wire ground strap or even better, in my case, soft copper tubing which I hammered flat and clamped tightly to the copper pipe with a stainless pipe clamp. Coat the connection completely with de-oxidation substance. You can seal it all with liquid rubber, but usually de-ox is sufficient. Just check it every so many months. Whichever lead-in you choose (wire, strap, or soft copper tube) keep it very short - less than 10 feet! If not done - you're building an antenna!

This lead-in tube or wire should be brought into your shack by the straightest, shortest route (no 90 degree bends). If using tubing, hammer it flat, drill 1/4 inch hole through the flattened portion, and using a stainless bolt with big fender washers and wing nuts, fasten 1 inch tin - braided copper shield or ground strap and run direct routes to every piece of equipment. The shorter the run, the better the efficiency. (Connecting the ground straps to low pass and AC line filter improve their effectiveness by as much as 20 dB).

The author was questioned about the durability of copper in salt water soil content. I had a ten footer in salt water at a previous home on a New Jersey barrier island for 14 years and when removing before the house was sold, it was still shiny! A plain fact known to few - copper in ground surface contact can remain there forever. Put it in your will!

Reference ground rods were used for comparison and resistance measurements. The lower the ground resistance became, the less EMI/RFI. In fact, no RF appeared anywhere on the ground tube or on any of the braids running the legal limit with an FT-1000, Alpha 89 and 8 element array. telephone EMI problems happily disappeared also, but that's another story.

Many thanks go out to dad for his strong back, callused hands and whose garden watering coincides with my pipe watering.

Next issue - Part II -

The what and what not to do's and why.

73 de Steve, K3DEM

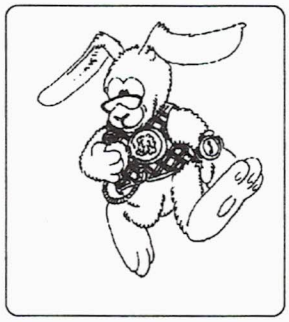


Digipeter Rabbit

continued from last month

Part 2

Meanwhile, Hamville was still plodding along as it always had, oblivious to the revolution in farming occurring around it. The old hares still picked carrots by ear. The **Ancient Royal Rabbit League** complained bitterly to the **Field Carrot Council** about all the new land it was giving to Techietown, but the population of Hamville continued to drop.



When the Field Carrot Council gave 2 acres of Hamville property to Techietown, the residents of Hamville began, for the first time, to be genuinely concerned about their plight. Some even dared to ask the Ancient Royal Rabbit League to change its mind about the need to learn to pick carrots by ear to live in Hamville. "We need new blood here to fight off the Field Carrot Council," they said. Charlie Whiskey, now in his nineties, was furious. "We have to maintain our standards. We don't need those smart young bunnies, we need rabbits skilled in our time-honored harvesting techniques. We need rabbits who are dedicated enough to the principles of Hamville to want to learn our methods. If a rabbit really wants to live here, he'll learn our ways. If he doesn't, we don't want him. You don't want those Quackers to move here, do you?" But by now the residents of Hamville had seen the writing on the wall. Although they genuinely enjoyed picking carrots with their ears, they realized that there were now other ways which yielded just as many carrots. And though they would probably continue to pick carrots by ear as they always had, they could no longer shun those bright young rabbits who chose a more modern method. A group of rabbits, led by an elder statesman rabbit named Elmer, who had once served in the government of the kingdom of Radio, asked the Ancient Royal Rabbit League to change its policy. The League agreed and issued a decree that henceforth ear harvesting skills would not be required to become a resident of Hamville.

When Digipeter Rabbit heard of the decree, he sent envoys to Hamville with all the latest scientific discoveries, which he shared freely with the residents. The residents of Hamville seized upon the new knowledge and soon Hamville became revitalized. Its population began to increase as young rabbits were attracted to its bountiful open farmland. The Field Carrot Council, impressed by the renaissance in Hamville, did not take away any more of its land, but actually gave some new territory to Hamville. Everyone was amazed at the new vibrancy of Hamville. Charlie Whiskey, though sad that his beloved harvesting method was no longer in vogue, saw that his people were prospering and was glad. And to show that there were no hard feelings, Charlie Whiskey sent Digipeter Rabbit a packet of 73 carrots which he had picked himself -- with his ears. The residents of Hamville rejoiced and declared a festival to celebrate their new prosperity. And over the front door of the Hamville Festival they put a banner, which read: "A bunny's worth is measured not by the skill of his ears, but by what lies between them." The residents of Hamville had learned an important lesson.

Unfortunately, Digipeter Rabbit, being a dumb bunny, never understood that the old technique provided advantages far beyond the picking of carrots by ear! As the rabbit came to realize, it had provided CW Rabbit with discipline in the learning process, including the mastering of new agricultural and farming methods Digipeater Rabbit was using. And, because CW Rabbit had been encouraged to actually learn how to improve on the basic picking of carrots by building the very first carrot gin, CW Rabbit now understood the technology of the more advanced techniques, not merely how to push the right buttons to get the machinery to work, which was all Digipeter Rabbit could do.

While those in Digipeter Rabbit and TechieLand prospered at first, after one season the crop dried out, and was lost. It was a lesson well learned, for by the time Digipeter Rabbit knew what had happened to his empire, the **Field Carrot Council** had decided that Digipeter Rabbit no longer possessed the knowledge to understand the basics of his working machinery, and no longer justified owning a plantation at all. Indeed, Digipeter Rabbit learned that **Field Carrot Council** was coming in to reclaim the land because he really didn't understand much about the machinery he was using, breaking an earlier understanding with the **Ancient Royal Rabbit League,** which had agreed to keep all rabbits in touch with understanding the basic laws of nature. The plantation was condemned, and the land sold to the highest bidder. ***by Frank Terranella, N2IGO***

continued next month

Amateurs make the Congressional Record

from the ARRL

Oklahoma Senator Don Nickles has entered into the Congressional Record a tribute to volunteers who helped in the aftermath of the April bombing of the Murrah Federal Building in Oklahoma City, including Amateur Radio operators.

Citing an "outpouring of love, selfless effort, and resources," Nickles said the community is "indebted to those volunteers who created (a) silver lining" to the dark cloud of the tragedy.

"Specifically," Nickles said, "Amateur Radio operators provided an essential service to rescue operations. Within minutes of the attack, operators were on the scene providing an emergency communication network that allowed for the organization of supplies as well as firemen, policemen, and rescue crews from countless communities.

"Their contribution of 360 hours of service was made possible by donations from electronics companies such as the Oklahoma Community (Communications) Center," Nickles said.

Sen Nickles's remarks were published in the August 11, 1995, Congressional Record, thanks in part to the efforts of ARRL Oklahoma Public Information Coordinator Thomas M. Webb, WA9AFM.

An article by Webb about Amateur Radio's role in this matter appears in September QST.

Also helping, in Washington, was George Stephens, WB3DAC, who is on the staff of the Senate Republican Policy Committee, of which Sen Nickles is chairman. (Stephens also is president of the Capital Hill Amateur Radio Society, W3USS.)

Special ARRL Bulletin 43 ARLX043

Radioman indicted

A man described as a disgruntled radio repairman for the City of Los Angeles has been indicted on four counts of murder in the first degree with special circumstances for the July 19th killing four supervisors at the city's Piper Tech Center. Three of those killed were hams.

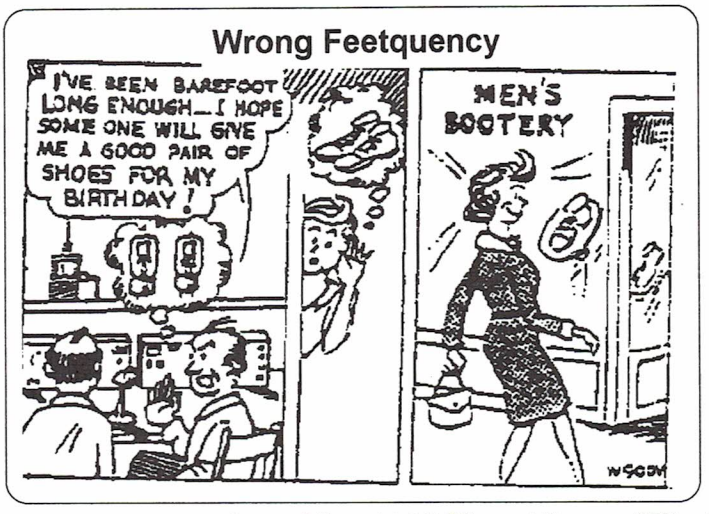
Willie Woods is accused in the shooting deaths of Marty Wakefield, N6BZ, Neil Carpenter, KA6QIB and Anthony Gain, W6KFN and non-ham James Walton.

Anthony Gain was an Advanced class licensee and trustee for a repeater operated by the city who had chosen to continue to work rather than retire. Wakefield was an active DXer and until May had been an ARRL volunteer examiner. Carpenter held an Advanced class license. All four shooting victims also held FCC General Radiotelephone licenses.

Gain, Carpenter and Wakefield were active in the Los Angeles City Amateur Radio Volunteers, a club aimed at helping city employees become licensed, with an eye toward emergency preparedness functions.

Their alleged killer could face death in California's gas chamber if convicted. He has pleaded not guilty on all counts at a hearing on August 3rd.

from Newsline 939



cartoon from May 1995 West Aliance (Wisc) ARC "Hamrix" -- Les Peterson, W9YCV editor and the September 1995 ARNS Bulletin

FOR SALE:

Kenwood TM-441A Mobile "440" (70 cm) rig.

Working condition but needs minor work on LCD.

Asking $125.00

Call Jim at (610) 559-8123

The Dark Computer

[Ed: The following is reprinted from the January 1992 issue of the WECAGRAM, which reprinted it from the December issue of the ARNS Bulletin, which received it from the Motorola Lunch Bunch.]

The Motorola Lunch Bunch is proud to announce its latest development.... The **DARK Computer.**

The Dark Computer is a technological breakthrough destined to eclipse the recently announced "Light" computer. The Dark Computer results from years of study, research and developments in the dark. It is faster than the light computer because dark travels FASTER than light. (Proof: Before light gets anywhere, dark is already there!)



The Dark Computer uses the newly discovered subatomic particle, the dark quark. Our research has determined that two dark quarks combine to form the basic elementary particle of darkness the offon.

Three dark quarks combine to form the elementary particle of management, the moron. The Dark Computer requires very little power--so little, in fact, that it is completely powered by a single lunar cell (similar to a solar cell, but more efficient in high dark conditions).

A complete bundled software package, developed at the Arizona University of Mimes Night School, comes with each Dark Computer. The software includes DOS (Dark Operating System), LUNAR-C (a quick and dirty C compiler), Duskbase-V (an irrational database), and Nada (an objection- oriented programming language).

Some of the special hardware features of the Dark Computer are:

Multiple shift registers for right-shift, left-shift and night-shift.

One biggabyte memory composed entirely of shadow RAM with fully dissociative outta cache.

Music synthesizer with demonstration tunes, such as

Moonlight Sonata, Dark Eyes and In the Still of the Night (which is not a hillbilly drinking song).

Surreal-time clock with granularity of 28 days (known as 1 lunar tick).

A display composed of one million (1000 x 1000) DEDs (Dark Emitting Diodes). These are similar to LEDs (Light Emitting Diodes) in the same way that electron-flow theory resembles hole-flow theory.

Optional interface to the MLB Digital Holstein (we're really milking this!). With a Digital Holstein connected, the processor output increases up to 250 Complex Orthagonal-weighted Flowing Operations PerSecond (250 COWFLOPS).

The MLB Dark Computer is especially useful for such applications as black hole research, dark-side-of-the-Force computations, blindfold tests, vampire tracking and mushroom management. Military applications include SDI, Stealth Research and RFP generation. The Dark Computer is powerful enough to handle computations on matter, anti-matter and doesn't matter.

DON'T BE LEFT IN THE LIGHT! Get A Dark Computer for your company and keep all your employees in the DARK The Dark Computer

DLARC picnic big success

by Jeff, N3QZT

The annual DLARC picnic took place on August 20, 1995 at Hacketts Park in Easton. We had a great day for a picnic the weather was just perfect.



The event was attended by about 80 DLARC members and their families. We had all kinds of foods and beverages. Some the club supplied like the hot-dogs and hamburgers. But other things like macaroni salad, deviled eggs, and baked beans were all brought by different club members, in addition many other dishes and various desserts were also brought by club members. W3TDF provided corn, as well and horseshoes. I again missed out on the horseshoe games (somebody had to make the hamburgers) but Ray told me that the team of W3TDF and N3IGA was all but unbeatable.

I would like to take this opportunity to thank those who helped in making this a great picnic. First thanks to all who attended. Thanks to N3ULW Glenn for donating a gas grill to the club. Thanks to N3RBK for his help at that grill. And a special thanks to KA3MOU Dick and Maryann his wife for their help in planning and also running the event.

See you next year at the picnic...

de Jeff N3QZT

editors note:

I only noticed one thing at the picnic, both Jeff and Dick, KA3MOU looked hungry.

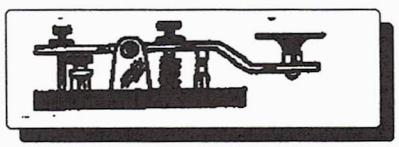
The Origins of Morse

By Tony Smith

(Part 1 of 3 parts)

Thanks to Ken, KE2EP for this article, first printed in introducing Morse, February, 1985

Samuel F. B. Morse was a painter of ability. He studied art in England and exhibited at the Royal Academy in 1813. Returning home in 1815, he took up portraiture as a profession, and painted many prominent people of his day. He later studied and painted in France and Italy, returning again to America in 1832, when he was appointed Professor of Painting and Sculpture at the University of the City of New York.



During the voyage home, in 1832, on the packet ship Sully, discussions about recent electrical experiments in Paris aroused his interest. He had some knowledge of the subject, having attended lectures and assisted with laboratory experiments back home, and he spent the rest of the journey trying to devise a practical electro-magnetic tele graph system capable of carrying messages rapidly over great distances.

Earliest Code

His 1832 notes, setting out his first ideas, are of great interest, and were eventually reflected in his first successful systems, i.e., a sending apparatus to transmit signals by the closing of an electric circuit a receiving apparatus operated by an electro-magnet to record the signals as dots and spaces on a strip of paper moved by clockwork a code translating the dots and spaces into numbers and letters

His first code used figures only, coupled with a dic tionary of numbered words. It was very simple, and his notebook spells out a message showing various numbers with their word equivalents underneath:

4030 141 322 32

"Wednesday 6th August C u v i e r naturalist died."

1.6.8.5.4.3

The numbers and dots under "Cuvier" suggest that Morse intended to spell out unusual words or names letter by letter, and this assumption is strengthened by a reference in his caveat (i.e. specification of what he intended to pat ent) of 1837, to the dictionary having numbered words, "beginning with the letters of the alphabet."

Other matters took his attention over the next few years until his appointment to a new academic post in 1835. He was now given rooms at the university, where he renewed his experiments with home-made batteries and various primitive instruments.

His first successful receiver (register) was made from a canvas stretching frame, a hand wound electro-magnet, and a hanging lever, with pencil attached, to draw on a moving strip of paper. A dot could be read from the lower point of a V, and a dash from an extended V (similar to a capital U).

Lack of funds, coupled with a need for practical as sistance, led to a partnership with a colleague, Professor Leonard Gale; with Alfred Vail, who offered funds, and fa cilities at his family's ironworks to make proper instruments when required; and with F. O. J. Smith, a Congressman with business and legal experience. Working together the three main partners contributed to the subsequent development of the Morse telegraph and code, although it was finally patented in Morse's name alone.

First Alphabetic Code

All of the early experiments and demonstrations had used Morse's number code. On 24 January 1838, however, he demonstrated a new code, comprising of letters instead of numbers, achieving a transmission speed of 10 w.p.m. double that attained previously.

The transmitter (correspondent) had a printer's portrule with cast type inserted in it as required, each type letter having saw-teeth to activate the circuit as it passed through the machine. This continued in use until about 1840, when it was replaced by a simple hand key, the fore runner of today's Morse keys, which was later claimed by Vail to be his invention.

In 1843, with funds running out, Morse petitioned Congress for financial assistance, and was allocated $30,000 to evaluate the merits of his system. He planned an under ground line, believing that Wheatstone's needle telegraph in England had successfully used buried conductors. After 14km had been laid, it was found that the pipe-encased wire had faulty insulation caused by heat in the manufacturing process. It was then discovered that the English under ground wires had also been a failure, and had been replaced by overhead wires on poles.

By 1 May 1844, the wires, now overhead, had reached Annapolis Junctions, 35km from Washington, in time to pick up news from the railway of the proceedings of the Whig National Convention at Baltimore, and its nominations for president and vice-president.

[Ed: Due to the length of this fine article It will be continued in our next 2 issues.].

DELAWARE-LEHIGH PA QSO PARTY 1995 Amateur Radio Club Inc

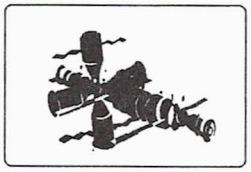
PA QSO PARTY

Get Ready, time is getting short..
October 14-15 1995.
Program at October 5 meeting will feature Ray, W3TDF.
7:30 NCC. KIVA HALL

Amateur Radio on MIR

from ARRL Bulletin

German Cosmonaut Thomas Reiter, DF4TR, will join the Russian Space Station MIR, and operate signing **DP0MIR**, during the European Space Agency's **"EUROMIR 95"** mission beginning September 2, 1995.



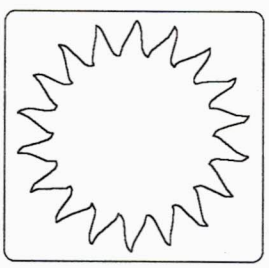
Reiter will use the 2-meter FM rig aboard MIR during the 135 days planned for his flight. Primary frequencies to be used (preferably in split mode) are 145.800, 145.550, and perhaps 145.200 MHz.

QSLs for DP0MIR should be sent to DARC QSL Bureau. .

Sunspot Hints New Cycle

W1AW Special Bulletin 46

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.

"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 RFI Survey

At a **Delaware-Lehigh Amateur Radio Club** meeting a few months ago we asked 14 questions as part of an **ARRL** survey on **Radio Frequency Interference**

Recently **ARRL** reported the preliminary results of responses of 42 clubs. Here is a brief summary of the survey.

1. Number of licensed amateurs at the survey meeting(s)? - **1183**

2. How many had interference when transmitting? - **607 (51%).**

3. How many had problem with TV or VCR interference? - **483 (41% of total; 80% of those in #2).**

4. Of the cases of TV or VCR interference, how many were with a unit manufactured in past two years? - 83 **(7% of total; 14% of those in #2).**

5. Of the cases of TV or VCR interference, how many cases involved a problem when connected to cable TV? - **260 (22% of total; 43% of those in #2; 54% of TVI, VCRI of #3).**

6. Of the total number of all cases of interference, how many involved equipment connected to the telephone system? - **359 (30% of total; 59% of those in #2).**

7. Of the total number of all cases of interference, how many involved interference with types of equipment other than TVs, VCRs or telephone equipment? - **211 (18% of total; 35% of those in #2).**

8. Of the total number of all cases of interference, how many involved a problem with a neighbor? - **268 (23% of total; 44% of those in #2).**

9. Of the total number of all cases of interference, how many involved a problem with consumer electronics equipment in your own home? - **425 (36% of total; 70% of those in #2).**

10. How many amateurs have had a problem with interference to their amateur stations from anything other than another amateur station (electrical, other services cable TV, etc.)? - **523 (49% of total).**

11. Of all the interference to consumer equipment (yours or neighbor's), how many have reported problems to the FCC? - **62 (out of 693 listed in #8 and #9 above - 9%).**

12. Of all the interference to consumer equipment (yours or neighbor's), how many have reported these interference problems to ARRL? - **18 (2.6%).**

***(NOTE:* In spite of all the publicity the ARRL RFI and TIS programs have received, hams still are not turning to ARRL for help with RFI problems).**

13. Of all the interference to consumer equipment (yours or neighbor's), how many have had the interference problems reported to the involved consumer-equipment manufacturer or to the Electronic Industries Association? - **52 (7.5%).**

14. How many hams are having an interference problem that is still active now? **356 (30% of the total attendance)!**

Contest calendar

by Barry, KU3X. contest editor

Oct 7-8 California QSO Party
ARRL International EME Competition
1995 F9AA Cup Contest
Oct 8-9 Tennessee QSO Party
Oct 11-13 YLRL CW Anniversary Party
Oct 14-15 Pennsylvania QSO Party
QRP ARCI CW QSO Party
Lbero-Americane Contest
Illinois QSO Party
Oct 21-22 Texas QSO Party
Jamboree on the Air
RSGB 21/28 Mhz SSB Contest
Worked All Germany Contest
Texas QSO Party
Oct 25-27 YLRL SSB Anniversary Party
Oct 29-30 CQ WW DX SSB Contest

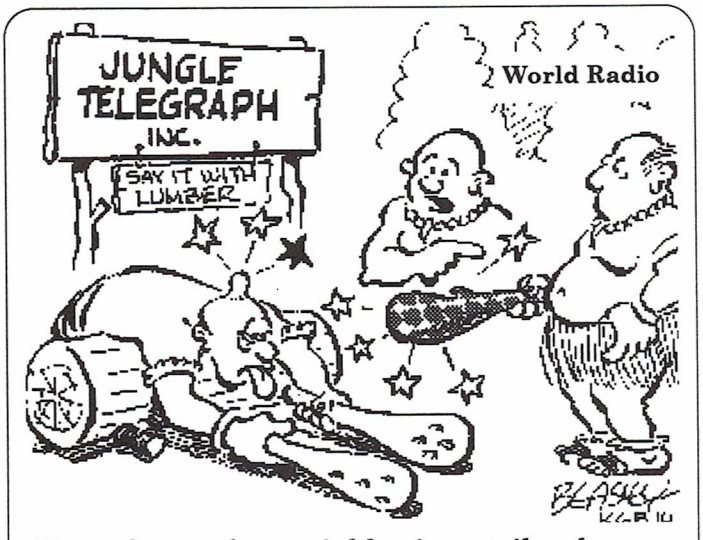
Exchanges:

Illinois and PA QSO Party = RS(T) + QTH

YLRL Anniversary Party = QSO Number, RS(T), and QTH

CQ WW DX Contest = RS + Zone

de Barry, KU3X.



He's from the neighboring tribe...he say you're using too much power–you splattering over entire band

New Product Review

by Mark, WA3KIF

For those of you who own a Yaesu FT 11R (or other Yaesu HT) Hand-held (billed as the smallest HT and it really is a full featured SMALL HT), I have found a terrific product made by Yaesu for using your HT mobile.



It is a cigarette lighter adapter for powering AND charging your HT while in the car. One end of a nifty coiled cable (similar to a telephone cord) is a male cigarette lighter plug (standard for most cars-12 volt). On the other end is a THIN adapter which slides onto the back of the HT. The wire comes down from the HT so as not to obstruct use and this slide on clamp is very thin and also does not interfere with its operation.

The price is approximately $40.00 and can be purchased from any amateur radio supply house. This makes and ideal configuration when used with "The Power Station" described in earlier article.

With these two pieces of equipment, one could have emergency/supplemental HT operation for weeks (literally!).

Silent Key

Don Smith KC3CV

Don Smith, KC3CV became a silent key recently... Don, from Allentown, was a past president of the Lehigh Valley Amateur Radio Club. (W3OI). He was active in the Swap Net of that group for years.

For Sale:

Ten-Tek Omni A
949 MFJ Antenna Tuner
234 Ten-Tek Speach Processor
KR50 Ten-Tek Memory Keyer
1827 Frequency Counter
5BTV Hustler Omni antenna
all manuals
Full price for all $400.
Call John N3DSP @252-5442

Big Gun on a Budget
or
"How to do anything with nothing"

by George AA3JU

This article is at least a month late because I have gotten myself involved in yet another BIG PROJECT. Oh you know the kind, they start out with buying a new cup and saucer and end up with you painting the house. Actually this big project was a set of triplets and is not quite yet finished. Actually I don't know if it ever will be but I keep plugging away. And that sort of summarizes this months article, hard work makes great stations.

Here is how it all started: I heard this station on one day operating from some obscure and arcane little speck of a country. I spent hours calling into the ether with little success. Yet I could hear the BIG GUNS like W3LPL, K1EA and even our own K3ANS work this fellow with ease. I was getting frustrated, in fact panicked. How on earth could I ever hope to work East Jabib or ever hear Watzir, it's only licensed operator, say: "AA3JU your 59 QRZ?" I needed a better station! After some study the BIG PROJECT was at hand and ready to get started.

Now first off let me say to the handwringers out there that these big gun stations did not just walk into HRO and put their Gold Master Card on the table and say "I wants me a BIG radidio station" Actually there's is a labor of love and hard hard work. I found out quickly that to get to the top of the honor roll you have to work for it, the honor is not for sale at any price! The first step was to listen to them and emulate their style so to speak. I have heard many fellows get DXCC and over using QRP stations. Fact is that I my self am nearing that goal from my mobile. You don't get through being sloppy . There is such a thing as technique and used well you can get through. Some quick hints: Find out where the other fellow is listening, don't assume that just because your swell new Yeawood DX 3000 is crystal accurate on both send and receive that our buddy Watzir has as good a radio. Fact of the mater is that in East Jabib they only get a supply ship once every two years and it very well may not have a fancy new ham transceiver on it. Second Use your whole call! This last 2 thing is strictly for DX nets which is about like saying you went fishing at the Old Fish and Pay lake.

Next the antennas had to get worked on. I know you love your G5RV but frankly it is not an antenna you will find anyplace at a YCCC, FRC or PVRC station. (Yankee Clipper Contest Club, Frankford Radio Club, Potomac Valley Radio Club) These fellow are serious about being heard. I personally could not afford to put up a stack of monoband Yaggis for each band but found some stuff that was much higher in performance than what I had. A mono band ground plane for instance will out perform your trap dipole for DX purposes. It's lower angle of radiation and slight gain make it a good choice (Along with the fact you can make one for about $5) I made some non stearable beams too. Four fairly equally spaced saplings made a good spot for a stationary quad. Even though it is low to the ground I get 6 Dbd out of it and that is pretty good! That antenna cost me about $25 to make. The list goes on and on. (Sometime ask me about how the five element wire monoband 20 meter Yaggi came to be!) The best place for ideas is the ARRL antenna handbook. Mine is parked right next to the john and is dog eared and has water spots on it.

I honestly loved my old tube radio. Ahhhh my beloved Drake Twins. Worked a lot of countries with that venerable old radio. I paid a measly $350 bucks for it and sold it for nearly the same. That is about what you would expect to pay for a decent hand held radio. Difference is that I worked the world (literally) with that grand old gal. Now tell me who are you talking to on that palmsized squawk box? Oh yes and one other thing, the old Drake was quite instrumental in helping me make the jump from five to twenty words per minute code. So in addition to giving me DXCC and WAS that glow in the dark dream handed me my extra class ticket. Not bad for something I basically got for free!

Now I am sure your saying "Hey where can I learn more?" At least I hope you are. The answer is simple: If you can't run with the big dogs at least listen to them bark. I just spent the evening talking with Steve, Charley and Wayne, and some others. Now without dropping calls I can tell you that in the world of artillery these fellows definitely class as Howitzers. And I listened. And I go over on the projects, and watch and learn by doing. Fact is a big complaint seems to be that the new ham is just not interested in doing much of this technical stuff at all. Seems they are busy tying up the repeater with autopatch calls to their wives or endless discussions on J-Poles. That's all well and good I suppose but what ever happened to self training and technical excellence? Well anyway if you want more I have a tower going up pretty soon and after that a Sterba Curtain for 40 meters. I also have a few slots open on my team for PA QSO party. I hope I hear from one or two of you.

I am going to keep pushing this notion of doing better for all of us. It is important to me because of a conversation I had with a non ham I had at a Radio Shack store recently. We were talking a bit about their 2 meter mobile radio. The fellow explained to me that he had no interest whatsoever in ham radio because "it's just like CB only you need a license." I was about to disagree with him and then I heard the discussion on the local repeater in the background and I realized more likely than not he was right. So hopefully I have deflated the notion that you have to be rich to be good. The only real wealth you need is a wealth of desire.

de George AA3JU.

REGISTRATION FORM

RADIO AMATEUR CIVIL EMERGENCY SERVICE (RACES)
AMATEUR RADIO EMERGENCY SERVICE (ARES)
Northampton County , PA

NAME_____ **CALL**_____

Address: _____

City:_____ State/Prov.:_____ Zip/PC: _____

Bus. phone:_____ Home phone:_____ County:_____

License Class:_____ Primary radio interest:_____

Check (✓) bands/modes you can operate:

	160	80	40	20	15	10	6	2	220	OTHER
CW										
FM										
RTTY										
SSB										
MOBILE										
PACKET										
IF OPERATING PACKET, THE CALLSIGN OF YOUR PBBS IS: _____										

Can your home station operate without commercial power? [ ] Yes [ ] No

If yes what bands? _____

Signed:_____ Date: _____

Please fill in the above application and mail to:

Clarence Snyder, W3PYF, Radio Officer
c/o Northampton County EMA
Greystone Building
Nazareth, PA 18064

PLACE
STAMP
HERE

Clarence Snyder W3PYF Radio Officer
Northampton County EMA
Greystone Building
Nazareth, PA 18064

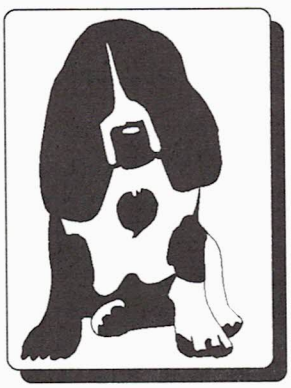
Fold Here

Fold Here

Anyone we know?

"Say, Zeke, why is your ole dog bowfin '?"
"Because he's a- lyin' on a cocklebur. "
"Then why don't he get up off the cocklebur?"
"Because he'd a-rather howl. "

There are people who are like Zeke's dog. They enjoy being mad much more than they could possibly enjoy curing the gripe du jour. I once said to a particularly persistent sourpuss, "Look, you have to decide whether it's more fun complaining about this problem or fixing it. That's up to you .Let me know when you figure something out.



" That was several years ago, and I haven't heard back from him Which was sort of the idea in the first place.

Hmmm .One of the disadvantages of going to college is that it takes many words to tell a jerk to shut up But this way, you do not eat a fist, because you can escape while the guy is still figuring out that you just told him to stuff a sock in his yapper.

You may have noticed that hams seem to have our statistical share of soreheads, airheads, knuckleheads, windbags, wise-offs, horses' behinds, old goats of all ages ,and a handful of just plain creeps and weirdos.

However, despite our occasional goofiness and once -in- a- while unpleasantness, hams in general are THE kindest and most generous people in the world.

I guess all this is a way of saying that we hams are still in position of putting our trousers on one leg at a time.. See there, We don't need a sociologist to tell US which way the wind blows.

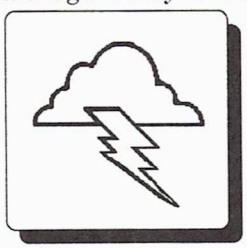
from MARC newsletter of the Mid Atlantic ARC,
WT3P editor.

The Anatomy of a Short Circuit
Man is Electrocuted in theft try.

From the Chicago Chapter of QCWA .]

(ARNS)- Police were trying to identify a man who was electrocuted by 138,000 volts while apparently trying to steal copper wire from the power company's substation.

"He was burned pretty much beyond recognition," said Sgt. Terry Urbaniak of the South Chicago District.



A pair of pliers was found next to the man. Fire fighters found no fire when they responded to a call about 3 :00 a.m. but found the man's burned body. Power was not disrupted.

Circuit protection from telemetry devices kept the system running. At the end of ten cycles of alternating current (which corresponds to l/IOth of a second), 15,507 amps were flowing through the remains. The circuit breaker then opened. The victim had shunted the current from C phase entrance to a phase shifting transformer to ground. The voltage dropped on C phase from 80,000 down to 1 7,000.

A hole was blasted out of the bushing feeding the C phase transformer. The victim had disconnected the ground cables. When he touched the ungrounded cables, the current found its way to ground through control lines which terminated in the substation measuring devices. Panels were blown off the racks, meters backened in their holders and wires disintegrated in their troughs.

The victim and his partner got in by cutting a hole in the wire fence. Two sets of foot prints were found entering, only one leaving. Judging from the prints leaving, the partner could have won an Olympic broad jump, high hurdles and maybe the 1 000 yard dash!

Thanks to KE2ED

Overheard

"The driest town I ever saw was in Kansas. They couldn't sell liquor there at all except to snake bite victims. They only had one snake in town and by the time I got to the head of the line, the snake was too pooped to strike"

from the September '93 Omar H. MungSociety "Ohm's Law newsletter via the ARNS Bulletin.

Skeleton crew

There are four main bones in every club

The wishbones
Wishing somebody would do something about the problem

The jawbones
Doing all the talking, but very little else

The knucklebones:
Those who knock everything.

The backbones :
Those who carry the brunt of load and do most of the work

All Amateur Radio Operators are invited to
Participate to the DLARC, RACES & ARES nets
on 146.70 W3OK/RPT with an alternate of W3PYF/RPT 145.11
W3OK trustee Rick Saeger, K3OO
The Nets are held on Sundays at 9:30 AM and Wednesdays at 7:00PM

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DLARC INFORMATION LINE 820-9110

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The W3OK CORRAL is published monthly and is the Official Publication
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==1994-1995==

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--CLUB MEETINGS

All regular meetings of the D.L.A.R.C. are held on the first Thursday of each month at 7:30 PM at Northampton County Community College
TALK IN ON 146.70
Any comments or articles contributed to
this newsletter should be addressed to
Clarence Snyder, W3PYF, Editor..717 Porter Street, Easton, PA 18042-1548

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