Delaware - Lehigh Amateur Radio Club, Inc.

W3OK Corral NEWSLETTER

NOVEMBER 2001

Club meeting November 1 at IU20

QRP Building

by Lamar, N3AT

My name is Lamar, N3AT, and I have been involved in QRP kit-building and operating for the past 8-10 years. I have been asked to do a program on QRP at the November meeting, and will be happy to discuss my favorite aspect of ham radio.

I will have something to say about the many different kits that are available today, perhaps answer questions about building and/or operating QRP equipment, tell something about DX contacts with low power equipment including some milliwatting. If you have questions, bring them along to the is great FUN!

de Lamar, N3AT

PA QSO PARTY - 2001 - NOW IS HISTORY

by Ray, W3TDF

A good number of **DLARC** members were in there plugging away. Scores seem to be very good and maybe, just maybe, we gave the Murgas club a run for their money. However, don't get your hopes up too high. I worked an awful lot of Luzerne County stations. As in the past couple years, a number of our higher scoring members were missing from the fracas. So, that means we need 3 members with small scores to make up for each of those. I worked K3OOO on a number of bands, and I understand Sarah built up quite a commendable score, so, congratulations and thanks. Those that stuck it out till Sunday afternoon were able to get those elusive counties, (TIO, BRA and PER), to get the clean sweep. I almost got a clean sweep of the continental U.S. ARRL Sections, missing only DE (state) and Idaho. 10 & 15 meters seemed dead when you tuned across them, but CQ's brought out the listeners, with no QRM. I would have broken the 200k barrier if I had spent a little more time on CW for the extra Q-points, and if I didn't lose 40 minutes taking care of a leak in my travel trailer during the Sunday rain. As I write this, there are only 360 days until the next PA QSO Party. C. U. there.

de Ray, W3TDF

DLARC PAQSO pts 2001

submitted by Barry, N3NVA

1,013,9099.0 TOTAL POINTS
43,567.3 AVERAGE POINTS
25 SCORES ENTERED
W3TDF 198,669.0
AE3T 18,703.0
K3OOO 170,000.0
KA3JWE 87,116.0
K3CP 68,540.0
K3MP 61,476.0
W3JD 59,891.0
KC2ZA 54,235.0
AA0AO 52,392.0
NC3P 51,422.0
KE3AW 48,404.0
WO4H 41,260.0
K3NZ 35,498.0
N3DFF 18,000
K3YD 12,070.0
W3OK 11,450.0
N3ULW 10,250.0
N3NNI 9,672.0
WB3HVT 5,704.0
N3EYT 1,950.0
AA3WM 1,900.0
KA3ONZ 1,107.0
KB3GOU 320.0
N3RZQ 20.0

Just the Minutes

by Jill N3ZSR

President Don Reamer, KA3JWE called the October 4th club meeting to order at 7:38 PM, with 48 members and 3 guests present.

Don started the meeting with a moment of silence due to the events of September 11th.



After a correction to the call sign of Dave, N3EYT a motion to approve the September meeting minutes was made by Jeff, N3QZT and seconded by Norm, N3NZ. Motion passed.

The Treasurers Report shown elsewhere in this newletter was accepted with a motion from Carl, AA3IX and seconded by Mike, AA0AO.

Barry, N3NVA passed around pictures from New York. The County completed bidding for the new tower. Barry is trying to have the County put up our equipment at the same time. Jeff Kelly told Barry that they are putting a site up around 309 on Blue Mountain. We can put 2 meter and 440 there.

The VE Session for October has 3 registered people to take the test. **Bill, N2DH** has 2 VEs plus himself for the evening. Bill is going to mail letters to current VEs and hopes to have a schedule made for next year so that everyone knows for the year what month(s) they are VEs for us.

Don welcomed the following guests to our meeting: **Kurt Chambers, KA2QYS Carlos Valasquz (son of new member) Caleb Zimmerman**

The following application(s) will be voted on at the November meeting: **James Woodhead, KA2ZQI Joe Palma, N3TNK Jeff Berger,** (plans on getting license)

The following new members were voted in: Don Jennings, **K6QDT** motion from Bill, **K3ANS** and seconded by Barry, **N3NVA** Carlos Valasquz, **KE3RC** motion Carl, **AA3IX** and seconded by Malcolm, **N3XRL** Lamar Derk, **N3AT** motion Bryan, **AA3WM** and seconded by Ken, **N3IYX**

Carl, AA3IX talked about Hamfest 2001. Carl said he has done our Hamfest for the past 4 years, but will not be able to continue. He will help the new person get started.

Awards were presented to the following: Bob, **N3QZR** certificate for building the operating desk in the milkhouse. Jim, **N3DFF** certificate for Field Day 2001.

Upcoming events that were announced are as follows: October 7 Bushkill Elem Science Fest (radio station) October 13 & 14 PAQSO Party October 20 Emmaus Halloween Parade (see Bob, KE3AW) October 20 American Lung Association Walk at Sand Island November 17 Lehigh Valley Radio Club, at Lehigh Valley Hospital to view the taping of Reilly Hollingsworth speaking at the Reading Club. December 15 & 16 Xmas City Special Event Station (se Bob, KB3CSS chairman)

Barry, **N3NVA** and Bruce, **N3FIH** talked a little about their time in New York, doing radio communications during the rescue and cleanup operations from the September 11th disaster.

The nomination committee announced the following results of the October Elections of Officers:

President Jeff, N3QZT

V President Brian, AA3WM

Secretary Jill, N3ZSR

Treasure Dick, KA3MOU

Board Dave, N3EYT

Glenn, N3ULW

Joe, W3JD

Barry, N3NVA

Bob, N3QZR

The program for the evening was from **Ray, W3TDF** and **Don, KA3JWE** talking on the PS QSO Party, October 13 & 14.

The meeting was adjourned at 8:35 PM on a motion from Dick, KA3MOU and seconded by, Ken, N3IYX.

de Jill, N3ZSR, Secretary



This bug feels a bit gummy — What have you been lubricating it with?

Delaware-Lehigh Amateur Radio Club, Inc.
Income and Loss Statement

Balance 8/31/01		**$569.75**
INCOME		
C D for 6 months cash in	1,025.03	
Change replace from Hamfest	500.00	
Credit City of Easton	25.00	
Donation Income Class Books	106.00	
50 - 50	14.00	
Dues Arrl	70.00	
Hamfest Income	1,733.59	
Interest Checking	0.12	
VE Test Session	24.00	
TOTAL INCOME		**$3,497.74**
EXPENSES		
Bank Chrg Checking	8.00	
Hamfest Change	500.00	
Butter Krust Baking Co	12.72	
Postage	99.00	
Renewal ARRL	32.00	
Telephone	30.39	
TOTAL EXPENSES	**$682.11**	
Balance 9/30/01	**$3,385.38**	
C D 12 MONTHS	2,000.00	
Overall Total with 1 CD		**$5,385.38**

de Dick, KA3MOU, Treasurer

On Saturday September 15, 2001, DLARC had their Hamfest. The profit from this year's hamfest is below in the report.

September 15, 2001

Deposit	$2,233.59
Income 50 - 50	$59.00
Gate	$1,503.00
Kitchen	$671.59
Total Deposit	$2,233.59
Expense Total Deposit	$2,233.59
Change Replaced	-$500.00
Expenses	-$529.00
Profit	**$1,204.59**

de, Dick , KA3MOU

Hello Fellow Club Members:

by Carl AA3IX

The **DLARC 2001 Hamfest** is in the books and as usual we had beautiful weather. I have run the event for the past 4 years and had a great time with it. However it is time for me to move to other things. Therefore I have resigned as Hamfest Chairperson. I will be available to help the next chairperson when the time happens.

I want to thank the people involved that made this years event run smoothly. **N3XRL-Malcolm, KE3AW-Bob, W3CE-Al, WO4H-Al, W3JD-Joe, NC3P-Bill, N3GXW-Norm N3GRK-Carl, WX3C-John, KA3ONZ-Bruce, N3NVA-Barry, KA2ZQI-James, K3CC-Skip KB3CFP-Greg, N3QZR-Robert, W3HJ-Bob, K3NZ-Norm, AA3WM-Bryan, K3YD-Blair KA3JWE-Don, and Greg the son of Bruce KB3FIH.**

This is the list that I have,If I missed anyone please contact me so I can recognize you for your contribution . Again I want to thank everyone for their support. Without it the event would not happen.

A special thanks to **Dave N3LWY** who played the announcement about the DLARC Hamfest on his repeater.

Many Many Thanks

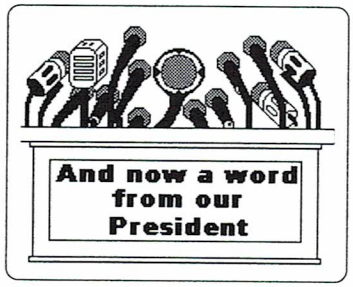
de Carl AA3IX



The Prez Sez

by Jeff, N3QZT

I want to congratulate the new club officers and board members. Also thanks to those who put their names into the elections process but where not selected. This form of competition is what makes our club stronger. Special thanks to **Bob/KE3AW** and **Al/WO4H** for there many years of service to the club by serving on the executive board, both have served well beyond the call of duty



I look forward to working with the new board and officers in the coming year. With the current state of affairs in our nation, it looks to be very challenging.

A special group of hams also stepped forward to answer the call of duty last month. The guys who went up to New York to help out with the horrific terrorist event that took place there deserve special thanks. Hams from all over the area went to help provide emergency communications and help in any way they could. I would like to thank each of the hams from our club that went to New York City.

And last for this month don't forget the **W3OK Christmas City Station.** It will be here before you know it. So make plans to come out and spend some time operating.

See ya there.

de Jeff, N3QZT President

Administrative Council Calls for End to Morse Requirement

Saying that it was "setting aside any previous relevant decisions," the International Amateur Radio Union Administrative Council this week resolved that IARU policy supports "the removal of Morse code testing as an ITU requirement for an amateur license to operate on frequencies below 30 MHz." The Council further resolved to urge member societies--as an interim measure--to seek Morse code testing speeds "not exceeding five words per minute."

The resolution was adopted during the IARU Administrative Council meeting October 6-8 in Guatemala City, Guatemala, which followed the 14th General Assembly of IARU Region 2.

The Council's Morse resolution took into consideration the approval--without opposition--of ITU-R Recommendation M.1544. That document sets out the minimum qualifications of radio amateurs. The Council also said it recognizes that Morse code "continues to be an effective and efficient mode of communication used by many thousands of radio amateurs" but that Morse code proficiency as requirement for an HF amateur license "is no longer relevant to the healthy future of Amateur Radio."

The principal business at the Administrative Council session was to review the status of IARU preparations for WRC-2003. Agenda items of concern to amateurs include, among others, the harmonization of amateur and broadcasting allocations near 7 MHz, the adequacy of HF broadcasting allocations below 10 MHz, and possible revisions to Article S25 of the international Radio Regulations.

Among other things, Article S25 spells out Amateur Radio operator qualifications. It now provides that Amateur Radio license applicants demonstrate the ability "to send correctly by hand and to receive correctly by ear, texts in Morse code signals" for operation below 30 MHz. The IARU Administrative Council supports the revision of Article S25 and the incorporation by reference of Recommendation M.1544.

The IARU Council selected the theme of the next World Amateur Radio Day, April 18, 2002, as "Amateur Radio: Continuing Innovation in Communication Technology."

via ARRL Bulletin

Letter to the editor

from Bud Tamm, W4YID

I am having some trouble with my computer emitting RFI; I guess you would call it, from the Tower Computer Case Compartment and its quite strong on all bands; When I shut down the computer, it ceases. Just a load hash sound.

If you or perhaps someone you know can help fine, otherwise I was wondering if a short blurb could go into the November W3OK Newsletter. Any help would be greatly appreciated. ***73 Bud Tamm W4YID***

CQ asks contesters to E-Mail all logs

sbmitted by Bill, K3ANS

(Hicksville, New York) -- Due to security concerns, CQ Communications Inc. is asking all participants in CQ-sponsored amateur radio contests to submit their logs electronically.

All logs for the CQ World Wide DX Contest, the CQ WPX Contest, the CQ World Wide 160-Meter Contest, the CQ World Wide VHF Contest and the CQ/RTTY Journal RTTY contests should be submitted via e-mail per instructions in the rules for each contest.

In light of recent events regarding hazardous items sent through the mail, logs received through the mail at the CQ offices will be held unopened until all potential health risks have been evaluated. CQ says it cannot guarantee that logs submitted by postal mail will be opened.

Contesters who want to be sure their scores will be counted must submit by e-mail. "We regret the need to inconvenience those contesters who do not have access to internet-connected computers, or who choose to log by hand and submit those handwritten logs," explained CQ Communications President Dick Ross,K2MGA. "But our logs come from all over the world. While the risk that amateurs might be involved in any sort of terroristic activity is extremely small, mail en route may be subject to tampering.

We cannot ask our staff members or contest committee volunteers to possibly expose themselves to dangerous packages sent through the mail."

CQ requests that this information be disseminated widely so as many contesters as possible will be aware of this rules change before the SSB weekend of the CQ World Wide DX Contest on October 27-28.

Alternatives for contesters without computer logging programs or e-mail access:

1) Get a computer logging program. There are many excellent and reasonably-priced programs available. Many may be downloaded on the Internet so there is no shipping delay. Some basic logging programs are even available as "freeware."

2) Transcribe your log into an ASCII text (.txt) file on a word processing program. Using the format on the log sheet, enter each item for each contact, separated by a tab. Separate each contact with a carriage return (enter key). Save onto a floppy disk and e-mail (many public libraries have computers with e-mail capabilities) to the address listed in the contest rules. Be sure to include the required information about your station in a covering e-mail message..

Oct VE Test

by Bill, N2DH

Jack O'connell Tech Plus
Kurt Chambers **KA2QYS** Novice to Tech Plus
Willad Buttner **KA3VEM** to General-Grand Fathered
VE's Present AA3IX W3ZF W3CE
Thalia KB3CSR

WX3MAS Christmas City Special Event

by Bob, KB3CSS

The 2001 WX3MAS Christmas City Special Event Station will be on the air from 9AM to 9PM, during 15 and 16 December. The station will be located in Room 215 Greystone Bldg at the Gracedale Home complex, as was the case last year.



We will need volunteers in 5 main areas: 1) Set-up 2) station operators 3) snacks 4) Take-down 5) sending out qsl certificates. Please indicate which of the above you can help.

As operators choose a time, I will post these on the Forum so that others will know what times are available. It was convenient last year to have 3 operators on duty per time slot, alternating between making and receiving the contact, logging the qso and checking the callsign on one of the on-line directories. We set up a 2 hour duty roster per team, but if you would prefer a 1 hour duty, let us know, so we can book you with another 1 hour person.

Last year's participants showed up promptly for their duties, making the entire operation run very smoothly and a good time had by all. Moreover,many new members experienced the thrill of their first DX contacts, the importance of which many of us veterans sometimes forget. Moreover, the veterans were very helpful in showing our new hams the "ropes". Those who couldn't operate gave of their time to print and send out qsl's, and I expect that we will handle the qsl's the same way this year as last.

Those who sign up for set-up should plan to begin around 7:30 AM on the 15th. Last year we started a little late.

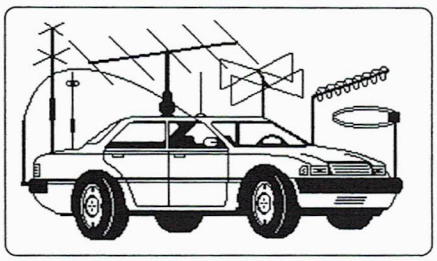
de Bob KB3CSS

The Amateur Amateur

by Gary Hoffman, KB0H

grh@heartbeat.wustl.edu

My automobile is my ham radio laboratory. It was not a conscious decision. That's just where I spend the most time trying to fix things. My wife Nancy and I have similar cars, and each has the same model of dual-band amateur radio transceiver in it. Between the two of them, practically everything that can go wrong has gone wrong.



There are several attitudes you can take when dealing with problems. One is to curse, complain, and make everyone around you miserable ("Dag-blasted con-sarn wretched son-of-a-gun is broken again!"). Another approach is to try to learn something ("Okay, why is smoke pouring out of it?"). Frankly, I do both. I burn up the adrenaline cursing, then when I calm down I try the logical approach. I get a great deal of satisfaction if I can actually figure out a problem and then fix it. (And later I write a column about it. It's a win-win situation for me.)

The problem that plagued me the most with our mobile radios was interference. (Real hams call it RFI but I'll stick with calling it interference.) I couldn't blame external sources since this was self-interference, or more properly, "auto-interference". Let me explain.

My mobile radio was actually two radios built into one chassis. One was for the 2 meter band and the other was for the 70 centimeter band. They shared a single antenna, a single power supply, a single control mechanism and display, and a single microphone. They did, however, have individual speakers. It was possible to hear conversations on both bands simultaneously, or to hear a conversation on one band while talking on the other.

The problem was that sometimes when I transmitted on one band, I would hear an ear-splitting BRRAAAAAAAAAAPPPPPP on the other band. It sounded like someone dragging a phonograph needle across a record. It didn't happen every time I transmitted, so I ignored it for as long as I could. Eventually it started to drive me crazy, and it would often happen when I was in the middle of an important conversation.

My first thought was that the dag-blasted con-sarn wretched son-of-a-gun radio was busted, but it happened both on my radio and on Nancy's radio. My second thought was that it was weather related, since I noticed it most often when I was trying to report poor road conditions, but after a few BRRAAAAAAAAPPPPs on sunny days, I changed my mind. The third thing that occurred to me was that neither radio had the problem until I switched from glass-mount antennas to magnetic-mount antennas. Was something wrong with the new antennas? Hmmmmm. I thought hard, trying to remember. I'd switched antennas because the glass-mount ones were terribly inefficient.

Time for a test. The glass-mount antennas were still in place, just not connected to anything. I tried to re-create the problem, but as you all know, appliances never fail when the repairman is there. Eventually, though, I was able to produce a mild buzz while transmitting. I switched to the glass-mount antenna, transmitted, and heard no buzz on the other band, but there was a subtle hiss. My analysis was that the problem was present with both of antennas, but much more evident when I used the magnetic-mount antenna. Ha! Problem solved! All I had to do was move the magnetic-mount antenna from the trunk to the roof!

That didn't help, of course. The problem wasn't the proximity of the antenna to the transceiver, it was merely the efficiency of the antenna...the better the signal, the greater the interference. All right. I hadn't fixed the problem, but I'd sure learned a lot. I knew that the radios had gizmos called "diplexers" which were supposed to prevent a signal transmitted from one band of the radio from getting into the other band, so I assumed that the interference wasn't getting in through the antenna cable. How about grounding? Manuals always say that grounding is important. I thought the transceiver was well grounded, but made absolutely sure by connecting it with a thick, ugly metal braid. My voltmeter confirmed a good connection, but that didn't solve the problem.

I stared at the spaghetti-like mass of wires in the trunk. Then I had an epiphany (translation: the light bulb over my head lit). Could one or more of these wires be acting like an antenna, picking up my transmissions and feeding them back into the radio? A brief and abortive experiment with tin foil convinced me that I could not effectively shield the wires.

Sitting on my haunches staring into the trunk wasn't helping, so I went inside and sat in my La-Z-Boy instead. The recliner was next to a bookshelf, and I my eyes happened to rest on the ARRL's Operating Manual. Idly I picked it up, thumbed to the index in the back and looked up "interference". Moments later I jerked upright and re-read the section I'd just perused. The very problem I was having was described in detail, and there was a solution! It was called a common mode choke!

All this sounded familiar. Right. I remembered. It was one of the questions on a license exam I had taken some years earlier... common mode chokes, 43 mix ferrite toroids, stuff like that. I closed my eyes and tried to visualize it. Inductors tend to allow lower frequency signals to pass but block higher frequency signals. So, if I put inductors on the speaker wires, the audio, being low frequency, should go through unharmed. Any stray radio signals, being much higher in frequency, should be blocked.

I will tell you right now that I am not an electrical engineer. If you talk about microhenries or picofarads I look like a deer caught in headlights. But in this case I didn't have to calculate anything and barely had to build anything. It was all in the book (both the ARRL's Operating Manual and RFI Manual). I bought some 43 mix ferrite toroids (easier than you might think). They were semi-metallic doughnuts, about an inch and a half across. I ran a speaker wire through a doughnut about 15 times (like I was trying to wrap up the doughnut with the wire) and voila, I had an inductor! More specific, I had a "common mode choke", designed to keep out evil interference.

And did it work? You betcha! Once I'd "choked" both speaker wires the BRRAAAAAAPPP diminished to a mere hiss. Later I was able to eliminate even the hiss by putting a choke on the transceiver's power cable. I still receive some auto-interference when I drive through one particular part of town, but hey.. that just means I have more to learn..

BATTLE LOOMS OVER PART 15 ACCESS TO 425-435 MHZ

The FCC has proposed changes to its Part 15 rules governing unlicensed devices that would allow operation of advanced RF identification devices between 425 and 435 MHz. By going along with a request made earlier this year by SAVI Technology Inc and fiercely opposed by ARRL, the FCC has set the stage for another battle between amateur and commercial interests.

"The FCC hasn't thought this through," said ARRL Executive Vice President David Sumner, K1ZZ. He contends that the Part 15 RFID proposal--included this week as part of a larger Notice of Proposed Rule Making and Order--is "contrary to the whole philosophy of the Part 15 rules." Sumner said the RFID devices SAVI proposes more properly belong on frequencies that are also authorized for use by devices regulated by FCC's Part 18 Industrial, Scientific and Medical (ISM) rules.

The FCC said this week's NPRM&O would modify the rules for RFID systems "to harmonize our rules with those in other parts of the world and to allow for improved operation." Sumner said that 433.9 MHz is allocated for ISM devices in 10 European countries but not in the rest of the world, including ITU Region 2 (North and South America).

Last March, the ARRL urged the FCC to deny or dismiss SAVI Technology's petition. The League argued that the field strengths and duty cycles SAVI proposed for its RFID tags were unreasonable "and would undoubtedly seriously disrupt amateur communications in one of the most popular of the Amateur Service allocations."

SAVI, which markets radiolocation and wireless inventory control products, told the FCC it needed the rules changes to satisfy customer demand for increased RFID system capabilities. The FCC this week said it agreed with SAVI that changes to its Part 15 rules to allow more advanced RFID systems in the 433 MHz band "would serve the public interest." It proposed to create a new section to Part 15 that would allow operation of RFIDs in the 425-435 MHz band and transmissions of up to two minutes at maximum field strengths now only permitted for extremely short-duration, intermittent control signals.

In an apparent about face, the FCC said it believes the proposed levels would offer only minimal interference potential for licensed users. The FCC in the past has acknowledged serious interference potential and has prohibited data transmission, among other things, at the proposed field strengths for that very reason.

As proposed, transmissions of 120 seconds would be permitted with just a 10-second silent period between transmissions. Under Section 15.231(e) periodic radiators are permitted field strengths of less than 5000 uV/m at 433 MHz measured at three meters, with duty cycles of less than one second and a silent period between transmissions that's at least 30 times the duration of the transmission.

The League pointed out in its earlier comments that the Communications Act of 1934 lacks authority to allow unlicensed devices with substantial interference potential. "Such devices must be licensed," the ARRL concluded. Unlicensed Part 15 devices must not interfere with licensed services and must tolerate interference received from licensed radio services in the same band.

Another portion of the proceeding involves the 13.56 MHz ISM frequency. Sumner said that proposal "at first glance" might permit increased emissions in the bottom 10 kHz of the 20-meter amateur band. Sumner said the ARRL would take a closer look at this section of the overall proposal before assessing its interference potential.

Sumner said the League plans to file a strong opposition to the FCC's NPRM&O. The entire Notice of Proposed Rule Making and Order in ET Docket 01-278 (which incorporates RM-9375 and RM-10051) is available on the ARRL Web site..

The ARRL Letter



All Amateur Radio Operators are invited to
Participate in the DLARC, RACES & ARES nets
146.70 and 444.90 W3OK/RPT (pl 151.4) with an alternate of W3PYF/RPT 145.11
W3OK trustee Chris Hornaman, NU3L
The Nets are held on Wednesdays at 7:00PM

==========

==========

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

==========

==2001-2002==

CLUB OFFICER

President -Jeff Keller .....(n3qzt@ptd.net).....N3QZT.....610-928-3897
Vice Pres-S.Bryan Williams.(sbw1@enter.net)..AA3WM..610 258-9470
Secretary -Jill Brodt.....(n3zsr@fast.net).....N3ZSR.....610-588-6977
Treasurer - Dick Dech....(ka3mou@enter.net)..KA3MOU..610 837-1585

EXECUTIVE COMMITTE

Joe Chuk.....(chuk@kutztown.edu).....W3JD...610-799-0337
Barry Vogt.....(n3nva@enter.net).....N3NVA..610-863-7204
Don Reamer.....(donster@enter.net).....KA3JWE...610-252-3063
Glenn Brodt.....(n3ulw@fast.net).....N3ULW..610-588-6977
Dave Blankenship.....(n3eyt@aol.com}.....N3EYT....610-974-8749
Bob Yankovich.....(n3qzr@yahoo.com}.....N3QZR..610-866-9162

NEWS STAFF

Editor - Clarence Snyder .....(w3pyf@aol.com)..W3PYF.610-252-2109
Circulation.....Richard Dech & YL Maryann.....KA3MOU 610 837-1585
Mailing List .Richard Dech.(ka3mou@enter.net)KA3MOU 610-837-1585

CLUB MEETINGS

All regular meetings of the D.L.A.R.C. are held on the first Thursday of each month
7:30 PM at IU 20 Building in Palmer Township
TALK IN ON 146.70
Any comments or articles contributed to this newsletter
should be addressed to *(w3pyf @aol.com}* or Clarence Snyder, W3PYF Editor.
717 Porter Street, Easton, PA 18042-1548
visit our web page
http://www.dlarc.org

18052+7204 04

[illegible]

DATED MATERIAL - PLEASE DO NOT DELAY

MEMBERSHIP EXP 12-31-01
ROBERT A GREEN KE3AW
346 CREST DRIVE
WHITEHALL PA 18052-7204

DELAWARE-LEHIGH AMATEUR RADIO CLUB, INC. K03W

The W3OK CORRAL

Greystone Building Gracedale Complex
RR 8
Nazareth, Pennsylvania 18064-9278

Presorted
Standard
U.S. Postage Paid
Lehigh Valley, PA
PERMIT No. 138