



Delaware - Lehigh Amateur Radio Club, Inc.

**W3OK**  
*Gorral*

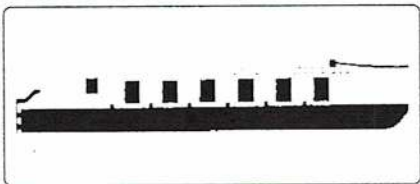
**NEWSLETTER**

MAY 2003

## Meeting on May 1st at IU20

### Ham Radio aids in rescue

News story credits ham radio for aiding maritime rescue: According to a recent New York Times news item attributed to Agence France-Presse, unidentified ham radio operators picked up distress signals



April 6 from a 114-foot missionary vessel that had experienced engine trouble during a 2000-mile journey from Kiritimati Island (also known as Christmas Island) to Kiribati in Micronesia.

The ship, with 64 passengers, reportedly had run out of water and food and had begun drifting south of the equator. In response to the distress call report, a nearby US Coast Guard icebreaker, Polar Sea--which was returning from Antarctica to Arctic duty--was dispatched and succeeded in finding the drifting vessel.

Coast Guard engineers reportedly repaired the engines and provided food and water for the passengers and crew. One passenger was taken off the vessel for medical treatment. The boat later proceeded under its own power to Tarawa.

*The ARRL Letter*



### CW for your PC

#### Program for May 1st meeting

Scott Thompson (N3EUS) will give a demonstration on quick & easy c.w. for your p.c.. please come and see what it is all about.

*de Bill (ka3rbh)*

### ARRL Contester's Rate Sheet 9 April 2003

Edited by Ward Silver, N0AX

Submitted by Blair, K3YD

Doing some grounding system work? If the thought of driving ground rods is keeping you up nights, Groundhaws has developed a motorized-ground rod driving system that converts the ground rods into small augers.

See <http://www.groundhaws.com> for more information. No, the nice young lady is not part of the package. Screw tips are available separately and a big hammer drill is also reputed to do the job.

This might be a good package for a club to purchase and share.

### TECHNICAL & TECHNIQUE

If you're constructing a large loop, Larry WIGOR recommends using a PVC 'sweep' instead of an 'elbow' to support the loop wire. Sweeps are designed to turn corners at a large enough radius to pull electrical cable and are found in the electrical section of finer hardware stores everywhere.

Using sweeps allows the wire at the corners to slide easily as wind conditions demand. By pulling on the wire, you can also convert a 'corner-fed' loop to a 'center-of-one-side-fed' loop just by pulling on the wire.

Moving the feedpoint can change the radiation pattern of a vertical loop from 'regional-coverage cloudburner' to a vertical-like low-angle radiator.



The DLARC Meets The First Thursday Of Every Month  
The Delaware-Lehigh Amateur Radio Club Is An ARRL Special Service Club



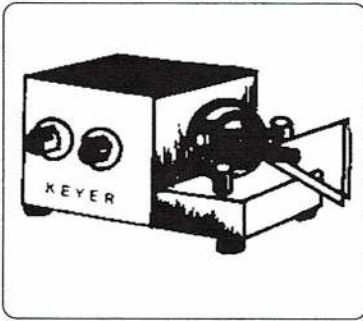


## Why Learn the Code?

*Gisle J Bjoerneseth (LA5EKA) on March 17, (<http://www.eham.net/articles/4848>)*

*submitted by Blair, K3YD*

The answer is quite simple. A while ago I realized that Morse code is the heart and soul of amateur radio. There are plenty of discussions on how **obsolete/inefficient/difficult Morse code is**, and quite soon it will not be required by the ITU to learn Morse code to gain access to the HF bands.



For me, all this is irrelevant. Why? Well, I was earlier a "no code tech". Got my tech license so that I could play with radios and whatever. I soon got quite bored, however, by old geezers on the repeaters, the odd satellite QSO now and then, and some packet radio experiments every blue moon. I then started with FM ATV experiments, trying to whip up some local activity, but still no thrill.

One day however, I was lucky enough to get my hands on a multimode 70cm rig. After working the repeaters on FM with it, I wanted to try out the "multimode" capabilities. I found out there was some kind of "test" going on every once in a while on 70cm. I didn't know what a test was, or what they were testing, but I joined using SSB, and soon found out about the monthly 70cm NAC tests (Nordic Activity Contest). It was fun for a while, but kind of "cool but no cigar". I heard a lot of Morse code on these 70cm tests, and to me it was all gibberish.

After a while I got my hands on a multimode 2m rig, and could now participate in the 144MHz NAC tests as well. On 144MHz the activity was tenfold of that on 70cm -- more stations to work, and more fun. Both these rigs had a jack on the rear panel for connecting a Morse code key. I started playing with the thought that perhaps I too could connect something to that hole in the back and get more test points and QSOs by hammering on a key? I found SSB contacts really hard sometimes, when band conditions were bad, but still I could in fact hear them, but not well enough for a contact. And aurora was quite impossible on 2m SSB.

Perhaps if I could... The CW ops seemed to work them perhaps I could... I decided to "look into" the matter. I searched the Internet for software and clues on how people usually learned the code. I read a lot of articles on how and why, don't and why not etc... So all in all I found quite a bit of info, and thought I had what I

needed. However, I had a nagging feeling that something was wrong, so I did nothing. It wasn't until I read about the Koch experiments I understood what it was. By reading the Koch paper, all the pieces fell into place.

Six weeks later I was using Morse code efficiently in the 144MHz and 432Mhz NAC tests. Working aurora late nights, enjoying the casual CW QSO with some station in Denmark or far east Sweden when conditions were adequate. Since I only had to take a Morse code test to get an A license, of course I did it. LA5EKA emerged from LC4PAT the 8th of June 2000. I was working both SSB and Morse code day and night. With new HF privileges there was a world of opportunities out there. There seemed to be no end to the excitement. I realized that I was having great fun, and that this was what amateur radio was about.

Now, almost three years after I started learning the code, I'm still as excited as ever when working HF. Though now I mainly do CW. In 2002 I had 95% CW, 0.3% PSK and 4.7% SSB. There is something magic about the Morse code. It's much easier to use than SSB, by far. Even when conditions are good, I think. No mumbling, no language problems, no constant phonetic repeating of LIMA ALPHA FIVE ECHO KILO ALPA to an operator with no ears, no ZOO like pileups, no need for kilowatt amplifiers etc...

If I hadn't started out learning the code and using it, I would still be sitting there, listening to the repeaters, whining about my technician privileges, talking down the CW ops etc... But as I said, I've gotten in touch with the heart and soul of amateur radio, and I am enjoying every minute of it. I feel sorry for all the "radio amateurs to be" in the future, feeling that they don't have to learn the code. Some of them will realize what they are missing, and learn it, but I fear that most will not.

Ok, now a comment to you digital mode people, writhing with frustration about my opinions of the "obsolete" Morse code. I'm sorry guys, but I find no challenge whatsoever in typing on a keyboard, and using a computer to decode the incoming data. It's ok for casual rag-chewing I guess, and every once in a while it can be fun. I work daily with computers, and have plenty of people I can chat with using IRC and the like on the Internet.

There's no more challenge in that than running PSK from my shack at home. It works fine, and is efficient in many ways, but alas, very boring. I find it a bit like flying on a commercial plane from one place to another; you're just sitting there, not actually flying the thing. Not much to brag about is it? And at last, I can communicate with others by banging two sticks together, blinking a lamp, blowing a whistle, or even using smoke signals. Can you do that with your computers? .





## "Wind Chill"

by Charlie, WA3RSQ

Many people work out of doors in winter and with more involvement in winter sports, the wind chill index has become important in planning outdoor activities in extreme cold temperatures.



Wind chill index (also called wind-chilled factor.) The cooling effect of any combination of temperature and wind,

expressed as the loss of body heat in kilograms per hour per square meter of skin surface.

The term "wind chill" was coined by Antarctic Explorer Paul A. Siple in 1939. During the 1940s Paul Siple and Charles F. Passel conducted experiments with the temperature and wind speed to develop the wind chill formula.

Arctic explorers and military experts have developed what is called the wind-chill index which shows the combined effects of the wind and the temperature on exposed skin.

The wind chill index is only an approximation because how you actually feel will also depend on other variables such as the type of clothing worn, amount of exposed flesh, the amount of radiation, and your physical condition at the time. These temperatures and the heat loss values are applicable to man and not inanimate objects.

It has been shown through experiments that human flesh will freeze at a temperature of 18 degs. F., and a wind speed of 22 mph in one hour, or at -22 degs. F., with a 22 mph wind in one minute.

A 30 mph wind, combined with a temperature of 30 degs. F., can have the same chilling effect upon you as a temperature of 15 degs. F., when the wind is calm.

### "Wind Chill Formula"

$$\text{Wind Chill ( F )} = 35.74 + 0.6215T - 35.75(V^{0.16}) + 0.4275T(V^{0.16})$$

"V" is the wind speed value in mph. "T" is the temperature in F.

Frostbite occurs in 15 minutes or less at wind chill temp. of -18 Degs or lower.

For more information on "Wind Chill" and a "Wind Chill Chart" using the wind speed in mph and the temperature in F. to determine the "Wind Chill" check out my my site at: <http://www.enter.net/~wxdata/a-chill.htm>

Have Fun:

*Charlie Giannetta, WA3RSQ  
Meteorologist - Professor*

## Speaking of speakers

by Val, W3EFL

No matter how good the recording and encoding technology, an audio system is only as good as its speakers.

There are all kinds of specialty speakers on the market -sub-woofers and woofers, which are designed to produce very low frequencies, and tweeters that produce very high frequencies. There's also the matter of "surround" sound. The mid-range? It's covered by a rather dull name: mid-range. Why not meowers? After all, isn't that what belongs between woofers and tweeters?

Anyway, what most speakers have in common is their principle of operation. They all have some sort of cone (called that regardless of its actual shape). It is made out of a light, stiff material that acts to push air. The material needs to be light so it requires less energy to move. It also needs to be stiff, because a stiff cone pushes air better.

The very back of the speaker cone is connected to a soft iron slug that sits neatly in a surrounding bit of hardware composed of a magnet and a coil. The magnet acts to counter to the coil. A signal that tells the coil to vibrate the cone is countered by the magnet that returns the cone to its home position. The scheme is more efficient than trying to send a second signal through the a coil to return the cone home. Which leads us to volume -- also known as loudness. The term comes from the volume of air that the cone can move, which is driven by the amount of power running through the coil. Of course, the set-up has to be designed to match power capabilities. Pour lots of power (measured in watts) through a speaker coil not designed to handle it and a "phuzzzt" (a highly technical word) will be the last sound produced by that little speaker.

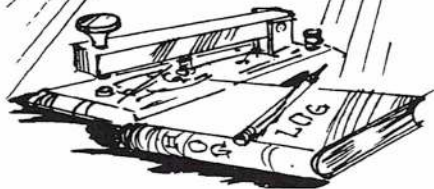
So, what should you look for when considering speakers? Unless you are an audiophile armed with a pile of specs and a voluminous buyers guide, just listen. Buy what sounds good, makes sense for your application and fits your budget. Listen to a lot of speakers and note with model numbers. We have heard of salespeople taking advantage of customers who ask for "that set we heard two samples ago" by trying to slip in something more expensive that sounds about the same.

*de Val, W3EFL*



DLARC

Silent Key N3FEA



**Don Meinhart, N3FEA** became a Silent Key on April 4th. A member for many years, he spent his Working career in the Ingot Mold Division at Bethlehem Steel, retiring in 1993,

---

## FCC Proposes to hike vanity call sign fee

The FCC has proposed increasing the regulatory fee to apply for, renew or reinstate an Amateur Radio vanity call sign from \$14.50 to \$16.30 this fall. The Commission included the new fee in a Notice of Proposed Rulemaking (NPRM) "Assessment and Collection of Regulatory Fees for Fiscal Year 2003" (MD 03-83), released March 26. The closing date for comments on the new fee schedule is April 25. Reply comments are due by May 5.

"We estimate that 9800 applicants will apply for vanity call signs in FY2003," the FCC said in its NPRM. That's up by 800 from FY2002. The agency expects to collect revenues of nearly \$160,000, an increase of almost \$30,000 from FY2002.

If all goes as it has in the past, the FCC will adopt a Report and Order on the FY2003 fee schedule this summer, and the new fee will become effective sometime in early September.

The FCC NPRM also seeks comments on its efforts to review, streamline and modernize its fee assessment and collection processes and procedures. "We welcome comments on a broad range of options in this regard," the FCC said. Areas of particular interest include suggestions for improvement in the agency's electronic payment system.

Applicants for amateur vanity call signs will continue to pay the \$14.50 regulatory fee per call sign (per 10-year license term) until the FY2003 fee schedule becomes effective. The FCC has said in the past that because it continues to incur costs related to vanity call signs even after their issuance or renewal, it believes a regulatory fee at renewal is appropriate.

Interested parties may comment via the FCC's Electronic Comment Filing System (ECFS) <<http://www.fcc.gov/cgb/ecfs/>>. Enter "03-83" in the "Proceeding" field. The FCC said it expected to have the docket available by March 28 for the posting of electronic comments.

Electronic comments by e-mail also are welcome. To receive filing instructions for e-mail comments, send an e-mail to [ecfs@fcc.gov](mailto:ecfs@fcc.gov) and include the words "get form <your e-mail address>" in the message body. The ECFS will reply with a sample form and directions on filing comments.

A copy of the FCC Notice of Proposed Rule Making is available on the FCC Web site <[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-03-64A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-03-64A1.doc)>.

*The ARRL Letter*

---

\*

## STORY Sudan operation is QRT

The **STORY** Sudan DXpedition shut down this week, a bit earlier than expected, after logging more than 49,000 QSOs. Pilot station, Bernd Koch, DF3CB, says the last QSO was March 31 at 1745 UTC, a bit earlier than expected. "The last news and logs were sent from an Internet cafe in Khartoum," he said. DF3CB has prepared an online QSL request form for those seeking **STORY** cards via the bureau.

It's available on the **STORY** Sudan DXpedition Web site <<http://www.df3cb.com/story>>, which includes more information and photos. **STORY** was active in the CQ World Wide WPX SSB contest over the March 29-30 weekend. Demand for **STORY** was heavy. Most-wanted lists put Sudan in the top 20.--some information from The Daily DX <<http://www.dailydx.com>>

*The ARRL Letter*

---



**Delaware-Lehigh Amateur Radio Club Inc.  
Income & Loss Statement**

Balance 1/31/03	\$7,242.95
<b>INCOME</b>	
Club Dues	\$441.00
Donation Income 50 - 50	35.00
Interest Checking 2/14	8.59
Member Donation	3.00
	-----
<b>TOTAL INCOME</b>	<b>\$487.59</b>
<b>EXPENSES</b>	
Hamfest Expense Fire Company	\$250.00
Postage	58.54
Refund dues	12.00
Telephone	20.48
	-----
<b>TOTAL EXPENSES</b>	<b>\$341.02</b>
Balance 2/28/03	\$7,389.52

This is the report for the month of March.  
Delaware-Lehigh Amateur Radio Club Inc.  
Income & Loss Statement

Balance 2/28/03	\$7,389.52
<b>INCOME</b>	
Class Materials	\$159.00
Club Dues	63.00
Interest Checking 3/14	8.58
	-----
<b>TOTAL INCOME</b>	<b>\$230.58</b>
<b>EXPENSES</b>	
Award Plaque	\$77.30
Memory Of Oliver Kratz, Daniel Yakibisin & Jack Smith	75.00
Newsletters March & April	117.00
Postage	57.00
Telephone	20.48
	-----
<b>TOTAL EXPENSES</b>	<b>\$346.78</b>
Balance 3/31/03	\$7,273.32

*de, Dick, KA3MOU, Treasurer*

**DLARC, kudos!**  
*by Bill, K3ANS*

Hello, I'd like to say a big thanks for the mobile division plaque that came in yesterday's mail. Thanks to all the folks who did the log checking and the rest of the work, and thanks to the Delaware-Lehigh ARC for sponsoring this award.

This must be some kind of speed record for getting plaques out. Not even six months have passed since the contest. Nice going, everyone.

*de Hal W1NN op of W3USA/m*

**Public Auction**

**Saturday, May 10, @9:00AM**

After enjoying 50 years of Ham Radio and an Electronic Sales and Service Business, **Harry Buchin, W3TEB**, will mark the occasion by holding a Public Auction offering many items of an electronic nature.

There will be various pieces of test equipment, meters, tubes, tube checkers, amateur radios and transmitters, antique radios, speakers, a tesla coil, antennas, rotors, and "many items too numerous to mention."

Refreshments will be available and a **J-38 CW key** will be awarded to the lucky registrant. The date of the auction is Saturday, May 10th, 2003 at 9 AM.

The sale will be held at **The Annex, 22 Lehigh Street, Macungie**, which is at the rear of Buchin Hardware. Harry has sold his property and is in the process of selling his hardware business. He and his wife, Margaret, N3RDI, are planning to retire and locate in Macungie and expect to be able to devote more time to their amateur radio hobby.

**DLARC License classes proceeding**  
*by Bob, KE3AW*

As of this writing we are past the mid-way point of the DLARC sponsored classes, taught by Chris/NU3L and George/N3SQD pm Monday evenings.

We have 8 registered persons, although not all have been able to attend all the sessions due to other commitments.

Already, three class members have earned their Technician licenses by passing the test at April's VE session. The following four persons to amateur radio: Frank Radoski, Larry Bezdziecki, Larry's daughter Kathy Green, and her husband Scott (who didn't attend the classes, but obviously did study with Kathy).

Please listen for them on 146.700, and welcome them to the air waves.

We expect more new amateur radio operators by this time next month!

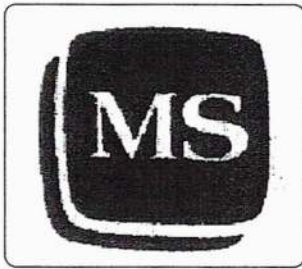
*de Bob KE3AW*



# MS WALK

Easton Sunday April 6, 2003

On a rather cool (ok it was cold) and somewhat sunny Sunday a small group of hams got together to provide communications for the Multiple Sclerosis walks. In Easton's Hugh Moore Park going from the canal boat launching area to the canal museum and back. The event ran very trouble free and no problems were encountered that the hams present were on able to over come.



We used the club repeater 146.700, it provided excellent coverage with just hand held radios. Allowing use to easily cover our posts.

I would like to thank the hams that gave up a portion of there Sunday to lend a hand, and provide a much needed and much appreciated service.

They are. KE3AW/Bob, KB3FIH/Bruce, Gregory/son of KB3FIH, KA3RVH/Bill, A3KM/Mark, N3CP/Bill, KB3HMK/Phillip, WF3H/Bob, KA3MOU/Dick, Maryann/Dicks wife and me N3QZT/Jeff.

Just a reminder about the MS 150-2003 Bike event which will take place on the weekend on **June 7th and 8th, 2003**. This is the largest public service event that the club participates in at this time and it requires a large number of hams (at least 25) to properly provide the level of communications the Multiple Sclerosis Society has come to expect from us over the last eleven years. It is a two day event starting at the Velodrome in Trexler-town and overnighing at Kutztown University and then returning the next day. If you would like to help but can only help on one of the days that is not a problem. ANY Help is welcome. How about this year let's see some new faces along with the ones that have helped in the past.

You can contact me via e-mail at n3qzt@ptd.net or call me at home: 610 928-3897 or contact me on 146.700. Thanks...Jeff/N3QZT

*de Jeff, N3QZT*



# Just the Minutes

by *Jill N3ZSR*

President Jeff Keller, N3QZT called the April 3rd club meeting to order at 7:30 PM, with 54 members and 10 guests present. The meeting was held at the new Northampton County 911 Building.

The February minutes was approved with a motion from Dave, N3EYT and seconded by Don, KA3JWE. The Treasurer's Report for February and March was approved with a motion from Ray, W3TDF and Seconded by Ken, N3IYX.

The club classes have 2 more meetings.

Barry, N3NVA reported that the new County tower is up with our antenna's are on it. Also our equipment is in the new building placed by the tower.

VE session is scheduled for tomorrow evening at IU20.

Kenny, N3IYX, reminded us that the milk house is open every Wednesday night around 7:30 pm. Anyone can come and operate.

Jeff asked that we make sure to have anything we want in the newsletter to Clarence NO LATER than the 10th of each month.

The following received certificates for helping to transport staff to area hospitals during the February snowstorm: Bill Broad- W3BBX and his wife Doris Bill Bigg - KA2RBH Phillip Bigg - KA3HMK Robert Barrall - KB3HHG Joe Moskalski - KC2IRV Jim Mahoney - KB3BYU

Bob Puharic - WF3H was awarded the Amy Zimmerman plaque this year.

We are still in need of a Ham fest and Field day Chairperson.

Jeff welcomed the following guests to the meeting: Susan Sklodowsky, Michael Treiber, Larry Bezdziecki and Scott Green from the club class. Steve - N3MX, Mark - N3GRE, Robin - KB3GZV, Dorian - KB3GZW. Hope Goodman and Maryann Dech

The following new member was voted in: Robert Klaus Jr. - KB3HVI on a motion from Bob - N3QZR and seconded by Blair - K3YD

The following applications will be voted on at the March meeting

**: Bob Daniels - KB3MGN**

**Mark Borgo - N3GRE**

**Steve Schrack - N3MX**

MS Walks for next year: April 6, Hugh Moore Park - Easton May 4th, Lehigh Parkway - Allentown

The program for the evening was by Dick Teasdale - WA3MDP. He gave about a 30-minute talk about the new Northampton County 911 building followed by a tour.

The meeting was adjourned at 9:50 PM on a motion from Dick - KA3MOU and seconded by Bill - NC3P.

*de Jill, N3ZSR, Secretary*





## The Prez Sez

by Jeff, N3QZT

Spring has sprung, (well as I am writing this it is snowing) the grass is starting to turn green and at a few locations things are starting to grow. As soon as the ground starts to thaw steel and aluminum



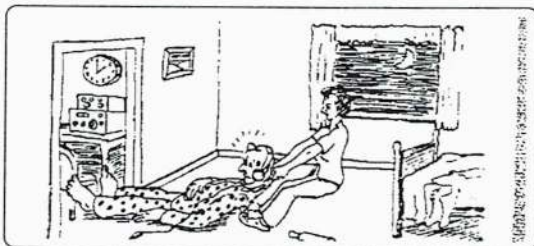
miraculously start to push their way skyward. Some are huge single arrays while others are combinations of smaller blooms. It's hard to believe that such things of beauty, at least in

the eye of a Ham, could grow out of a solid block of concrete.

With the coming of spring also comes a host of public service activities. Our club provides communications for these events throughout the spring and summer. These events are important to our club and to amateur radio. They serve a dual purpose, by exposing Ham radio to the public in a positive way that improves our overall image and also providing a much needed service to the organization that is conducting the event. Some people give back to their community by volunteering at hospitals or nursing homes, some work through their churches or other service clubs. If you currently aren't giving anything back to your community, why not start by volunteering for some of our club's public service events. They are usually only a few hours long and are good practice for improving your skills as a radio operator while learning the proper way to conduct yourself in the event of a real emergency.

Two of the most fun events that our club participates in are Field Day and the D.L.A.R.C. picnic. Field day is the last weekend in June which is the **28th and 29th** and the picnic is **September 28th**. And let's not forget our Hamfest which is going to be held on **September 20th**..

de Jeff, N3QZT



## Weather Drill Exercise!

On Thursday, March 20, 2003 we were going to have the state-wide weather exercise. Due to circumstances beyond our control, the exercise was canceled.

I would like to thank the following hams who showed up at the milk house for the exercise, **John, N2MWQ, Bill, NC3P and Rob, KB3HPN**. Also a thank you to **Bob, N3OLH** who volunteered to come out if he was needed.

de Dick KA3MOU

---

## John WX3W new District EC

Changes made in E. Pa. Section Staff Recently there have been a few changes made to the E. Pa. Section Staff. Fred Serota, K3BHX, has been changed from Bulletin Manager to State Government Liaison following the resignation of W3ZRQ.

Thank you to Al who served as SGL for a number of years. Fred will continue to be an asset to the Section. Section Emergency Coordinator (SEC) Mike Miguez, N3IRN resigned due to family health matters. Mike will continue to serve in the Section as District Emergency Coordinator for District 4 and as EC for Montour County.

Many thanks to Mike for doing such a good job despite some trying circumstances. Taking Mike's place as **SEC is John A. Holmes, WX3W**, from Bath, Pa.

John was serving the Section as Assistant Section Manager for Skywarn prior to the SEC appointment.

The ASM position for Skywarn has been eliminated. John's commitment to emergency communications will be a great asset. New Emergency Coordinators for the Section are Tom Olver, W2TAO, for Pike County and Tom Miller, KB3CVO, for Cumberland County. Both of these individuals should prove to be good additions to the E. Pa. Section. Congratulations to all of the new appointees.

de Eric, WB3FPL

---



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.

==2002-2003==

**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 COMMITTEE**

Joe Chuk.....(chuk@kutztown.edu).....W3JD..610-799-0337  
 Barry Vogt.....(n3nva@enter.net).....N3NVA..610-863-7294  
 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>

1 P O O M N + 1 N O P O P

MEMBERSHIP EXP 12-31-03  
 ROBERT A GREEN KE3AM  
 346 CREST DRIVE  
 WHITEHALL PA 18052-7204

**DATED MATERIAL - PLEASE DO NOT DELAY**



**The W3OK CORRAL**  
 RR 8  
 Greystone Building Gracedale Complex  
 Nazareth, Pennsylvania 18064-9278

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