THE DELAWARE-LEHIGH AMATEUR RADIO CLUB, INC.

NEWS

RD #4
GREYSTONE BUILDING
NAZARETH, PA
18064

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Letter from the President

We are getting close to the wire for the beginning of many summer activities. Plans are final for the annual club banquet and of course field day is just a few weeks away. I would like to comment just a bit about the banquet. It seems this is probably one of the least attended of our club functions and I'm not sure why! If anyone would like to comment to me why you do not attend, I really would like to hear. Perhaps we should not have a banquet.. or maybe change the format.. hold the affair another time. Give it some thought and write to me.

I have been yankee clippered into the chairmans position for field day. At the June meeting there will be a sign up sheet which I hope thousands will respond to. I want to know when you will arrive and depart and what you would be most interested in doing. As you will see from the sheets we are going to need many volunteers for things other than "operating". It's all part of the game and I guess operating is the real "fun" but just as in real life, sombody has to cook and do the dishes, put up the antennas, set up the gear, and T H E N.... put it all away after the game is over!

So please sign up and come enjoy what has to be the most difficult and yet the most fun event of our club year!!

I must apologize to several of you members who months ago asked for some tech assistance. I still have your names and will have somone call you sometime during the summer to give that assistance. I'm sure some tech help was in the area of antennas and what better time to stretch those wires and mount those rotors than in the hot steamy summer!!

I would like to thank those who volunteered to provide communications for the N.C.A.C.C. Spring Expo held at the beginning of May. We probably had too many operators on the scene. A wonderful problem.. and a problem I hope infiltrates our "field day" operations. Well I can dream.....

73-88
KU3K

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DERMATOLOGISTS MAKE RASH JUDGEMENTS!

Letter from the Secretary

The May meeting of the DLARC found 31 members and guests present. In the absence of our president, the business meeting was conducted by our vice-president, Bob, W2CCE.

One new member was welcomed into the club. Richard Buck, N3FBU.

Thank-you letters were read from the SARA group to whom we donated tower restoration money, and the family of silent key Dave Grover, N3DRE.

It was announced that the speaker for the annual club banquet on June 6 will be Dave Porter, K2BPP.(see article elsewhere in News)

Discussion was held on upcoming Field Day activities which will begin for us with setup at 8:00 AM on Saturday, June 27 and end after all equipment is stowed on Sunday, June 28. It will be held again at Hackett's Park near Easton.

The annual "Derriere in the Delaware" will be held on July 19. Clarence, W3PYF will coordinate the event.

As a follow-up to the article in last months newsletter on cable TV leakage, Clarence asked for written reports of any leakage to be sent to him.

Ken, KA3EED reported on our participation in NCACC's Spring Expo '87.

Volunteer Examiners are still being sought. With a few more VEs a schedule can be made so that each VE would only have to be present at 3 or 4 examinations every year. Without more VEs our examination program may be in jeopardy.

Barry, KU3X reported from the Activities Committee. The first DLARC W.A.S. award plaque was awarded to Ray Bilger, W3TDF with Barry KU3X, Daryl KA3MND, and Ken KA3EED receiving 2nd, 3rd, and 4th awards respectively.

Discussion was held on a club 220 mHz repeater. A motion was made for the repeater committee to investigate the feasability of this project. The motion was seconded and passed unanimously. Any comments on this issue should be directed to Ron, K3LPR.

The meeting was adjourned at 8:37 PM. No program was held following the business meeting.

de Diane, NB3L

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DLARC Classified Ads

From the estate of WA3CFC - Mini Quad antenna. Top and middle sections of Rohn 25 Tower. CDE Rotator and control box. CONTACT: Bill W3FYK at 691-0963

FROM THE OLD MAN
by Clarence W3PYF

Well it's that time again, for my fingers to do the talking, so here goes. First as much as it hurts we must all congratulate the 1st place in the club Worked All states award. w3tdf, ray did it all. nice quiet guy, sat there while everyone else was working their tails off and he did it first. Congratulations Ray. Second place went to Barry, KU3X, third award to his boss, Darryl, KA3MND and fourth to editor Ken, KA3EED. Boy all I can say Barry, if I was running a contest, the second place would have gone to my boss. Remember, its not all over yet, just bring your logs to Barry, with the calls of the stations and the states worked and the beautiful award from the club will be yours. Those that have seen it say it is much nicer than the ARRL award. Nice to hear the pleasant voice of Amy, KA3IJL the new technician at Northeast Electronics on the repeater. Sure sounds better (at least to me) than the guys on the repeater.

Don't know how many of you saw our prez, Bob, as he appeared on Channel 69 during a production staged in Allentown a few weeks ago. His rendition of Man of LaMancha was great as judged by those who watched the show (Sylvia and I). He has been busy the last few weeks directing the music for the Civic Theatre presentation of Fiddler on the Roof. Although he is not a member of DLARC, many of the members of the club feted the only older man than me on his 85th Birthday. Pres, W3VQ. A few weeks ago, they say that the midnight gathering on .70 was attended by about 37 hams. Much to late for us young guys.

One of the fun communication programs of DLARC and the Northampton County EMA will be the "Derriere in the Delaware" program on July 19th, to benefit the Red Cross. Make plans to attend and help in this worthwhile activity, in which we will act as the safety division as well as the communications between Scott Park and Eddyside, No Police work just communications. Although it was cold, KU3K, KA3EED, KA3OEG, KA3MNY, KC3II, KA3ODI, and KA3IJL furnished radio communications for the NCCAC open house on May 3rd. Apparently from N3AAV, who organized the activity, the College people were delighted with our professionalism.

I am glad to report that as of today, 134 amateurs, have signed up as members of the Northampton County RACES organization. All should have received cards indicating your membership by now. If not please contact me. If you have lost the application form, ask for one at the next club meeting.

Just talked to Wally, W3YXS on the phone and he reports that K3LPR repeat, is up and running full blast with two bulletin boards on line. Contact Wally for further information.

There is a rumor circulating around the repeater now, that Chuck, KC3SM is about to publish a new directory of the area. He is getting lost so much now that the American Automobile Association, (AAA) is going to appoint Roy, KA3MNY as their official spokesman for keeping track of Chuck. Lest I forget, I want to wish all the best to the new married couple. KA3MNY and Evelyn on their recent marriage. Roy spent the first day of his honeymoon working at the NCCAC activity.

I had three cards from Tony, N3CVH and Lisa, from Europe, apparently he is having a ball. One of the cards he sent must have burned its way all the way from Spain. He has already been in Germany, and France and when he mailed the card he was ready for 17 days in Spain. Instead of working DX, he is DX, but he says nothing about working from any stations over there...Hope he gets back in time to work the Derriere in the Delaware, we have the umbrella all ready for him in the middle of the old bridge.

'73 for this month,
Clarence, W3PYF

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Novice Enhancement is Working!

W5YI phoned Larry Weikert, Chief of the General Radio Branch in Gettysburg, to see if he was getting any reaction yet to the Novice Enhancement Report & Order.

"Are we ever", he said, "Novice applications have just about quadrupled! We will probably process in excess of 6,000 Novice applications this month...as opposed to a normal of 1,500!" Larry mentioned that he hoped all of the applications he was received "were legitimate."
from W5YI report

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NOTES ON DAVE PORTER, K2BPP

Following is a bit of background information about our 1987 DLARC Banquet speaker.

In 1954 while exploring the air waves via Amateur Radio as a young Ham operator, Dave Porter of Summit, NJ discovered far away signals from Antarctica. This was the beginning of a life-long love affair with polar regions that led to his expeditions to both poles - and became the first person to stand at both geographic poles!

He started communicating with the American stations in Antarctica using a radio interconnection between the men and their families that became known as the "phone patch". This service continued nightly for seventeen years - averaging five hours per night. At the milestone of fifty thousand phone patches in 1970, the United States Navy invited Dave to Antarctica as their guest to see the stations and meet the men who he knew so well over the years. The high point of that tour included a stop at South Pole station. In 1973 he returned to Antarctica as a consultant to improve radio communications - a six week project and second time to the South Pole. In 1974 the Naval budget was cut back reducing the manpower in Antarctica to a point that "K2 Busy Phone Patch" daily service was no longer needed. He "retired" the Antarctic chapter of his life with 107,000 patches and 71,000 radioteletype messages completed over the seventeen year period.

After a rest of five years he heard about a private polar expedition to the North Pole planned for April 1979. After a few minutes thought he contacted the expedition leader and found that he had eleven days to pack! Naturally amateur radio would go too and operate for the first time at the top of the world!

This presentation is the story of that North Pole expedition and return expedition the following year....

Don't miss it-

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Drivers are safe when the roads are dry, but roads are safer when the drivers are dry!

Radio Frequency Weapons

The March issue of "The Atlantic" carries a rather gruesome piece entitled "The Zap Gap". It is about RF weapons, non-explosive devices capable of electronically disabling aircraft, communications and other microchip based military systems.

The Department of Defense has acknowledged that the USSR has conducted research into the use of strong ground based radio frequency signals that can interfere with or destroy critical electronic components of ballistic missles or satellites ...or even cause personal disorientation. Supposedly, the Soviets have generated RF pulses with peak power exceeding one gigawatt and reptitive pulses over 100 megawatts.

The RF gun could be designed to burn out the silicon intergrated circuits that are the brains of modern weaponry. Delicate silicon chips can act as tiny antennas at certain frequencies -- such as sixty gigahertz -- and be quickly overloaded and blown out.

Reportedly, US low orbit recon satellites have been blinded on at least two occasions by huge Soviet RF pulses. Small chip guns might be used on the battlefield to disable microprocessor controlled armament, knock whole radios off the air, or to blank out whole battle management systems. Larger chip guns might constitute a new generation of anti-aircraft weapons. RF pulses propagated over a larger area could erect an electronic wall.

Development is also expected of electromagnetic weapons that would attack the human body. Others might use lower-powered radio waves or electromagnetic fields modulated at extremely low frequencies of one to one hundred hertz.

ELF radiation has been shown to have effects on the brain and nervous system. ELF weapons might prevent people from thinking clearly ..or cause indecision on the part of commanders. The US Embassy in Moscow was for several years bombarded with subtle radio waves in what some intelligence sources have interpreted as an early ELF test.

From W5YI REPORT

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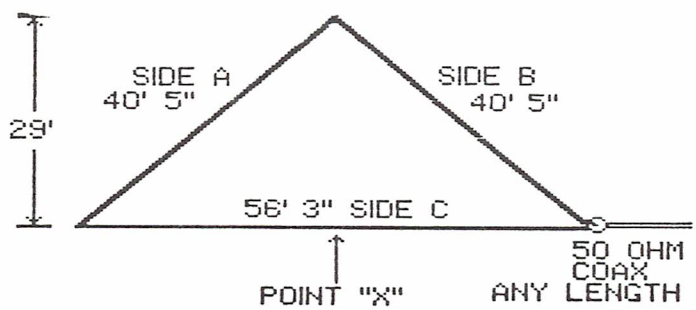
40 Meter full size Delta Loop
by Barry KU3X

Want strong signals into Europe, VK's and ZL's, or how about bone crushing signals into New York, Virginia, or Ohio? You don't have to run a kW to have a strong signal all the time. (but it helps. HI-HI) I needed somthing better than my dipole at 55 feet on 40 meters so I decided to try a Delta Loop, vertically polarized. The angle of radiation for this type of antenna is approx. 28 degrees. Just what the doctor ordered for DX work. The gain of this antenna is 1.5 db over a dipole. That is not much, but it is the low angle of radiation you are after for DX. If you want a high angle of radiation for close in work, such as New York, Virginia, or Ohio, than feed this antenna at point "X". This will make the Delta Loop have horizontal polarization. You will be suprised how loud your signals will be into surrounding states. As shown in the diagram, I feed mine in the corner for vertical polarization. Be sure to place an R.F. choke at the feed point. (10 turns of 50 ohm co-ax in a 6 inch loop). I am very impressed with the performance of this antenna. I also discovered another feature of this antenna while working Europeans with my 160 M sloper. While in the receive mode I switched from the 160M sloper to the 40 M Delta Loop and noticed that while receiving 160M signals on the Loop, the signal strength is about 50% of what it is with the 160M antenna but background noise is just about gone. Needless to say, I now use the Loop for my 160M receive antenna.

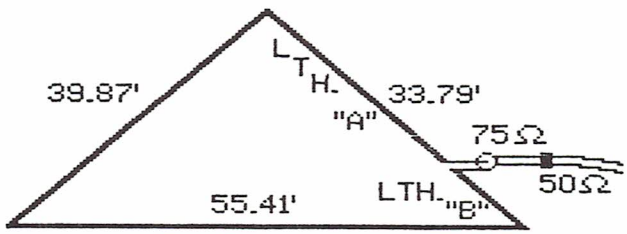
Shown is my Delta Loop wwith 4 feet trimmed off to make it resonate at 7.125 mHz. At 7.000 mHz SWR is 1.8/1. At resonant freq. SWR is 1.2/1. At 7.250 mHz SWR is 2/1. Use the following formula to scale the antenna for your desired bands.

1005/freq.= full wave
296.5/freq.= side A or B
412/freq.= side C



Optional construction dimensions for 40 Meter Delta Loop.

Length A = 251.25/ Freq.
Length B = 45.25/ Freq.
75 Ohm section = 1/4 Wavelength or
246/Freq. X V.F.



CONTEST CALENDAR

JUNE 13-15
S. America CW Contest
ARRL VHF QSO Party

JUNE 20-21
SMIRK QSO Party
Nine Land QSO Party

JUNE 27-28

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FFFFF IIIII EEEEE L     DD
F       I   E     L     D DD
FFF     I   EEE   L     D   D
F       I   E     L     D   D
F       I   E     L     D DD
F     IIIII EEEEE LLLLL DD

      DD      A   Y   Y
      D DD   A A   Y Y
      D   D A   A    Y
      D   D AAAAA    Y
      D DD  A   A    Y
      DD    A   A    Y
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JULY 1
Canada Day Contest

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Here are some Nets to check out for help for the W.A.S award.
Century Club (Hawaii 11:30 PM E.S.T.)
14.305, 3.905 and 7.233 mHz

Alaska Net	11:30 PM E.S.T.	14.293 mHz
Geritol Net	9:00 PM E.S.T.	3.767 mHz
YL System		14.331 mHz
County Hunters		14.336 mHz

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Input on the I/O Ports used on the C-64 and VIC-20 computers

by Wally, W3YXS

The following article is part 1 of a 2 part article by W3YXS. Although a similar article article appeared in Commodore Magazine, this article was written prior to that publication.

The I/O (input/output) ports of the two computers are identical except for the decimal location in memory. To access the I/O ports you have to do two things. The first is to tell the Data Direction Register (DDR) whether you want the port to transmit or receive data. The DDR on the C-64 is located at 56579 and for the VIC at 37138 (both decimal). If you want to send data to the outside world, you will have to poke a 1 in the DDR. To have the outside world talk to your computer, you will have to poke a 0 in the DDR.

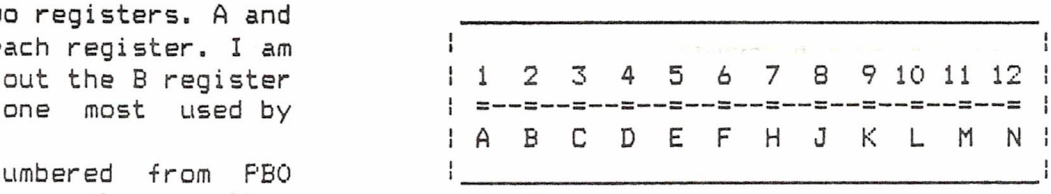
To put a 1 or a 0 in the DDR you must use the POKE command. Example: POKE 56579,255 for C-64 or POKE 37138,255 for the VIC. The number after the comma indicates what ports are affected. To figure out these numbers we first have to know that there are two registers. A and B, and 8 ports in each register. I am only going to talk about the B register because this is the one most used by amateurs.

These ports are numbered from PB0 through PB7 and are also called C,D,E,F,H,J,K,L. RTTY programs are channeled through these 8 ports. POKE 56579,255 tells the DDR that all 8 ports in the B group will be output ports. The way we get the 255 is shown in Fig. 1. After studying Fig. 1 we also can see that if we want to make port PB3 or "F" an output port, we will use the number 8. It will put a 1 in that location in the DDR and make it an output port. The rest of the ports will, by default, become input ports because there are no 1's in their location. If we want to turn on more than one port, we can use the numbers in Fig. 1 and add all of the numbers together for the ports we want to turn on and use that sum in the poke statement. Example: POKE 56579,15 will put a one in locations PB0, PB1, PB2, and PB3. Again by default the remaining 4 ports will become input ports.

Now that we can control the DDR, the second step is to tell the port what to do. There are only two ways that the port can go, high or low. Again that means either we put a 1 or a 0 in the port and that will make it high or low. In this case a 1 will make the port high and a 0 will make it low. Now the POKE command looks like this. POKE 56579,255:POKE 56577,0. If you type that into your computer it will make all of your ports low or 0. The first POKE command is telling your DDR that you want all of your ports to be output ports. The second POKE command is telling your computer that you want all of the ports to be a 0 or low. Now suppose we want to make PB3 and PB4 high and the rest of the ports low. The command would be POKE 56579,255:POKE56577,24. Again the 255 is telling the DDR that all ports are to be output ports, and the 24 is telling the computer that PB3 and PB4 are to be high. By putting in the various numbers from Fig. 1 you can configure these ports anyway that you want them.

FIGURE 1.

Connector on right side of computer when viewed from the rear.



A = ground	F = PB3 = 8
B = CA1	H = PB4 = 16
C = PB0 = 1	J = PB5 = 32
D = PB1 = 2	K = PB6 = 64
E = PB2 = 4	L = PB7 = 128

sum of PB0 through PB7 = 255

Next month Wally will discuss input ports and list a program to see what the ports are doing.

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ONE OF OUR MEMBERS SAYS THAT HE PREFERS BOWLING TO GOLF FOR A NUMBER OF REASONS. ONE OF WHICH IS THAT HE'S NEVER LOST A BOWLING BALL!

DELAWARE - LEHIGH AMATEUR RADIO CLUB, WORKED ALL STATES AWARD

Starting date- March 5, 1987 - 0000 G.M.T.

No states worked previous to this date will be counted for this award.

Applicants call_____ Applicants name_____

Date submitted_____ Mode_____ Band(s)_____

	Call	Date	Band	Mode	
Alabama					
Alaska					
Arizona					
Arkansas					
California					
Colorado					
Connecticut					
Delaware					
Florida					
Georgia					
Hawaii					
Idaho					
Illinois					
Indiana					
Iowa					
Kansas					
Kentucky					
Louisiana					
Maine					
Maryland (D. C.)					
Massachusetts					
Michigan					
Minnesota					
Mississippi					
Missouri					
Montana					
Nebraska					
Nevada					
New Hampshire					
New Jersey					
New Mexico					
New York					
North Carolina					
North Dakota					
Ohio					
Oklahoma					
Oregon					
Pennsylvania					
Rhode Island					
South Carolina					
South Dakota					
Tennessee					
Texas					
Utah					
Vermont					
Virginia					
Washington					
West Virginia					
Wisconsin					
Wyoming					

LOUSY INCONSIDERATE DUMMIES

LID 01: Cougher who keeps his mike open as he hacks away from smoking too many cigarettes. Great when you are monitoring and eating dinner at the same time!

LID 02: The jerk who spends his time kerchunking the repeater, timing it out and making it useless for everyone else.

LID 03: This is the senile Ham who never, ever allows even one microsecond between transmissions on the repeater. This chap is usually in contact with another 03, complete with an outrageous signal which can't be broken. These old boys can keep a repeatertied up, saying nothing whatever of interest, for hours on end.

LID 04: The disgusting old fart who insists on using four letter words on the air.

LID 05: The mobile dingle who is driving to or from work and talking via the mountaintop repeater to a fellow dingle a half a mile away. Much of the conversation has to do with expert criticism of observed poor driving practices in his vicinity, a subject of obvious deep interest to the dozens of other chaps waiting to use the repeater. Also, he lets you know exactly which highway he is on and which direction he is heading.

LID 06: The flying repeater user. This chap can tie up even more repeaters than the mountaintop-DXer. His big complaint is the length of some of the squelch tails on some repeaters on the channel he's picked.

LID 07: The Ham who breaks into a transmission by another Ham who is calling a specific station before the called station has a chance to answer.

LID 08: The OP who has to be reminded every other transmission of your name (handle as used by CBers), or who never gets your call right twice in a row.

LID 09: This is the cliche'er who will see you farther down the log because he has to pull the big switch and modulate the mattress. (X-CBer?)

LID 10: The Ham who puts up with the cliche' user without screaming at him, suggesting he go back to CB where he belongs.

LID 11: Any Ham who tries to solve his own TVI problems without the help of fellow Hams as intermediaries.

LID 12: The Ham who refuses to help the Ham with TVI problems.

LID 13: Local Ops who fuss because a few visitors use their precious repeater for a couple of days.

LID 14: The Op who insists on using the repeater to carry on a QSO when he is close enough to the other station to go simplex on an unused channel to carry out his contact.

LID 15: The Op who is trying to impress his buddies that he has a phone patch number by calling his XYL to tell her that he will be home in two minutes.

This is only a partial list of LIDS. The article from which this was taken (with permission of the author) had a total of 91 LIDS. I think we all can find ourselves in there some pplace. I know I can see myself there in some places! Hi!

If there is any interest, we can include a list of HF LIDS in a future issue of the News.

From May 1986 issue of "73" with permission and some editorializing by me.)

de Ben, N3CNH

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PRB-3

The "Pick Your Own Call Sign" inquiry - A lot of people apparently feel, now that they are looking into it, that perhaps our present amateur call sign assignment system is not all that bad. You can talk in theory, but when you get down to specifics ...like who is going to get W4KFC and other calls... it becomes complex. The League has asked for an extension and there does not appear to be any reason why it should not be granted. from W5YI report

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COCOS ISLAND - At Press-Time we're awaiting the start of a month of cw, ssb and possibly RTTY operations by TI8CBT, who expects to sign TI9M on 10-80. QSL to his home CBA.

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CROZET I. - FT8WA continues his daily activity, alternatively on 3790 or 7015 KHz at 0200 UTC and then near 21,250 KHz from 1300 UTC. QSL via F6FNU.

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FRANZ JOSEF LAND - EK1P is regularly on 14,175-180 KHz from 1700 UTC. QSL via Box 88, Moscow.

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INDONESIA - Good 15m openings from 1500 UTC logged YC5BHH on 21,232, YCØBAQ on 21,255, YCØHOB on 21,273 and YCØEAQ on 21,288 KHz. For the All Asia Phone Contest on 20-21 June, YBØSY and his group will spend a week in their otherwise almost silent YB9 call area. We'll have more on the upcoming Special Event July and August activities when you will be hearing and working YB19 and YB42 prefixes.

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LATVIA - EU1Q on 14,190-195 KHz from 1530 UTC. QSL via Box 88, Moscow.

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MACAO - KC7V hopes his XX9-license is ready for the CQ WW CW Contest on 30-31 May. His continuing travels will include 2 to 3-day operations in VS6, DU1, KC6, KHØ and KH2. QSL to the '87 CBA of KC7V.

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MARIANA IS. - KHØAC on 14,212 KHz from 1100 UTC. Len is restoring his antennas after the recent devastating hurricane. QSL via K7ZA.

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MOLDAVIA - UO5O on 7013 KHz most days from 0030 UTC. QSL to Box 88, Moscow.

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MT. EVEREST - Now to 6 June. SM2DWH/BTØ on 21,245 KHz at 1100 UTC and 14,185 KHz at 1200 UTC. QSL via SK4NI.

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NEPAL - Fr. Moran, 9N1MM, is near 14,180 KHz every Monday from 0001 UTC with a potent signal. QSL via N7EB.

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RHODOS I. - 28-31 May. SV1RP/SV5 will have a 2-day warmup for his participation in the CQ WW WPX CQ Contest on 30-31 May. Look for George on 1845 KHz as well as about 5 KHz above the low ends of 10-80. QSL to his home CBA or via SV1NA.

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ST. BARTHOLEMY I. - Now thru 6 June. FJ/K2IBW (note the new prefix) will "live" on 14,190 KHz but also devote time to ssb on 15 and 10. QSL to his home CBA.

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ST. PIERRE & MIQEULON - 6-16 June. FP/K1RH and FP/W1CCN will be on all bands, 10-160 including 30m, with cw and ssb in the usual DX slots, although emphasis will be on cw - 3 and 25 KHz above the low ends. They will leave all antennas at the Hotel Robert - so the next visiting DXer needs only to bring his rig. QSL to their home CBAs.

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SIERRA LEONE - In celebration of their Country's 29 years of independance, 9L stations are using the 29L prefix with their normal suffix. 29L1IS comes up daily around 21,195 KHz at 1400 UTC and then, at about 1800 UTC he QSYs to 14,175-180 KHz. QSL to the CBA of 9L1IS.

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TAIWAN - 5-10 June. BVØAE by JA1UT and his team of JA DXers with cw and ssb on all permissible bands. QSL via JA1UT.

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ZAIRE - 9Q5NW on 21,250 KHz at 1530 UTC inviting contacts on 3790 KHz from about 0430 UTC. QSL to: Tom Harrell, PO Box 368, Stockbridge, GA 30281.

All Amateur Radio Operators are invited to participate in the DLARC Nets on 146.70 W3OK/rpt.
The Nets are held on Sundays at 9:30 AM and on Wednesdays at 7:00 PM.
The alternate repeater for these Nets is 145.110 W3PYF/rpt.

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The DLARC NEWS is the Official Publication of the Delaware Lehigh Amateur Radio Club Inc.

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1987
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Barry Kery.....KU3X...691-8888
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****

NEWS STAFF

Editor - Ken Field.....KA3EED.759-6306
Co-Editor - Clarence Snyder.....W3PYF..252-2109
DX Column - Norm Zoltack.....K3NZ...799-4044
Circulation - Dick Peischl.....KC3CR..759-0294
Digital Column - Joel Elston....K9IBD..252-1515
Mailing List - Clarence Snyder..W3PYF..252-2109
Printer - Norm Zoltack.....K3NZ...799-4044

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CLUB MEETING NIGHT

All regular meetings of the D.L.A.R.C. are held on the first Thursday of each month at 7:30 PM in the Greystone Building at Gracedale.
Phone....759-2600

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Any comments or articles contributed to this newsletter should be addressed to:
KEN FIELD
5632 SULLIVAN TRAIL
EASTON, PA 18042

THE DELAWARE-LEHIGH AMATEUR RADIO CLUB, INC.

NEWS

RD #4
GREYSTONE BUILDING
NAZARETH, PA
18064

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Coopersburg Pa. 18036

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