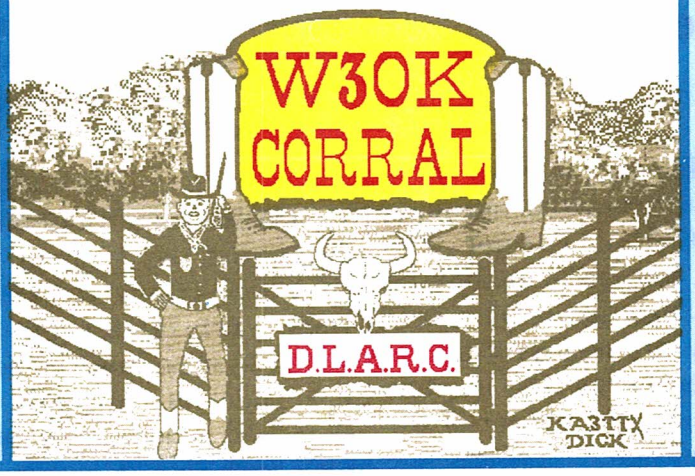
DELAWARE - LEHIGH AMATEUR RADIO CLUB, INC. W3OK

August 1995



SPECIAL SERVICE CLUB

ARRL Affiliated Club

DLARC HAMFEST AUGUST 13

Get ready for Sunday August 13

by Chuck KD3SQ

This is the last chance in the W3OK Corral to remind you of the DLARC Hamfest coming up this month on August 13th.. All committees are working hard to make this the best ever.
Committee Chairpersons include:

Ticket Sellers.....Don, KA3JWE
Tailgaters.....Dave, N3GJX
General Parking.....Ken, N3IYX
Security..... ....Carl, N3GRK
Financial.....Dick, KA3MOU
Vendors.....Tom, N3LLL
VE Testing.....Robin. WA3T
Site Director.....Ray, W3TDF
Talk-in..... Barry, N3NVA

The club needs help, if you have not volunteered contact one of those above.

Gates open to vendors and tailgaters at 5:00 AM and we open to the public at 8:00 AM. Hot breakfasts are available, there is plenty of parking.

VE Sessions at 10:AM and 1:30 PM. There will be lots of goodies in the indoor vendor area and bargains galore at the outdoor flea market, so please support **YOUR** Club and come out to **YOUR** Hamfest. Give me a call if you have any questions, and I'll see you on August 13.

de Chuck, KD3SQ, Chairman

Easton Hospital Run Sunday Aug. 6

Once again we have been asked to handle the safety communications for the Easton Hospital Run to be held on Sunday August 6 in Easton.

Contact **John, N3IGA** if you can help.. We have to gave about 9 people for the three hour affair. You will have to be at the Hospital parking garage at 8:30 AM and will be done by about noon.

Those who operate will again receive Tee Shirts.

RFI got you you(or your neighbors) down?

DLARC MEETING August 3rd 7:30 PM

At our next general meeting on August 3, Bill VanHorn, K3CP, will present a program on dealing with RFI, TVI and interference in telephones. He'll talk about how to hunt down RFI, how to eliminate RFI, and how to keep your radio shack so RFI-free that you can fire up the rig and still watch every channel on the shack's TV without interference.

Do you know what to do when the problem is not yours: how to keep good relations with neighbors -- so they don't become irate neighbors?

Hear Van on RFI at the **August 3 DLARC** meeting at 7:30 pm, in **Room 282, of the College Center in Northampton Hall, Northampton Community College**.

Note: Our plans for a program on "Surfing the Internet..." are wiped out, at least for a while, until we determine how to get telephone line access to our meeting room.

Pity the Control Operator

by Ken, KE2EP

It's a tough job, but somebody got to do it. More than just an expression, it's a brief but adequate description of the job of the Control Operator. The Control Operators assist the Trustee in monitoring the repeater for proper use. Sometimes, the user of a repeater forgets that they are transmitting via the Trustee's callsign, not their own. The input to the repeater uses your callsign, the output of the repeater uses the Trustee's callsign.

No one is perfect. Neither the users of the repeater nor the Control Operators are perfect. On most repeater systems, Control Operators are taught to show great restraint, they very rarely speak on the air about on-the-air repeater usage. Our repeater is considered by most to be quite liberal, but there are some limits to what we will and will not permit to be done on the system. We use the analogy of "a guest in our house" to describe the relationship of repeater users to the Trustee. In effect, you are borrowing his rig and antenna and the Trustee is also (along with you) responsible for all transmissions. As the Trustee must work and sleep, he uses Control Operators to monitor the repeater when he cannot.

It is possible for Control Operators to make mistakes, to deal unfairly with repeater users, and, in general to abuse the trust granted to them by the Trustee. This rarely happens in real life, but is certainly possible. We ask you to cooperate with the Control Operators and comply with their requests, even if they seem to be improper at the time. If you feel you have been treated unfairly by a Control Op, call the Trustee. Do not argue with the Control Operators or defend your actions over the air!

By way of example, several repeaters require users of the machine to ID at the start of communications. Part 97 of the FCC rules only requires identification at the end of communications and every 10 minutes during a QSO. On most repeaters, a Control Op will come on and request your ID, if you do not give it at the start. It is wrong to argue the rules with the Control Op and quote the FCC rules. The FCC rule applies to all; however, as "guests in our house," some additional rules are imposed. You must ID at the start, if you wish to use the repeaters. If you don't like the rules of a machine - don't use that machine. And please, please don't argue with a Control Operator.

On the subject of Control Operators, let us not forget that the Amateur Radio Service is proud to be a self-policing service. It is the duty of each Ham to help other HAMs abide by the rules. When you hear something "off color" or business related -- it is your duty to gently remind the other station that their actions are improper. The Control Operator's work should be done by the Amateur Community, and the Control Op should only be needed if there are no other HAMs available.

Repeater Range

by Ken,KE2EP

Did you ever wonder just who can hear you when you use one of our repeaters?

What is the Repeater's coverage area? Read on, the answers will surprise you! Well, for those of you who like the technical nitty-gritty here are some facts to consider. Our repeater system is coordinated, and the nearest repeater that shares our frequency is over 70 miles away.

In this example, we will consider the halfway point to the next repeater as being "our" area. That means we have an area of coverage which is a circle.

The circle has a 35 mile radius and, of course, a 70 mile diameter. If you dig out one of those old high-school trigonometry text books (you did keep them, didn't you?), you will find the following formulas:

The circumference of a circle is pi * Diameter.

The area of a circle is pi * (Radius * Radius).
Recalling that pi is 3.1416:

It is easy to see that the Repeater's area is a circle 3.1416 * 70 miles or 219.912 linear miles circumference. However, the area of coverage, may come as a shock to you. It is 3.1416 * (35*35) or 3,848.46 square miles of coverage.

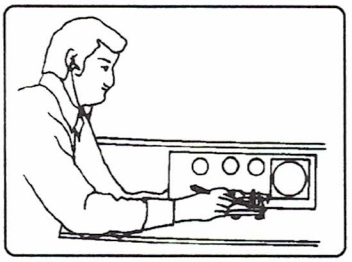
These are very conservative figures. Our signals definitely go a lot farther than the 35 mile radius used in the example.

de Ken, KE2EP

Amateur radio, what is it?

by Skip, K3ZTJ

Last night a young man who had just passed his exam told me he was only interested in FM repeaters. The longer I thought about what he said, the more upset I became. Upset because there's a big wide wonderful world out there with millions of people, and he's turning his back on all of them.



This hobby has many challenges and I'm only asking for you to consider them. Its easy to push a button a talk to your neighbor down the street, but your radio can take you to places that you may only dream about or enable you to make a contact with a sinking ship and help save them.

When you become an amateur you start on a path to adventure in Ham Radio. Your ticket can be the beginning of a life long hobby that can take you anywhere you wish.

What do you do as a Ham Radio enthusiast? Would you like to learn more about the opportunities for Ham operators ? Where should I start?

FM is a good place to learn some operating procedure and dialogue. Hey, it's ok to make mistakes and ask for help we all had to start somewhere. The local repeater on 2mtr FM can be used by anyone. It does have some special uses, EMS disaster drills, weather alerts, coordinating local events and autopatch. Fm can also be used on simplex but these are local contacts.

VHF/UHF frequencies with a modest station can produce contacts of several hundred miles on phone and CW. The drawback with the frequencies above 50 MHz is that you have to wait for a band opening. Ground wave is reliable only for short distances.

HF, 160 meters to 10 meters or the low bands can produce contacts around the world with low power [10watts] and modest antennas. You could talk to a ham in Germany one minute and the next minute be talking stateside. DX contacts are outside the United States on the low bands. All modes of are permitted but Fast Scan TV.

Don't miss out on the other modes of communication. **Digital, CW,** and **ATV** are operating modes that can be used on all bands.

The digital modes require a TNC [terminal node controller] and some interfacing to the radio. Some TNC's can be used for radio teletype **RTTY**, Packet, APRS, Clover, Amtor, Pactor, Slow Scan TV [SSTV], and CW.

I know everyone says they hate CW, well give it a chance. Start slow with the novice bands and after a while CW will be just as if you were using a microphone. CW is still the most reliable mode and compact mode of communication.

Want your own TV station ? Fast Scan TV is what you need. Some areas have repeater systems dedicated to fast scan.

When I first called CQ on 40 meters CW I made a few contacts. Then I started to make more and more. After a while, I figured that it was time to see what awards were available to me. My first award was the ARRL Rag Chewers Club [RCC]. I did it as novice on CW. Awards look nice on the wall of your shack as well as QSL cards. Everyday I would check the mail for QSL cards sent to me from all over the world. I would then check off the card in my logbook and DXCC list or WAS list. 40 and 80 meters were great for stateside contacts. I made a lot of friends all over the US. I still go to hamfest and meet some of the guys I talked to years ago and locals. Maybe that's what is meant when we say were in the Ham Fraternity /Sorority.

The contest bug bit next and I played contester for a while. I learned about MUF's, gray lines and studied propagation. I operated many HF and VHF contest. There weren't too many stores around and I didn't have much money back then so I also had to build much of my equipment. Here is were the experimenter was born. Just think after 30 years I still haven't experienced all that there is to Ham Radio, everyday there seems to be a new challenge.

I think of my Ham experience as a long walk down a dimly lit hall with many doors. Some of the doors were unmarked, and others had brightly lit signs with large letters, inviting me in. The key to all of this was my Ham Ticket. Then I came to some locked doors. Try as I may I couldn't open them; I needed another key. Upgrade Now more doors opened. There were people standing outside shaking my hand, patting me on the back and saying fine business OM. This is great, making life long friendships.

I'm offering a challenge to you, walk down that hall, and if you're afraid, I'll light your way. I won't hold your hand, but I will help you up if you stumble. Remember, you're now a member of the Ham fraternity/sorority, and we help each other.

de Skip, K3ZTJ

Aliens from outer space to land in the US

by Rob, WA6TBH



For the first time, the U.S. Immigration and Naturalization Service after some prodding by the U.S. State Department, will officially allow two aliens from space to land in the United States.

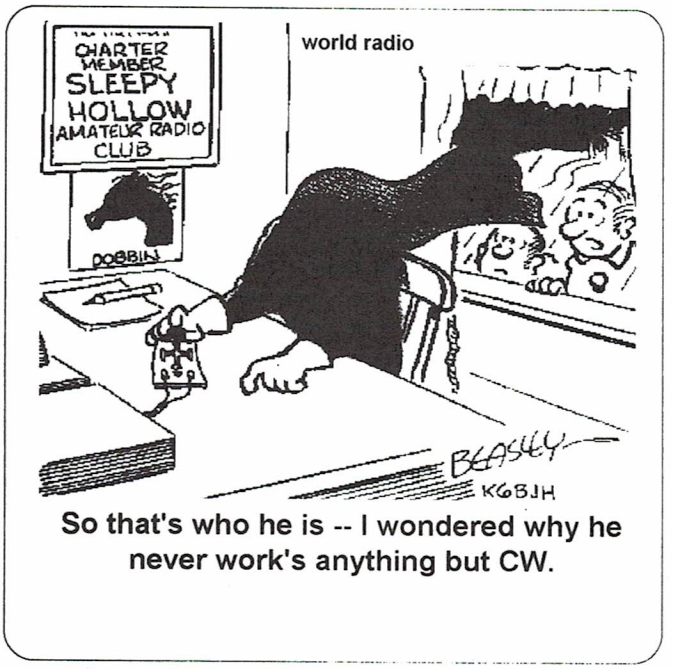
It seems that U.S. entry visas for cosmonauts Vladimir Dezurov and Grennady Strekalov were forgotten before the launch of Mir-18. They were launched from Kazakstan on March 14 and are scheduled to land either in Florida or California in early July aboard the Space Shuttle Atlantis (STS-71). The U.S. State Department has, for the first time, asked for a waiver for **"aliens from outer space."** The INS has agreed not to arrest the cosmonauts for illegal entry into the United States.

from Rob Landis, WA6TBH via packet

Autopatch hint

by Bob, KE3AW

If you need to make an autopatch, but you are marginal into the repeater, it is wise to let the machine repeat the number dialed. That way you can tell if the correct number went through. It can help prevent mis-dialed calls and frustrations in your attempts to autopatch.



So that's who he is -- I wondered why he never work's anything but CW.

Study fails to find EMF-Cancer link

from the ARRL Letter (Volume 14, No. 10)

The Council of the American Physical Society (APS) has issued the results of a study entitled "Power Line Fields and Public Health," concerning the potential dangers of cancer from electromagnetic fields that emanate from common power lines and electrical appliances.

The APS concluded that "the scientific literature and the reports of reviews by other panels show no consistent, significant link between cancer and power line fields" and "the preponderance of ... research findings have failed to substantiate those studies which have reported specific adverse health effects from exposure to such fields."

"While it is impossible to prove that no deleterious health effects occur from exposure to any environmental factor, it is necessary to demonstrate a consistent, significant, and casual relationship before one can conclude that such effects do occur. From this standpoint, the conjectures relating cancer to power line fields have not been scientifically substantiated."

The APS said that billions of dollars are being spent by states and municipalities to mitigate and litigate this perceived problem and "the burden of cost placed on the American public is incommensurate with the risk, if any."

A background report on this issue by David Hafemeister is available on the Internet through the APS World Wide Web HomePage at: http://aps.org.

de Bill/WA3SCW

ARRL MDC Bulletin Manager

He knows

He who knows not, and knows not that he knows not, is a fool, **Shun him.**
He who knows not, and knows that he knows not, is simple. **Teach him.**
He who knows, and knows not that he knows, is asleep. **Waken him.**
He who knows, and knows that he knows, is wise. **Follow him.**

Arab apothegm
via K3CP

A Beginner's Course on Computers.
How do they work?
Part 3 of 3
by Van, K3CP

Adding numbers in the binary system is simple. It looks strange at the beginning and might lead you to believe that it is difficult. Adding 1 and 0 equals 1, but 1 plus 1 = 10. The answer would be 2 in the decimal system, but remember, there are no 2's in the binary system. 2 plus 4 would equal 6. To express 6 in binary, put a 1 in the 4th column and a 1 in the 2nd column. 1010. We can better understand this if we simplify Table 2 by removing the explanatory headings and deleting the spaces between the digits. see Table 4.



Table 4

Binary	Decimal
0000	0
0001	1
0010	2
0100	4
1000	8
1111	15

If a programmer wanted to have the computer print an upper case "A" he would enter 1000001 (65). Early computers used a SPST switch for each bit. To enter an "A" the programmer would turn on the seven and the one switch and hit a push button switch to enter them. This is what was done before the development of languages like Assembler, BASIC, PASCAL, FORTRAN, C, COBOL and others. Using one of these languages, the programmer can use codes that have a resemblance to English.

Addition in Binary.

To add 5 and 13 the programmer would enter the numbers on a keyboard and the programming language would convert them to machine (binary) code. This in turn would cause transistor switches or gates to be set. A one would mean the switch is on and a zero would mean it's off. The program then puts 0101 (5) at one address in memory and 1101 (13) at another memory location. The process would look like Table 5.

Table 5

	Binary	**Decimal**
	0101	5
	+ 1101	13
Total	10010	18

This information is temporarily stored in RAM - Random Access Memory. Unfortunately this memory is lost when the computer is turned off or restarted. To avoid loss of the data the programmer will save it to a disk, which magnetizes a dot for a one and does not magnetize another dot for a zero. When the computer is turned on again, the data is read from the disk and put back into RAM where it can be manipulated again.

Writing words

To write the word "RADIO" the programmer would use the standard seven bits ASCII code. He could do this by using a word processor that would convert the document or letters into binary and place each one at a different memory address. See Table 6.

Table 6

Binary	Decimal	Character
1010010	82	R
1000001	65	A
1000100	68	D
1001001	73	I
1001111	79	O

Even though eight bits are enough to store all the alphanumeric information they are not enough for all the memory that is needed to store our data. Recall that I said that the computer would store the letters R A D I O each in a different address. Each letter in RADIO is a byte made up of 7 bits. We could use 8 bits, but we don't need that many in this case. When you write a letter you would use a word processor that takes care of all the details. The word processor program would convert each key stroke to the ASCII equivalent binary number and then store it in memory in an address area reserved for this purpose. Memory can consist of many millions of storage locations.

Inside the box.

The heart of the computer is the Central Processing Unit or CPU. Some types are 8088, 80286, 80386, 80486 or Pentium chip. They are the traffic cop that directs all operations. They differ in their speed of operation and the amount of memory they can control.

Summary

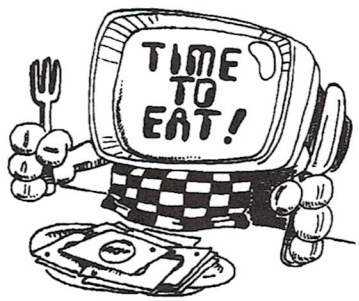
As promised, I have shown you how a computer works, but to simplify it even further I will sum it all up in a few short sentences. A program converts english or other conversational languages to binary numbers. The computer then stores them in memory at an address identified by binary numbers. This article is very elementary, but I hope it has taught you a little about how a computer works and inspires you to pursue your knowledge about computers. Good luck and have fun.

de Van, K3CP

D.L.A.R.C. Annual Picnic

Place: Hacketts Park, Easton
Date: August 20, 1995
Time: 12:00 noon
by Jeff, N3QZT

The Annual DLARC picnic will be held again at Hacketts Park in Easton, please plan on attending and bring along the spouse and family. Food items like the hamburgers and hot dogs and beer and soda will be provided by the club. Its up to us to bring the other items that we all like to have at a picnic, like chips and pretzels and different kinds of salads, desserts (individual servings are best).



Listen to the Sunday and Wednesday ARES RACES, Nets for announcements as to how you can sign up to bring your favorite dish. I will also be passing a list around at the August meeting for sign up.

Please let me know if you plan on attending this FUN event, this will help greatly in making sure that we have a suffecient amount of things to eat and drink. You can get hold of me, N3QZT on 146.70 or leave a message for me on W3PYF-3 message board. Or you can contact KA3MOU the same way.

Thanks and see you on August 20 at the picnic
73 de Jeff, N3QZT

FCC Rest in Peace? Not yet

from Amateur Radio Newsline 932

Is the FCC on its way to oblivion? A think tank with ties to House Speaker Newt Gingrich released a proposal to dismantle the Federal Communications Commission and replace it with a small executive branch office. The plan would turn over the nation's airwaves to broadcasters, cellular companies and other current holders of FCC licenses. Future licenses in all services would be sold to the highest bidder. How could such a sweeping change impact on Amateur Radio?



Whatever support amateur radio gets from the FCC now would be a thing of the past if the Commission is dismantled. That's one opinion voiced by an opponent of the Progress and Freedom Foundation's plan. The foundation proposes to drastically reduce the Commission's staff which numbers about 2,200. Perhaps most significant to amateur radio all FCC rules and regulations including Part 97 governing the amateur service would be phased out. The foundation's idea is getting thumbs down from Alabama ARRL Section Manager Tom Moore, KL7Q. The Foundation proposes setting up a new office of Communications. It would oversee privatization of the airwaves. Many federal laws would be repealed, which must of the FCC's regulatory responsibility being transferred to the states. Anti-trust regulators would take over some functions. Moore believes amateur radio would be a loser under the think tank's plan.

Hams aren't the only ones who don't seem to like the idea of dismantling the FCC. The proposal is also drawing criticism from Commission Chairman Reed Hundt.

And the FCC is far from being down and out. Representative Edward Markey of Massachusetts, the senior Democrat on the House telecommunications panel says that Congress is considering legislation that would give the FCC even more power and influence than it has right now.

.from Amateur Radio Newsline

For Sale

Kenwood TS-820 Transceiver. 10, 15, 20, 40, 80, 160 meters.with: MC-50 Desk Microphone, YG-88C, CW Filter, **$350.00**

Tucker T-1000 Antenna Tuner with **Dummy Load** and Manual (Specs identical to MFJ-949E) **$100.00**

Neil Stackhouse/N3QEK. (610)**863-5825** after 4PM.

SB-102 Transceiver, HP-238 Power Supply, H-24 Speaker, S-36 Shure mike, and the HD-1410 Electronic Keyer. I have extra power output tubes (6146) and extra tubes for the radio. I also have all the books for the SB-102 plus other manuals. I'm asking **$250.00** or will consider interesting trades. Contact me either through W3PYF's BBS or by phone before 9 pm, **837-7487** de John Holmes, N3IGA

Is it time for a repeater revolution

by Donald L. Stoner, W6TNS

A short time ago, I visited one of our dealers and got a real shock. The lady, a co-owner and long-time ham, blew me away. In the course of our conversation, she mentioned that if one really needed communications in an emergency, a cellular phone was the best insurance policy. She had recently purchased one and felt much more secure driving though (let's see--what's the politically correct expression?) less fortunate neighborhoods. Wait just a darn minute. She's a long-time ham, has her choice of "free" handheld radios from the stock on hand, and isn't bashful about talking on ham radio. Yet she still relies on a cellular phone for her safety?

You heard me right. "How come," I hear you asking? You thought repeaters were supposed to be our lifeline in case of trouble, eh? "You cannot depend on calling the local repeater and having someone help you," she explained. There was no animosity toward newcomers but simply a underlying tone that people just don't give a damn anymore. "I've called for assistance, when I know people are listening, and no one answers me. Other times, the existing users tell me to standby until they have finished their conversation," she stated. When she mashes 911 on the little "flip-phone," it always works--there was always someone immediately ready to help at the other end of the circuit.

The conversation really upset me. In my opinion, this is a sorry state of affairs. While we call it a hobby, ham radio is still a service. Part of service is people helping people. NARA has used the safety aspects of having a two-meter handheld as a "hook" for getting interested in ham radio. We said in our advertising, "why spend all that money for a cellular phone, when you can do almost the same thing on ham radio for less money." In another place, I can recall saying something to the effect that you can buy a two-meter handheld radio for less money than one year of average cellular charges

If the dealer comments are typical around the country, we Amateurs have a serious problem. While one of the missions of NARA is to guide people in being "good hams," it's pretty tough to change human nature. In lieu of that, I believe every repeater should have a 911 line on in. But, that's not very practical either. Many repeaters are in locations where a phone line is not available. In other cases, adding an autopatch to the repeater could be a financial hardship for the owner/operator.

But what about this? Why can't we hams install repeaters that are only connected to a land-line, as a service to other hams? With the relaxation in Part 97.113 of the FCC Rules and Regulations, we are somewhat less concerned about what is said in a business context. Keying the proposed repeater would kick off an ID and dial tone. It would be a great "drawing card" for ham radio and a good vehicle for local media publicity on the service hams are providing.

Closed repeaters

Speaking of repeaters, I've received several letters from newcomers asking about "closed repeaters," what they are, why they are and how one accesses them. I still have not answered their letters because, frankly, I don't know what to tell them.

A closed repeater is one operated by an individual or group and restricted to a select group of users, usually those approved by the individual or group. In other words, if you are not approved, you may not use the repeater.

In some cases this is done to insure that the users also provide financial support for the on-going maintenance of the repeater. By joining the group and paying dues, you are allowed to use the repeater.

In other cases, repeaters are closed simply to keep out the "riff-raff." All too often this means newcomers who may, or may not, be very sophisticated. If a ham, at the local radio club or hamfest, seems to have the "right stuff," they are asked to join the repeater group. Otherwise, they can go pound sand

I know I am going to tick off a bunch of closed repeater operators but, in my opinion, repeaters should be open to everyone. The spectrum they use belongs to all of us, not just a privileged few. Maybe someone will write and explain why a repeater should be closed. But until I can be persuaded otherwise, I think they violate the spirit of ham radio. I'm incredulous the FCC permitted this concept in the first place. I'm also surprised that one of these closed repeater operators hasn't ticked off a lawyer/ham and gotten sued for violation of some supposed right or freedom.

73 de Don, W6TNS

The preceding story was picked up from packet by **Dick KA3MOU,** and with his comment. " *I am glad that the W3OK Repeater is not like the one this lady talked about. The Delaware-Lehigh Amateur Radio Club repeater is an open and friendly repeater."*

Updates available to rosters

If you didn't pick up your copy of the Club roster update of new members since the main roster was published, copies will be available at the August club meeting.

Contest Calendar

by Barry, KU3X, Contest Editor

Aug 2 West Coast Qualifying Run. 10-35 WPM
Aug 5-6 YO DX Contest
ARRL UHF Contest
North American QSO Party, CW
W1AW Qualifying Run. 10-40 WPM
Aug 12-13 Maryland-DC QSO Party
Great New Mexico Chile Chase
Aug 19-20 SEANET 1995 SSB Contest
Aug 19-21 European DX Contest, CW
ARRL 10-GHz Cumulative Contest
KCJ Contest
New Jersey QSO Party
North American QSO Party, phone
SARTG Worldwide RTTY Contest
Aug 27 W1AW Qualifying Run. 10-35 WPM

Exchanges

NA QSO Party = Name and state/province
YO DX Contest = Signal report and ITU zone
Great NM Chile Chase = RST and state/province
Maryland-DC Party = Signal report and QTH
SEANET Contest = RST and serial number
KCJ Contest = RST and two-character content code
SARTG RTTY Contest = RST and QSO number

de Barry KU3X

DLARC Club jackets

The jackets are light lined with embroidered name & call on the front. Embroidered on back **Delaware-Lehigh Amateur Radio Club, Inc.** Available in Small, Medium, Large, XLarge, XXLarge and XXXLarge.
Cost for each Jacket is: Small, Medium, Large and XLarge.....$44.95
XXLarge XXXLarge.....$46.95 Plus shipping and handling.
If interesting in ordering a Jacket let Dick Dech, KA3MOU know. 73 de, Dick, KA3MOU

Digital Signal Processor Bypass

by Barry, KU3X

If you have a digital signal processor and don't use it all that much because it is a pain to have it on line all of the time, then this mod may be for you.

I found that having to use the volume control on my DSP-9 and not being able to use the volume control on my radio a real pain. When putting the DSP on by-pass, I still was locked into using the volume control on the DSP unit. This aggravated me enough that I finally took the unit out of line and let it set and collect dust on the shelf.

If you have an external speaker with two inputs, then here is what you can do: Get a "Y" adapter for your speaker output jack on the back of your radio. Plug input "A" from your external speaker to one of the audio jacks on the "Y" adapter on the back of your radio. Now plug the DSP's audio output into input "B" of the external speaker. Connect the input to your DSP unit to the other output of the "Y" adapter on your radio. If you did this simple job correctly, all you have to do is switch between "A" and "B" on the external speaker and you will totally bypass the DSP unit and will be able to use your radio's volume control when not using the DSP.

July 7 VE Test Session

by Robin, WA3T

At this session, seven candidates took a total of 13 elements. There were two upgrades, and four new licences...

Daniel T. Ruth, KA3AQV to Extra
Peter B. Ingles, N3VOY to Technician Plus

Donald D. DeMuzio	**new Technician**
Charles M. Dziuba	**new Technician**
John P. Koser	**new Technician**
Charles E. Lamonte	**new Technician**

The VE's at this session were **Bob, KE3AW; Glade, WA3MVQ; Bill, NS3J; Mark, KB3AZR;** and **Robin, WA3T.**

The next test session will be on August 4th; team 4 will be in attendance.

de Robin, WA3T, Team Liason

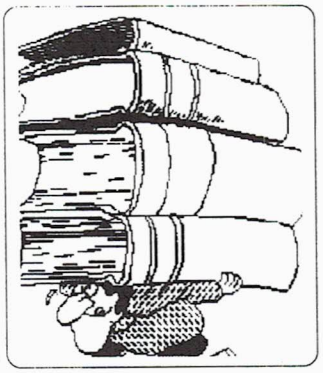


Minutes of General Meeting

July 6, 1995

by Bob, N3OLH, Secretary

The July meeting of the Delaware-Lehigh Amateur Radio Club was called to order at 7:30 P.M. in Room 282 of the Northampton County Community College on Thursday July 6, 1995 by Bob Green, KE3AW, the Club President. Approximately 63 members an guests were present.



Before the business meeting began, Bill, K3ANS, introduced Everett Weller, the inventor of the soldering gun, as a special guest at our meeting. Everett and his brother Carl, invented the gun while operating a radio repair shop in Easton.

Clarence, W3PYF, moved to approve the minutes of the June Meeting as printed in the July issue of the W3OK Corral. The motion was seconded by Ray, W3TDF, and the motion was approved by the membership.

The Treasurers report was presented by the Club Treasurer, Dick, KA3MOU. The report showed a cash balance of $4,102.19. Jim, N3QZS, made a motion to accept the Report and the motion was seconded by Barry, N3NVA. The report was accepted as read.

A membership application was received from

Scott Mc Curdy, N3VGG.

A motion by John, N3NUE, and a second by Bob, N3NET, was made to accept Scott into membership. The membership voted to accept him. Guests were also recognized and welcomed to the meeting.

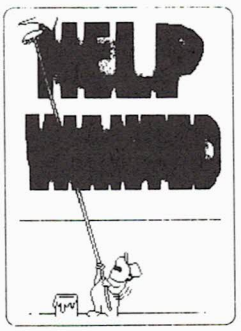
Barry, KU3X, announced that Tony, WB2P, had received an upgrade to his DX 100 award for working 212 countries above the required 100.

Barry also showed the membership a Sony ICFSW7600G short-wave radio that will enable users to enjoy short wave listening while traveling

The President informed the membership of the following awards that DLARC had received for public service activities: A plaque from the American Lung Association for the Club's participation in the Association's 1993 Clean Air Challenge. A proclamation from Northampton County naming the week of June 19 through June 25 as Amateur Radio Week. A plaque from the MS Society for our Club's efforts on behalf of their 1995 MS 150 Bike Tour.

George, N3SQD, announced that the Club has added a Swan 350 HF receiver and a PC to the inventory of equipment for loan to members.

Hamfest Chairmen are looking for volunteers to assist with the August 13 DLARC Hamfest. If you can help please contact one of the following



Ticket sellers - Don KA3JWE

Tailgaters - Dave N3JGX

General Parking - Ken N3IYX

Security - Carl N3GRK

The Picnic Chairman, Jeff N3QZT, also is looking for volunteer to assist with the annual Club picnic to be held on August 20.

George, AA3JU, is looking for volunteers to assist at the Club sponsored Special Event Station to be held on August 26 in conjunction with the Blue Valley Farm Show.

Bob, KU3K, gave a recap of the Club's 1995 Field Day activities and thanked all of those members and wives who made the event a big success.

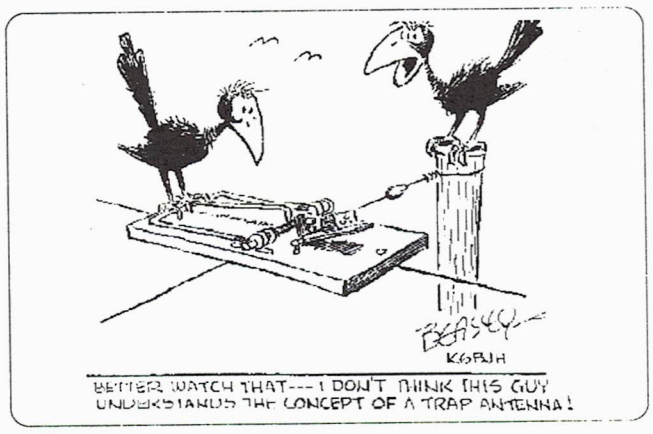
Tom, N3LLL, Chairman of the Technical Committee brought two items relating to the operation of our repeaters before the membership for a vote. First related to whether the 146.70 repeater should use a PL tone on its output to eliminate unwanted interference. After a thorough discussion the membership agreed to the following motion: To put PL tone on the output of the 146.70 repeater for a period of on month using the most inoffensive frequency (least amount of hum). The second related to the tabled motion from the June meeting concerning the linkage of the 444.9 and the 146.70 repeaters. After discussion , the tabled motion, to link the two repeaters under normal conditions with the capability of unlinking them on demand, was passed

Bob reported that 10 of our members provided communications services for the Bucks County Horse Show and that the Club received a $100 contribution for our efforts.

Because of the length of the meeting the evening program was postponed.

The meeting was adjourned at 9:20 p.m.

de Bob, N3OLH, Secretary.



The Prez sez

FCC, ARRL, DLARC, and YOU!

by Bob, KE3AW, president

What is our future with the FCC? We have seen the automation of the FCC's Gettysburg office and the connection with the ARRL's VEC program. New licenses and upgrades have been processed in less than three weeks. Compared with the delays in processing in the past, this is real progress.



Overwhelming response from listeners of W1AW services has supported the ARRL's transmissions of Morse code practice below 30 MHz. There is the strong bet that the FCC will honor this response and dismiss W5YI's petition of opposition to these transmissions.

Is everything going well? No. The FCC has let us down when it comes to enforcement. It often does not use the evidence of rule violations gathered by Amateur Auxiliary program volunteers for legal action, nor does it widely publicize the cases it does pursue.

The FCC is becoming less involved in ham radio. Red tape prevents bringing cases of violators to swift completion. Fines are levied, but actions from that point are extremely slow. Worse, Capitol Hill is suggesting the FCC be dismantled.

What does this mean to DLARC members? In the future we may need ARRL more than ever. Our support of DLARC and ARRL in upcoming issues could be very critical. DLARC is recognized as having a numerous ARRL members, but we should increase that number.

ARRL membership means more than subscribing to QST. We probably never thought of ourselves as a political group, but as amateur radio operators and DLARC members we may need to rally to get the protection and enforcement of the FCC laws on the books. In the future, we may need to find and prepare evidence against malicious interference cases on any of our frequencies, more than we have been doing.

Your support makes a difference. Join and support ARRL. Support DLARC and ham radio in as many activities as you can. Hamfests, Field Days, demonstration stations, and public service activities show the public some aspects of ham radio. They give us the opportunity to discuss the values of ham radio, too. That helps promote our cause.

There are a number of August/September DLARC events, including the big one, our Annual **DLARC HAMFEST on AUGUST 13.** Join in!

73, Bob/KE3AW

Waiting for your license?

Applicants, give the **VE/ARRL/FCC** time to process your applications. However, after three weeks or so, if you have not received anything from FCC, you may wish to check your FCC status.

A toll-free call to either the **ARRL New Ham Hotline 800-326-3942** or the **FCC 800-322-1117** should give you the news you are looking for. When issued a call sign by the FCC, even by telephone, you may operate legally within the privileges of your new license.

The Pennsylvania 67 Award

There are 67 counties in Pennsylvania. May of them are easy to work and confirm. Others are a bear, because they have more bears than people, let alone hams. County-hunting is a popular on-the-air activity, and the Pennsylvnia QSO Party uses counties as a score multiplier. Put it all together and you have a receipt for an operatiig award.

The Mid-Atlantic Amateur Radio Club (MARC) is establishing a "Pennsylvania 67 Award". To earn it, hams must work and confirm all 67 counties in the commonwealth. Any 2-way real-time QSO on a legal ham band/mode will qualify. QSO's made using repeating devices such as FM voice repeaters, satellites, moonbounce and packet digipeaters/nodes are valid because these devices opeate in real or near-real time. Not accepted are messages stored and forwarded through BBSs. this award is for QSOs, not a collection of packet mail.

QSL cards are required. To get all the details on how to apply for the award and have your QSLs checked, send a SASE stamped envelope to:

Mid-Atlantic ARC, ATTN: PA67 AWARD, PO Box 352, Villanova, PA 19085.

from the MARC newsletter, REMARCS, WT3P editor

The ties that bind

or

Learning the code with AA3JU

by George, AA3JU

I am going to say this right off. If you are a proud Technician, absolutely dead set against learning the international Morse code read no further there is nothing here for you, and more likely than not you will get very upset and decide that I am horribly anti social. The fact is that I know I am horribly anti social and so does everyone else and it is not the subject of this article. More I have decided to mend my ways I suppose and actually provide some small public service and help the hopeless with the study of the code. Or at the very least keep you company in the bathroom for the next 10 minutes or so.



Let me start this story at the beginning, in the closet of my friend Jimmy Rosen in Closter, NJ. Jimmy was my buddy through grade school and in his closet was a Heathkit HW 16 a bare 60 watt bulb, a straight key and several well worn Playboy magazines. His clothes were on the floor (so were mine at my house but I did not have the radio I was just a slob.) Jimmy had recently passed his novice ham radio test and was busy talking with fellows around the country with this radio. I asked him how to take this test and he showed me a book. I looked through it and why heck I knew pretty much everything there, nothing too hard. Then he told me about the code. WOW! What an obstacle I thought this is really hard stuff. And it was the only way you could even use this ham radio thing and that was just silly. Now at this time I had a pretty neat Pierce Simpson Cheetah CB set and I could talk to all kinds of people too! And I didn't have to learn anything and it had a microphone! But in my heart of hearts I knew that Jimmy had the cooler set up but that code was just way to hard to learn. That alone kept me off the ham bands for about 20 more years and lurking with the truckers and riff raff on 11 meters. But I was bit and bit hard by the ham radio bug.

A few years back I found out that you could become a ham without ever learning so much as one dit, dah or beep of that silly code and that was GREAT. After due study with Gordon West I became a tech lite. Or would once my license showed up. I found out that I would have to wait 14 weeks to get my ticket. Now what? Well I had a computer and some software to train for the Morse code and I figured what the heck give it a try. See what I thought was that I could get a 10 meter rig and put it into the car right where the old CB was, nip off a few inches from the antenna and I would be able to talk to people as far away as Florida maybe even Mexico who knew! But first to learn the code. So five characters at a time I struggled with those infernal beeps. Not once did any of that indecipherable gibberish seem to make any sense at all! I knew absolutely for certain that I would never once use that silly code but it was the rule so onward I went.

After while it began to make a bit of sense. Sort of like learning big fancy words in vocabulary class and using them at inappropriate times. I was expletively expunged of former transgressions and penury verbiage. I would spell out the street signs I saw in code or at least the letters I knew. And eventually I had learned them all, the letters, those infernal numbers and punctuation marks. And of course the prosigns which were like bonus agony all except slant bar (SHAVE AND A HAIR CUT) which was as close to music as you could get on the ham bands without getting busted. Yup I knew em all, and now was the time to take the BIG TEST.

I walked into the test room the VE team all stood over 7 foot and had long sharp fangs and they were drooling profusely! I just knew they were going to drag me naked and screaming over shards of broken glass to test my mettle. But my jaw was set and I knew what the little beeps said. Or so I thought I did, right until I choked the first time during the warm up! Yup I copied. "Th** is the 5 w**********" One whole minute of shear panic! The test didn't go much better. I had what looked like a page full of gibberish. I answered exactly zero questions correctly. "Good God what was I doing here anyway?" But then the biggest, meanest and ugliest of the VE's came over to congratulate me. Someplace on that paper was 27 characters in a row perfectly copied. And at that moment two weeks into my no code techdom I George C. Cook became a ham. And I knew it! All the shipboard radio room romance, all the secret messages of espionage and Jimmy Rosens closet flooded into my head at once. I had joined the ranks of thousands of others before me and I learned what it meant to be a ham and to have actually put my small little knot into the ties that bind us together in fraternity.

It would take me about another year and a half to make extra. It was always the code that held me back and always the code that would hold my interest. And I have been asked many times since how I did it. How did I do the undoable? So I got a Tee Shirt with the secret written right across the front of it. It says: "Just shut up and learn the code" You see it is so easy to complain you can't do it but easier yet to do it. I know I was the biggest complainer of them all for years and years. Just absolutely useless silly old stuff I would say. But sitting there for 14 weeks silent made me shut up and learn the code. And to get to General and above? Well I had to again Shut Up and Learn the Code. I had a radio but no microphone just a key. And every day I would pound brass till I got better. Yup that's it no big secrets no subliminal cassette tapes to play during my sleep and absolutely no using the technique employed by the German military during the second world war which had a lot to do with alligator clips and 115 volt right from the wall socket. Just sit down and talk to other people with those annoying little beeps Every single day.

I am not the top CW guy in the world. I cannot copy 60 wpm in my head and send it just as fast with my toes. But I do admit to doing it from the car which has a stick shift in it. (That scary little revelation will be expanded on at another time.) I do not chew electrons and spit lightning bolts. And most assuredly I have no direct ties to the almighty. Just put one foot in front of the other and walked in the footsteps of my peers. And you can do it too. No magic "Just shut up and learn the code."

And then you can sing this to yourself in the car: " There he goes just a drivin' down the street going' **DAH DIT DITTY DAH DIH DITTY DAH DIH DAH"** OK well you might not do that but I do and I just absolutely had to work that line into the story someplace or live with it in my head for the rest of the night and you know how that goes!

DI DI DI DAH DI DAH AA3JU

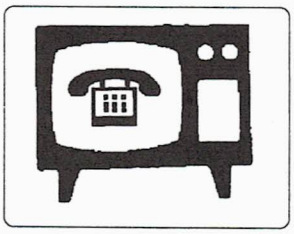
name is George

New Media Systems

Odds 'n' Ends

By Joe Chuk, W3JD

On June 15th, the Senate passed the Telecommunications Competition and Deregulation Act of 1995. This bill provides for sweeping changes in all communication areas, both broadcast and non-broadcast, but it's not even close to becoming law yet, since the House of Representatives is currently working on their version of a deregulation bill. When that passes, a conference committee will have to work out the differences between the two bills to come up with a single version to be sent to the White House. Watch this space for a comparison between the Senate's and House's final versions.



If you've recently gained access to the World Wide Web (WWW) on the Internet, you'll be interested in some recent steps by the FCC to improve their on-line services. The FCC homepage (http://www.fcc/gov) is the access point to all of these resources. There you'll find buttons for such items as the Daily Digest, the Commission Agenda, Auctions, and current Rulemakings.

An especially useful button is one called "Getting Information," which gives a tour of what information is available and where it can be found. It introduces the Commission, the Bureaus, and the Offices, and provides links to all available on-line documents. Like most homepages, this one provides more information than any one individual is likely to be interested in, but it does give immediate access to documents and texts of FCC decisions that used to be difficult to obtain quickly in hard copy.

One of the issues to be covered by both the House and the Senate is the cross-over between telephone and cable service. Technically, a phone company cannot provide cable service in its own service area, but recent court decisions have superseded existing regulation (in favor of freedom of speech) by allowing phone companies to provide video entertainment (video dial tone) on their lines. Coming from the other direction, cable multiple system operator (MSO) Time Warner has been offering cellular phone service since November of last year. In Rochester, NY, the company has captured a third of the new cellular service market. For the consumer, there is little distinction (beyond greater convenience) between this wireless service and traditional wireline phone service -- despite the current restrictions on the ownership of traditional systems.

Speaking of wireless systems, the University of California at Santa Cruz has just completed a nine-month pilot project that supplemented the typical wired computer network with one using radio waves. On the "Ricochet" network, students used special wireless modems equipped with a two-inch rubber duck for transmitting signals to receivers mounted at regular intervals around the campus. Metricom, the company that built the network, is currently building similar systems at Stanford University, the University of Oregon, and Oregon State University.

de Joe, W3JD

For Sale

Radio Shack 2meter HT with extra battery. Mint condition. Still in box. Asking $225.00

Call Joe Bianco @691-5382

500 Ft of 10 fiber, Fiber Optic cable in one run 50 cents per foot.

3/4" 75 ohm hardline in about 3 runs under 100ft. $1.00 per run.

Wanted: 25 ft or larger tower. Will pay shipping or wil take down n Lehigh Valley.

Satellite dish from 3-10 ft in diamater with or without mount. If larger, With Mount.

Call, **David, N3SQE @838-7355.**

Putting a new radio in your car

by Alan, WO4H

I have had several requests for information on the proper routing of coax and electrical cables as a result of continuing publicity that has been given about damage to Computer Control Command modules in motor vehicles created by RF energy during mobile operation. The GM Tech Center in Warren, MI has many ongoing projects involving EMF and RF in the envoirnment.

One of their recommendations pertaining to mobile operations is reprinted in this Newsletter.

The last update was 1992 and it still valid along with the part numbers. I purchased the kit a few weeks ago for a 1995 model vehicle. You will need to order the long bolts and spacers for the battery.

de Al, WO4H

TRANSCEIVER INSTALLATIONS

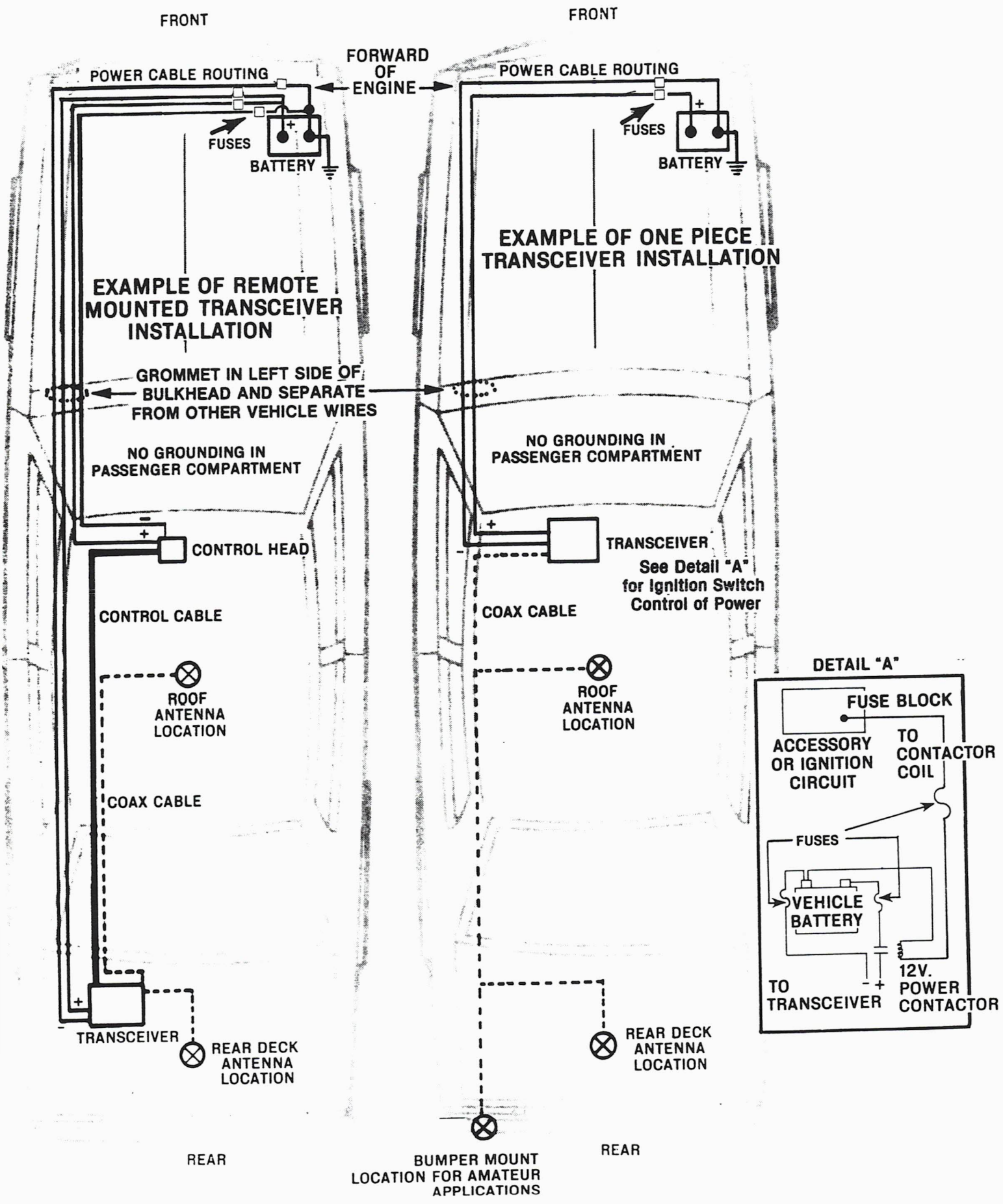
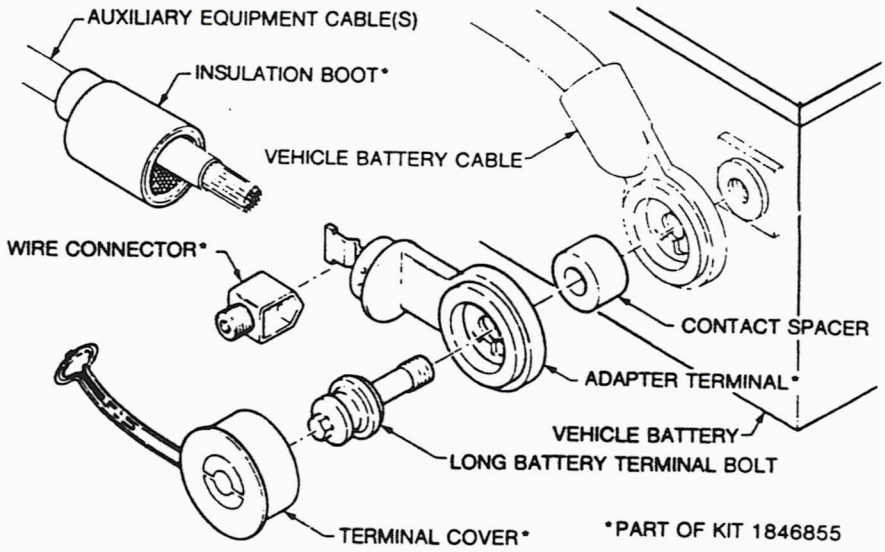


Figure 2

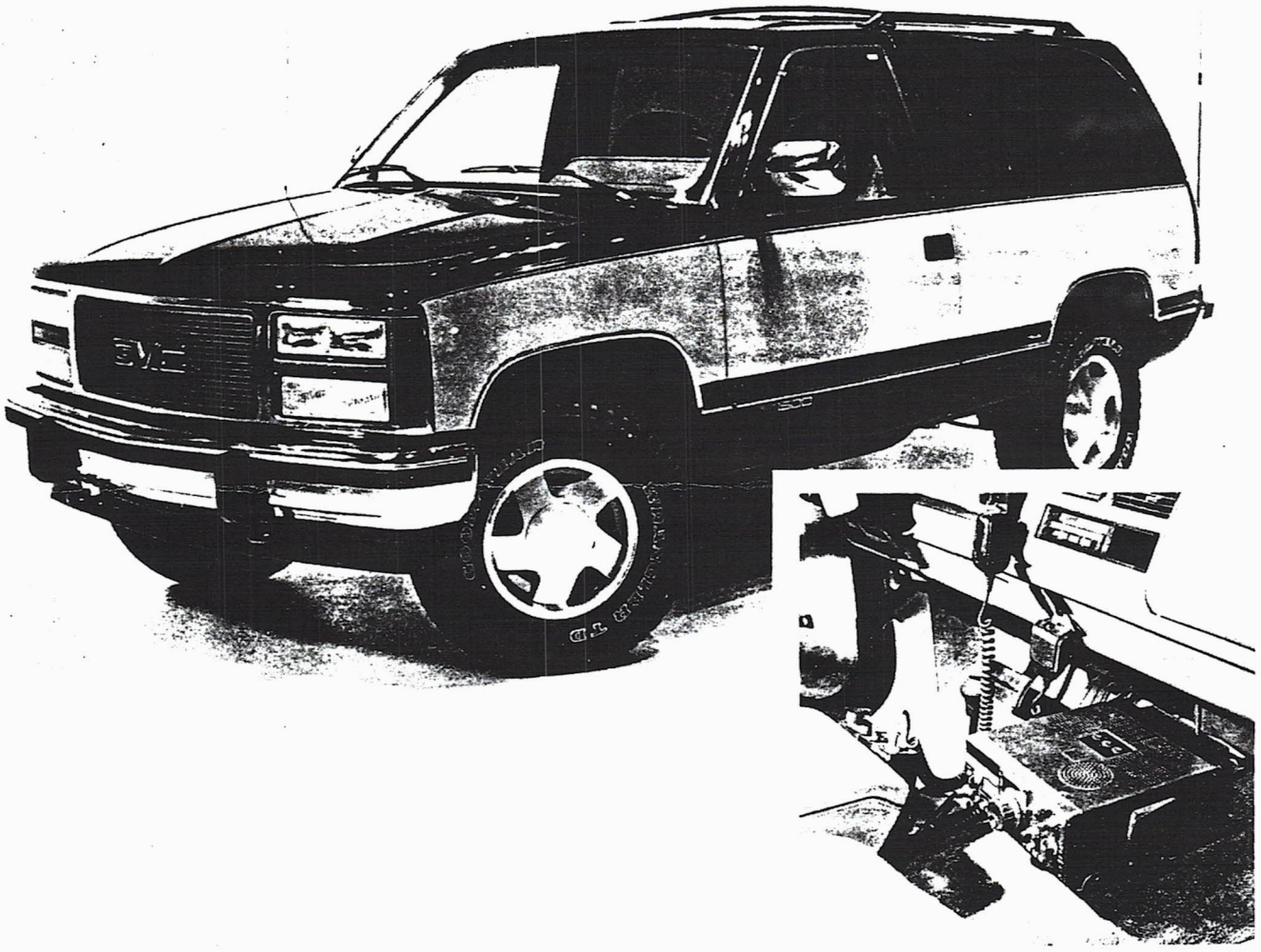
Auxiliary Electrical Equipment GM Recommended Installation

AC-Delco Side Terminal Adaptor Package 1846855, when combined with the longer battery bolt and spacer will provide the simple, tight, corrosion resistant connection illustrated. Parts can also be purchased at car dealerships.

Item	AC-DELCO Catalog 7A10	CAR DEALER "Parts" Book
Kit	1846855	1846855
Bolt	7803	12004188
Spacer	7804	12004189



CURRENT PRODUCT ENGINEERING
GENERAL MOTORS CORPORATION



JUNE 1992 ISSUE

Radio Telephone/Mobile Radio Installation Guidelines

Certain radio telephones or land mobile radios or the way in which they are installed may adversely affect the vehicle operations such as the performance of the engine and driver information, entertainment and electrical charging systems. Expenses incurred to protect the vehicle systems from any adverse effect of any such installation are not the responsibility of General Motors Corporation. The following are general guidelines for installing a radio telephone or land mobile radio in General Motors vehicles. These guidelines are intended to supplement, but not to be used in place of, detailed instructions for such installations which are the sole responsibility of the manufacturer of the involved radio telephone or land mobile radio.

INSTALLATION GUIDELINE

(refer to enclosed figures during installation)

1. Transceiver Location
   A. Locate transceiver for remote radios on driver's side of trunk as near to the vehicle body side as possible.

   B. One piece transceivers should be mounted under dash or on transmission hump where they will not interfere with vehicle controls or passenger movement.

   C. Great care should be taken not to mount any transceivers, microphones, speakers or any other item in the deployment path of a Supplemental Inflatable Restraint or "Air Bag".

2. Antenna Installation
   A. The antenna should be a permanent-mount type located in the center of the roof or center of the rear deck lid. Glass mounted antennas should be kept as high as possible in the center of the rear window or windshield. If a magnet-mount antenna is used, care should be taken to mount the antenna in the same location as a permanent-mount type. If a disguise-mount antenna is used, great care should be taken to shield the tuning network from vehicle electronics and wiring, or to mount the tuning network in an area completely clear of vehicle electronics and wiring.

   B. Standard metal mount antennas may be mounted on a vehicle with nonmetallic body panels by two methods. Most nonmetallic skinned vehicles have metal frames underneath. Mounting the antenna near a metal frame section and bonding the antenna mount to the frame with a short metal strap will provide the groundplane connection. Some antenna manufacturers offer "groundplane kits" that consist of self adhesive metal foil that may be attached to the body panel to provide the groundplane for the antenna.

   C. Some vehicles use glass that contains a thin metallic coating for defrosting or to control solar gain. Glass mount antennas will NOT function when mounted on this type of glass. Consult your GM dealer or owner's manual to determine if this glass is installed on your vehicle.

   D. Each vehicle model and body style reacts to radio frequency energy differently. When dealing with an unfamiliar vehicle, it is suggested that a magnetic-mount antenna be used to check the proposed antenna location for unwanted effects on the vehicle. Antenna location is a major factor in these effects.

3. Antenna Cable Routing
   A. Always use a high quality coax (at least 95% shield coverage) located away from the Engine Control Module and other electronic modules.

   B. Care should be taken to maintain as great a distance as possible between any vehicle wiring and the feedline.

4. Antenna Tuning
   A. It is important that the antenna be tuned properly and reflected power be kept to less than 10% (VSWR less than 2:1).

5. Radio Wiring and Connection Locations
   A. BOTH Transceiver power lead connections should be made directly to the battery itself. On vehicles equipped with a "jump start terminal", the positive lead may be connected to the terminal, but the negative lead should still be connected to the battery. GM approved methods of connecting auxiliary wiring to a side terminal battery include the adapter package illustrated in Figure 2, NAPA-Belden replacement battery bolts (part # 728198), or drilling and tapping the hex end of the original battery bolts 10-32 X 3/8" deep.

      NOTE: It is recommended that a fuse be placed in the transceiver negative lead to prevent possible transceiver damage in the event the battery to engine-block ground lead is inadvertently disconnected.

      For ONE-PIECE TRANSCEIVERS where ignition switch control is desired, a 12 Volt power contactor must be installed in the transceiver positive lead. The contactor should be located at the vehicle battery with the coil of the contactor driven through an appropriate in-line fuse from an available accessory circuit or ignition circuit not powered during cranking. The contactor coil must return to battery negative.

   B. Any negative lead from a handset or control unit must return to battery negative. It is preferable that the positive lead for a handset or control unit be connected directly to the battery. It is recommended that the handset or control unit positive and negative leads be appropriately fused separately from the transceiver positive and negative leads. If ignition switch control is desired, the handset or control unit positive lead may be connected through an appropriate in-line fuse to an available accessory circuit or ignition circuit not powered during cranking.

   C. If multiple transceivers or receivers are to be installed in the vehicle, power leads to the trunk or under dash should be terminated in covered insulated bus bars. All transceivers or receivers may then have their power leads connected to the bus bars. This makes a neater installation and reduces the number of wires running to the vehicle underhood area.

6. Wire Routing
   A. The power leads should be brought through a grommeted hole in the front bulkhead that must be provided by the installer. For trunk-mounted transceivers, the cables should continue on along the driver's side door sills, under the rear seat, and into the trunk through the rear bulkhead. All attempts should be made to maintain as great a distance as possible between radio power leads and vehicle electronic modules and wiring.

   B. If the battery is located on the passenger side, radio power leads should cross the vehicle in front of the engine.

7. Troubleshooting
   A. Should vehicle-radio interaction develop following installation, the source of the problem should be determined prior to further operation of the vehicle. Most interaction problems can be eliminated by following the installation guideline.

   B. If any vehicle-radio interaction problems exist after following this guideline, the vehicle should be returned to a GM dealer for examination and resolution of the problem.

Field Day 1995 Wrap-up

by Bob, KU3K, Field Day Chairman

That late June weekend called **Field Day '95** is history! I have always said that the Delaware Lehigh Amateur Radio Club members who gather for this special drill are THE BEST! -

We loaded the equipment, food, beverages and generators, Saturday morning starting at 8 AM. We arrived at the FD site about 9 AM and I'm not kidding when I tell you that at least one transmitter of our three could have been "on the air" at about 10:30. It was astounding how everybody just seemed to know what to do. I hardly spoke to anyone..just watched as the workers swarmed around the gear and raised the towers and antennas! This setup machine was practically running itself. If you haven't attended a field day in a few years you simply must put aside the date for next year. (Last full weekend in June!)

What fun! I just wish we could have 200 DLARC members participate. We might operate in the 15 transmitter class!! Thanks to all the equipment providers N3IYX, W3TDF, AA3JU, NU3L, and to all the operators, especially KA2VEM and the Novice/Techs who once again provided a full 24 hour coverage at their position!

Special thanks to **Barry KU3X** and his wife **Judy, Don KA3JWE** and his wife **Sharon N3RZQ**, for the great food, and to **Ken, KA3EED** for the use of his generator (and gasoline to power it). To those who helped lug, lift, move, schlep, tote, hammer, squeeze, drive, pull and push...It just could not have been done without you!

FINAL SCORE **CW 970**

SSB 1632

NOVICE 228 (KA2VEM)
BONUS 1210

This includes 310 points for having 31 ARRL members participate...an extra bonus this year!

FINAL CLAIMED SCORE = 8354

SEE YOU IN '96 !!??

de Bob, KU3K

Why not bring a friend to the next DLARC meeting. August 3rd, Northampton Community College.

How NOT to sound like an idiot

by Tim, WB8OGM

A lot of new hams are entering the ranks of amateur radio since No-code licensing came about and obviously many are coming from the CB ranks. I did too 25 years ago. However, some of the terminology being hear on 6 and 2 meters is almost teeth grinding at times. Therefore I have come up with a list of terms NOT to be used on the amateur bands and make you sound like a rip roaring idiot...

DON'T SAY:

I got me a new lean-ur today, how's it hittin' ya ?

I got me a new kicker, how it be soundin' ?

Lemme swing my set 'o' beams ur way. (A beam is a single yagi no matter how many elements. If you have more than one yagi then you have a stacked array)

Breaker break.... Breaker .26 (or whatever rptr freq. ur on) I'm clear and on the side (on the side of what ?

If your done talking just say clear and listening or clear and monitoring)

Catch you on the flip side

Double nickel

Don't give "Smokey reports" on the local repeater

73'rds 3's I'm clear and on the side 3's and 8's (Just simply say 73)

Don't begin every transmission with QUE-ES-EL !

4 roger That's a four 10 roger What's ur 20 ?

Dont say "WE" when your referring to only yourself about something.

Dont ragchew on calling freq.'s...IE 144.200, 50.125

Dont try to sound like a know it all when you really dont, old timers can see right through that stuff in a heart beat. Dont put pingers or devices that make awful noises when you key or unkey your microphone.

Every one of these terms have been heard on a pretty regular basis locally on 2 meters. The most important thing is just try to be yourself and not some phony baloney. Other hams will respect you a great deal more if your just yourself when on the radio. Positive or Negative comments are welcome and please dont criticize my spelling as I know I made a few mistakes.

de Tim, WB8OGM

via Packet

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

==========

DLARC INFORMATION LINE 820-9110

==========

The W3OK CORRAL is published monthly and is the Official Publication
of the Delaware-Lehigh Amateur Radio Club Inc.

==========

==1994-1995==

CLUB OFFICERS

President -Bob Green .....KE3AW.....432-8286
Vice-President - Tom Frobase..... .N3LLL.....395-4327
Secretary - Bob Gerst..... N3OLH.....868-8200
Treasurer - Dick Dech.....KA3MOU..837-1585

--EXECUTIVE COMMITTEE

Robin Moseley.....WA3T.....820-0944
Bob Dickinson.....W2CCE.....967-1393
Ray Bilger.....W3TDF.....346-7313
Don Curtis .....W3LR.....,.282-4459
Bob Kratz.....KU3K.....866-5879
Chris Hornaman.....NU3L.....965-4151

--NEWS STAFF

Editor - Clarence Snyder, ...W3PYF.....252-2109
Technical Editor.- Wm Van Horn..... K3CP.....691-5979
Digital Editor - Joel Elston.....K9TBD.....252-1515
Contest Editor - Barry Kery.....KU3X.....691-8888
Circulation - Bill Broad .....KA3OEG.. 253-0729
Mailing List - Richard Dech KA3MOU 837-1585
Printer- Norm Zoltack.....K3NZ.....799-4044

--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

The W3OK CORRAL
RR 4 Greystone Building
Nazareth, Pennsylvania 18064-9211

DATED MATERIAL - PLEASE DO NOT DELAY

BULK RATE
U.S. Postage Paid
LEHIGH VALLEY, PA
PERMIT No. 138