Delaware - Lehigh Amateur Radio Club, Inc.

W3OK Corral NEWSLETTER

December 1997

# Christmas City Station to operate December 13/14

## Christmas City Station WX3MAS

*by Ray, W3TDF*

The annual Christmas City Special Event operation is scheduled for **December 13/14**. Operation will take place at the Greystone Building, using the club station for SSB, and an additional set-up in the meeting room for CW. We are fortunate to have the use of the distinctive call **'WX3MAS'**, which is the call assigned to the Christmas City ARC.

Operators are needed to man these stations for 2 hour periods. The announcement will be in the December issues of the ham magazines for operating periods of **9AM to 9PM both days.** There are some slots open for SSB, and most of the CW. Walk-in operators and/or observers are welcome, and the assigned operator may even let the strays sit in. As usual there will be cookies and coffee/tea for the helpers and operators.

Our club (yours and mine), has been doing this event for at least 25 years. We get many compliments both on the air and with the QSL cards that we receive. Our certificate, which was designed and donated by **Norm,K3NZ**, are distinctive and cherished by the recipients. The operators helpers will also receive a certificate of appreciation.

If you would like to participate please contact me by E-Mail at **W3TDF@juno.com** - packet at **W3PYF-3 (144.99)** at **(610)346-7313.**

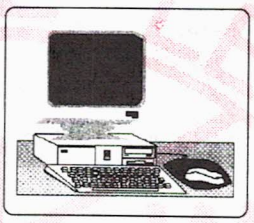
**Meeting December 4th in Kiva Hall, The Internet and ham radio with Dan Ruth W3ZF speaking. 7:30 pm.**

**Talk in on 146.70 if needed**

## December Meeting to feature The Internet

*by Dan Ruth W3ZF*

This topic at the **December 4th** meeting of the Delaware Lehigh Amateur Radio club in Kiva Hall, may



be foreign to a certain segment of our membership; it may even be kind of a sore point with some in the amateur community. It seems that **"THE INTERNET"** may be tapping (or should I say "sapping") some of the attraction of our hobby.

There seems to be no doubt that regular **PACKET** activity has dwindled since the spread of the Internet. Cheaper more powerful computers, cheaper faster modems and attractive deals from Internet Service Providers (ISPs) have smoothed the way for this phenomenon to enter our households. Well, now that so many of us have access to this "new-kid-on-the-block", we might as well see what it has to offer.

Alarmingly, we can acquire a recipe to make deadly bombs. Amazingly, we can see deep into the beauty of our galaxy (by viewing pictures taken by the Hubble telescope). Conveniently, we can view a highly detailed street layout of a distant city we plan to visit. Shamefully, we can view the complete physical layout of some nude pinup. This medium brings much that is good - and - much that isn't!

Amateur Radio Resources on the Internet" will focus on what's out there for us as Radio Amateurs. I hope to have a live connection to the Internet during this program to present what I've found to be informative, interesting, and exciting. Once again, I'll be counting on your interaction during my talk to round out the presentation. Bring a list of your favorite URLs (Internet addresses) and we'll take a ride on my magic carpet. (Or should I say, "bring your swimsuit, and we'll all go surfing")

# DLARC in Emmaus Halloween parade

*by Bob, KE3AW*

The annual Emmaus Halloween Parade was a go on Saturday night, October 18, and **Delaware-Lehigh Amateur Radio Club** was there to help insure the success of the occasion.

**Sixteen radio operators were involved.** **Bob/N3QQ** was the Control Operator shadowing the Parade Marshall.

On the parade route were:

**Bob/KE3AW,**
**Joe/KE3DZ,**
**Joe/W3JD,**
**Mark/WA3KIF,**
**Mitch/WA1LLD,**
**Jeff/N3QZT,**
**Ray/W3TDF,**
**Amy/KD3TI,**
**Bruce/KA3TIU,**
**Glenn/N3ULW,**
**Malcolm/N3XRL,**
**Dan/W3ZF.**

Standing by for service, if needed, were: **Ed/AA3OU, Bill/KA3OEG, and Mike/N3OUC**.

After the parade activity the enjoyable DLARC tradition of the visit to Perkins for a snack was welcomed by the operators, spouses, children, and friends.

**Service Electric Cable** provided live TV coverage of the parade as well as replays a few evenings later, and gave particular attention to **DLARC.**

Thanks to all the hams who worked at this event, not only from me, but more important, from the Emmaus Halloween Committee and the Borough of Emmaus.

The potential communication needs of a public service activity of this size, including bands, marching groups, floats, and thousands of spectators present a test of our readiness and skill. Once again DLARC radio operators provided the needed communication.

***de Bob KE3AW***

# Dues Reminder

**Check your mailing Label.**

If your membership expires **12/31/97** your dues are due. Annual dues for each category of membership are as follows:

1. **Under age 18 - $12.00**
2. **From 18 to 64 years of age - $17.00**
3. **65 years of age and over - $12.00**
4. **Family member - $3.00**
5. **Associate member - $7.00**

Since membership is on a calendar year basis, members joining between July and December pay one-half the annual dues for the current year. There is an initiation fee of **$1.00** for each new member. New applicants are approved for membership at the next monthly membership meeting. If paying dues at the Club meetings please put dues in a envelope with your call sign, thanks. Checks for dues should be made out to DLARC.

Dues can be mail to the Club Treasure Dick Dech

**Richard A Dech -KA3MOU**
**120 MCILHANEY AVENUE**
**BATH PA 18014-1612**

# Brass Banger's Net

*by Mark, K3MP*

Come and join in on the CW net nightly on 28.175 from 7:45PM til ??? Join N3JAF, Norm in Coopersburg and K3MP, Mark in Catasauqua. Get that code speed up to upgrade your license. For you that haven't worked CW in a while, get off that 2 mtr radio, put your mike away, and join in on the fun. Invite a non-ham or a tech to your house and teach them the code. Show them that there is a world out there under 2 mtrs FM.



Talk to the world in CW. Imagine talking to a foreign country and actually understanding what they are saying. Yes my dear 2 MTR no code buffs, everybody speaks the same language here. This is Ham radio at its finest. There are great techs out there, but without the use of satellites, your not going to shoot the world with RF. As one of my fellow hams would say "Just shut up and use the key." Thanks to his little push I enjoy that WORLD BELOW 2 MTRS. Looking to CU there on 28.175 and bang a little brass.

***de Mark,K3MP***

# The Delicate Art of the QSL
# A Personal Perspective

***by Rich Shevalier N3NXF***

**Part Two:**

## My Philosophy on Exchanging QSL Cards

Last month, I discussed using a computer to design and print personalized QSL cards, and how I always send along a QSL letter describing my life. This month I will tell you how I have been successful in getting QSL cards, and why I think these things work. I did, however; manage to omit customizing the QSL card to a one-of-a-kind status. Because of the ease of modifying the design, I have in the past sent a one-of-a-kind QSL card to friends in commemoration of some special help (e.g. N3JGX got one for diligently helping me to get to 13 wpm CW). These cards always contain a message stating that no other card just like it wi ll ever be printed. I think it's a nice gesture.

There are two principles that drive my QSL exchange mechanism. The first principle involves the fact that I have realized I am a product of the "instant gratification generation". I want my replies FAST, and accordingly, I operate under a "the sooner they get my QSL card, the sooner I'll get theirs" policy. I always send the cards directly to the DX station, and never use the outgoing QSL bureau. This is MY personal choice, and may not work for you (it certainly won't if you send out more than a few cards a month). The second governing principle of my QSL exchange effort is a sage piece of advice given to me by a savvy DXer when I first became a ham: "generally speaking, you want or need the DX station's QSL card much more than he wants or needs yours". The logical corollary to this statement is that you need to devise a way to help the DX stations want or need your card. Interesting, pretty, colorful, humorous or suggestive cards can perform this function, but there are other ways.

When I'm in a QSO with a DX station I will try to talk to him about his country, or mention that I'm a teacher (good or bad, we've ALL had them, a common denominator), or otherwise stimulate an interesting (read memorable) conversation. I make it a point to tell the station what a memorable conversation it was, and to expect my QSL card. At this point, you can often receive valuable information, like a new address, a QSL manager or often just "I'm good in the Callbook".

Many times the DX station is not interested in a rag-chew, especially if they are involved in a contest. This of course doesn't diminish your accomplishment of contacting a sought after prefix, but it does mean that you're not very likely to engage the DX station in a memorable chat. In fact, the very real probability is that you are the 80th W,N,K,A 3 station that he's contacted in the last twenty minutes. This is why I have included a space on my QSL card for "I'm your contact #:_____", on the theory that if I'm easy for him to find he'll be more likely to reply with a card.

No matter who the DX station, or what the contact situation, I always include with my card a short letter describing who I am, my family, living conditions, and shack equipment. This has reaped a tremendous reward. I've received, in response, similar letters with "what a great idea" type comments. I've gotten several QSL cards (different designs) from the same station. I've gotten photographs and travel brochures too ! Personally, for the small amount of work that goes into writing and printing the letter, I feel it really reaps the greatest reward.

Because I want my card back fast (for my own satisfaction, and because the more work they have to do to send it, the more likely they'll be to put it off and forget to send it), I ALWAYS include a self addressed envelope. If it's to a domestic station the envelope is stamped, if it's to a foreign station I include a dollar bill for postage (for Germany I'd have to include $2). As a precaution, I NEVER write any call sign on the outside of the envelope (and use only bank quality envelopes). Unscrupulous (and probably disgruntled) postmen in this country and abroad have figured out that the letters with those funny digit combinations often contain cash. Puff goes the QSL ! Here's what I do:

1. wrap the bill around the card
2. fold the letter around the bill/card
3. fold the return envelope over the letter
4. slide the whole package into the outgoing envelope

That's plenty of protection for the bill, and is still under the 0.5 oz maximum for the $0.60 international postal rate.

Now all that is left to do is sit back, and collect your profit in QSL's. I estimate (I've never actually checked for some reason) that this technique is about 95% successful in generating a return QSL card.

Sometimes even with the money and SAE, the DX stations can't be bothered to mail the card to you directly (personally I think that's rude, but not everyone thinks like me). Instead, they send you the card via the QSL bureau. Prudence suggests that you should have several SASE's (5x7) waiting at the incoming QSL bureau. They will (if you have an envelope there) hold your incoming cards until you get about 10 or so, and then send you the whole package (talk about Christmas in July !). You do have to be patient though, this process can (and does in many cases) take YEARS. Also, don't think this is just for international QSLs. It took several years to get a QSL from a station within 5 miles of my QTH (he sent it via the bureau).

So that's it, my philosophy and mechanism for sending and encouraging DX stations to return QSL cards. I hope you find some of these ideas helpful, and can mold them to fit your situation and needs. Gud Luk and Gud DX.....

***de Rich, N3NXF***

# FCC issues new form 610
# Old versions obsolete

***via the ARRL Letter***

The FCC announced that as of January 1, 1998, Amateur Radio applicants may only submit FCC Forms 610, 610 A and 610B that carry an edition date of September 1997. After the first of the new year, previous editions of Form 610 will not be accepted for filing by the FCC or by Volunteer Examiner Coordinators (VECs). Amateurs may begin using the new Form 610s now.

The major change on the new form is a certification that says the applicant has "read and will comply with Section 97.13(c) of the Commission's Rules" regarding RF radiation safety and the amateur service section of OST/OET Bulletin No 65, Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields. But, Amateur Radio Supplement B of Bulletin 65, which has additional information on how to conduct a routine RF safety evaluation and explains other aspects of RF safety, is still in the draft stages and not yet available to the ham radio community.

ARRL Executive Vice President David Sumner, K1ZZ, says the League is concerned that that the new Form 610 could be in the hands of hams before Amateur Radio Supplement B is complete. Sumner says it's essential that the FCC make Supplement B available in time for ha ms to complete their evaluations to meet the deadlines in the rules.

ARRL Lab Supervisor Ed Hare, W1RFI, who's been involved in reviewing the draft supplement, said he expects the FCC to release it sometime in November. The ARRL will release a book on the new RF safety regulations near the end of the year. "Above all, it is important that the required station evaluation be as easy as possible for hams," Hare said. "The FCC has pretty much met that goal. Additionally, most hams, by virtue of their power levels, will not need to do an evaluation at all."

Section 97.13(c) reads: Before causing or allowing an amateur station to transmit from any place where the operation of the station could cause human exposure to RF electromagnetic field levels in excess of those allowed under 1.1310 of this chapter, the licensee is required to take certain actions.

**1.** The licensee must perform the routine RF environmental evaluation prescribed by 1.1307(b) of this chapter, if the transmitter PEP exceeds the following limits: 160-40 meters, 500 W; 30 meters, 425 W (legal limit is 200 W--Ed); 20 meters, 225 W; 17 meters, 125 W; 15 meters, 100 W; 12 meters, 75 W; 10 meters, 50 W; VHF (all bands), 50 W; 70 cm, 70 W; 33 cm 150 W; 23 cm, 200 W, 13 cm 250 W, SHF/EHF (all bands) 250 W.

**2.** If the routine environmental evaluation indicates that the RF electromagnetic fields could exceed the limits contained in 1.1310 of this chapter in accessible areas, the licensee must take action to prevent human exposure to such RF electromagnetic fields. Further information on evaluating compliance with these limits can be found in the FCC's OET Bulletin 65, Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.

The new Forms 610 may be obtained from the FCC' Web site via the Internet at **http://www.fcc.gov/formpage.html,**

at **ftp://ftp.fcc.gov/pub/Forms/**

or by fax at 202-418-0177 (request index, or for Form 610 use form code 000610, for Form 610A use form code 006101, for Form 610B use form code 006102). The FCC Forms Distribution Center will accept FCC forms orders by calling 800-418-3676.

ARRL VEs and VE teams will be able to obtain a supply of the new Forms 610 in mid to late November--once the ARRL/VEC has had time to obtain a supply of the new forms.

Individual amateurs may obtain a copy of the new Form 610 by sending a self-addressed, stamped envelope (SASE) to: ARRL/VEC, 225 Main St, Newington CT 06111. Include 32 cents postage for each Form 610 requested (this is a four page form).

For general information, contact the **FCC, 1270 Fairfield Rd, Gettysburg, PA 17325-7245**, or call the FCC's National Call Center at **888-225-5322 (CALL FCC).**--FCC

***The ARRL Letter***



## VE test results

***by Mark, K3MP***

The monthly test session was held on **Friday November 7th** at 7PM. There was a total of 4 elements given, with one new license class earned.

**David W. Grumbine KB3BWG Tech**

The VEs for the evening were **K2YIY, Cary, N3EBH, Tom, WA3MVQ, Glade, NS3J, Bill** and **K3MP, Mark.** One of the examinees was just starving for information about radio.

We will be looking for him to be at more test sessions. Thanks for the good evening ... .

***de Mark, K3MP, VE Liaison***

One more club member, upgraded via the W5YI session at the LVRC.

**Leo Derany, N3UKR upgraded to General.**

# Val Sez

***by Val, W3EFL***

The "pound" key on your keyboard (#) is called an octotroph. The only domestic animal not mentioned in the Bible is the cat. The "dot" over the letter "i" is called a tittle. Table tennis balls have been known to travel off the paddle at speeds up to 160 km/hr.



Pepsi originally contained pepsin, thus the name. The original story from "Tales of 1001 Arabian Nights" begins, "Aladdin was a little Chinese boy." Nutmeg is extremely poisonous if injected intravenously. Honey is the only natural food that is made without destroying any kind of life. What about milk you say? A cow has to eat grass to produce milk and grass is living.

The most common name in the world is Mohammed. Michael Jordan makes more money from NIKE annually than all of the Nike factory workers in Malaysia combined.

The volume of the earth's moon is the same as the volume of the Pacific Ocean. Cephalacaudal recapitulation is the reason our extremities develop faster than the rest of us.

Spiral staircases in medieval castles are running clockwise. This is because all knights used to be right-handed. When the intruding army would climb the stairs they would not be able to use their right hand which was holding the sword because of the difficulties of climbing the stairs. Left-handed knights would have had no troubles, except left-handed people could never become knights because it was assumed that they were descendants of the devil. Ham radio operators got the term "ham" coined from the expression "ham fisted operators," a term used to describe early radio users who sent Morse code (i.e., pounded their fist). The slogan on New Hampshire license plates is "Live Free or Die." These license plates are manufactured by prisoners in the state prison in Concord.

Chinese Crested dogs can get acne. Hydrogen gas is the least dense substance in the world, at 0.08988g/cc. Hydrogen solid is the most dense substance in the world, at 70.6g/cc.

Each year there is one ton of cement poured for each man woman and child in the world.

The house fly hums in the middle octave key of F. The only capital letter in the Roman alphabet with exactly one end point is P.

Only 1 in 2,000,000,000 will live to be 116 or older. An ostrich's eye is bigger than its brain.

Tigers have striped skin, not just striped fur.

According to Einstein's Special Theory of Relativity, it is possible to go slower than light and faster than light, but it is impossible to go the speed of light. Also, there is a particle called tackyon which is supposed to go faster than light. This means if you fire a tackyon beam, it travels before you fire it.

When you tie a noose, the rope is wrapped twelve times around because it's the same length as a persons head.

Hummingbirds are the only animal that can fly backwards.

A cat's jaw cannot move sideways.

***de Val, W3EFL***

**This is a reminder that on Feb. 1, the W3OK repeater will be in PL with 152.4 as the PL. One of the control operators will be able to unlock the PL if needed.**

## FCC sets RF safety evaluation threshold for repeaters

The FCC has released an erratum to its RF safety rules that sets 500 W ERP (effective radiated power) as the limit for most amateur repeaters before a routine RF safety evaluation would be required. This applies to repeater systems on all bands.

A routine RF safety evaluation would be required for all repeater systems with more than 500 W ERP and having either (1) a building-mounted antenna or (2) a non-building-mounted antenna with a height of less than 10 meters (approximately 33 feet) above ground level to lowest point of the antenna.

It's fairly simple to calculate ERP. Take the PEP input to the antenna and multiply it by the numerical equivalent of the antenna gain in dBd (dB relative to a halfwave dipole in free space). Gain relative to an isotropic radiator (a point source), dBi, can be converted to dBd by subtracting 2.15 dB from the dBi number. For example, say your repeater puts out 100 W and has 3 dB of feedline loss. Calculate: 100 x 0.5 = 50 W to the antenna. The antenna has 8.8 dBd of gain, or 7.59 as a decimal. So the ERP is 50 x 7.59= 379.5 W..

***The ARRL Letter***

## VEC fees to rise in 1988

The ARRL/VEC test fee will be $6.35 in 1998--up from $6.25 in 1997. The announcement follows this week's FCC Public Notice announcing a 2.2% increase in the maximum fee reimbursement, to $6.39. Volunteer Examiners (VEs) and Volunteer Examiner coordinators (VECs) may charge examinees for out-of-pocket expenses incurred in preparing, processing, administering, or coordinating examinations for amateur operator licenses.

The amount of any such reimbursement fee from any one examinee for any one examination session, regardless of the number of elements administered, must not exceed the maximum allowable fee.--

***Bart Jahnke, W9JJ/FCC via The ARRL Letter***

**Remember that Dues are due... If your mailing labels says Membership expires 12/31/97, mail your dues to Dick, KA3MOU, treasurer.**

## Delaware-Lehigh Amateur Radio Club, Inc. Income & Loss Statement 10/1/97 Through 10/31/97.

| | | |
|---|---|---|
| **Balance 9/30/97** | | **$2,683.88** |
| **INCOME** | | |
| Dues Arrl Misc | 397.00 | |
| Hamfest Income | 84.00 | |
| **TOTAL INCOME** | **481.00** | |
| **EXPENSES** | | |
| Hamfest | 204.68 | |
| Memory Of John Fox | 25.00 | |
| Newsletters - For Nov. | 127.20 | |
| Postage | 146.52 | |
| Renewal - | 169.00 | |
| Telephone - | 34.22 | |
| **TOTAL EXPENSES** | **706.62** | |
| **TOTAL INCOME - EXPENSES** | | **-225.62** |
| **Balance 10/31/97** | | **$2,458.26** |

**Total** Membership 372

***de Dick, KA3MOU Treasurer***

### Lincoln and Kennedy?????

Abraham Lincoln was elected to Congress in 1846.
John F. Kennedy was elected to Congress in 1946.
Abraham Lincoln was elected President in 1860.
John F. Kennedy was elected President in 1960.
The names Lincoln and Kennedy each contain seven letters.
Both were particularly concerned with civil rights.
Both wives lost children while living in the White House.
Both Presidents were shot on a Friday. Both were shot in the head.
Lincoln's secretary was named Kennedy. Kennedy's secretary was named Lincoln.
Both were assassinated by Southerners. Both were succeeded by Southerners. Both successors were named Johnson.
Andrew Johnson, who succeeded Lincoln, was born in 1808. Lyndon Johnson, who succeeded Kennedy, was born in 1908.
John Wilkes Booth, who assassinated Lincoln was born in 1839.
Lee Harvey Oswald, who assassinated Kennedy was born in 1939. Both assassins were known by their three names. Both names are made of fifteen letters.
Booth ran from the theater and was caught in a warehouse. Oswald ran from a warehouse and was caught in a theater. Booth and Oswald were assassinated before their trials.

## Just the Minutes

*by John, N3IGA, Secretary*

The November 6th meeting of the **Delaware-Lehigh Amateur Radio Club** was called to order by Joe, W3JD. There were 55 members and guests present. A motion was made by Clarence, W3PYF, to accept October's meeting minutes as printed in the newsletter. Bob, KE3AW, seconded.



Dick, KA3MOU, gave the Treasurer's Report. Starting Balance was $2,683.88. There was $706.62 in expenses. The Ending Balance, as of October 31, is $2,458.26. Tom, N3LLL, made the motion to accept the Treasurer's Report. Don, KA3JWE, seconded it.

Bob, KE3AW, gave a report on the Novice-Tech Classes. They are in their eighth week. It looks like there will be 5 good hams coming out of this class.

Joe, W3JD, announced that since the first Thursday of January is New Year's Day, the club meeting would be January 8 with the VE session on the 9th.

Ray, W3TDF, gave a report on the PA QSO Party. As of right now, we are a little under 1.3 million. There are still some scores that Ray has not received yet. Ray has no idea if we won again since there was a big turn out from other clubs this year.

Ray, W3TDF, also talked about the Christmas City Special Event. It will be held on December 13 and 14 from 9am to 9pm. Ray passed around a sign-up sheet with 2-hour slots. If you want to be a part of this annual club event, contact Ray.

Joe, W3JD, informed members present that there is a need for more editorial contributors to the club's newsletter. We need more writers. You don't have to be a good writer. Write about any experiences with Ham radio, electronics or how you have benefited from Amateur Radio.

As far as the monthly programs, Joe, W3JD, is trying something different. He has asked the Board members to volunteer to coordinate two programs for the next year. John, N3IGA, is looking for ideas from the club members on what kind of programs members are interested in.

Clarence, W3PYF, is in need of more Net Controls for the Sunday morning and Wednesday night nets. You may have the net once every 5 weeks. The only requirement is that you must live in Northampton County.

It looks like we will be back at Schnecksville Fire Co. next year for the Hamfest. Norm, K3NZ, gave two dates that he got from the Fire Company. Both dates are a Saturday. One date is **September 12**. On this date we can have the same grounds and also have the pavilion next to the grounds. That means we could have inside vendors. The other date is **September 26.** We would only have the grounds on this date. The majority of members present wanted the **September 12th** date. There has to be some checking out of what else is going on that weekend first.

Amy, KD3TI, made the motion and Carl, AA3IX, seconded that the following individuals are approved for membership:

**Elliott Marcus, W3GWQ**

**Bruce Lawrence, N3ZXT**

**Cheri Lawrence, no call**

**Donald Trayes, WB4CVH**

**Gabriel Lantos, KZ2A**

The program for the night was Tom, N3LLL, and Chris, NU3L, doing a demonstration of the proper way to solder. They even had a video camera set up so that everybody had a chance to see how to solder something small. They had a little handout that was a photocopy of Heathkit's Kit Builder's Guide. If you are new to the hobby or an old timer, you had to pick up on some new tips on soldering or desoldering.

A motion to adjourn the meeting was made by Howard,KB3ZX, and seconded by Dave, N3LWY

***de John, N3IGA***

## Program Ideas

As President Joe, W3JD, stated during the November club meeting, I'm compiling ideas or suggestions for programs that would be interesting for club members. Please send your ideas or suggestions for programs to jholmes@fast.net, and I will present all ideas and suggestions to the Executive Committee.

***de John, N3IGA***

## So you want a new transceiver!

*by Steve Auyer-N2TKX*

**Ever been impressed with all the features touted in the ads for radio equipment, but been unsure as to what, exactly, was meant by some of the claims?**

**Here's a primer that will help you figure out what's really being said.**

**ALL NEW** -- The plugs, jacks and connectors aren't compatible with anything else on the market.

**ADVANCED DESIGN** -- Upper management doesn't understand it.

**BREAKTHROUGH** -- We ignored everything we learned in developing the previous designs..

**NEW** -- It comes in different colors from the previous version.

**DESIGN SIMPLICITY** -- It was developed on a shoe-string budget.

**EXCLUSIVE** -- We're the only ones who have the documentation.

**FIELD TESTED** -- Manufacturing doesn't have a test system.

**FOOLPROOF OPERATION** -- We eliminated almost all of the controls.

**ENERGY EFFICIENT** -- Almost unmeasurable power output - you'll need a linear to work anyone but your next door neighbor.

**HIGH ACCURACY** -- But the display only shows 3 significant digits to keep the cost down.

**FUTURISTIC DESIGN** -- The mold for the plastic case got screwed up - that's why it looks so weird.

**IT'S HERE AT LAST** -- We've released a 26-week project in 48 weeks.

**MAINTENANCE FREE** -- It's impossible to fix

**MEETS QUALITY STANDARDS** -- The on-off switch almost never breaks. We haven't checked the rest of it yet.

**PERFORMANCE PROVEN** -- The breadboard worked really neat.

**REVOLUTIONARY** -- The knobs go round and round.

**SATISFACTION GUARANTEED** -- We'll send you a replacement unit if you don't like it.

**STOCK ITEM** -- We shipped it once before, and we can do it again, probably.

**UNMATCHED** -- It's almost as good as the competition.

**UNPRECEDENTED PERFORMANCE** -- Nothing ever had as many out-of-band harmonics as this unit.

**YEARS OF DEVELOPMENT** -- We Finally got one to work.

**CUTTING EDGE TECHNOLOGY** -- Designed around a bunch of free samples from a salesman. He claims the production units will work just like the samples.

**ISO-9000 CERTIFIED** -- We have *NO* idea what this means, but our competitors claim they meet it, so we probably do too.

**MIL-SPEC** -- From the folks who brought you $600 toilet seats.

**MODERN SUPPLIERS** -- The IC in the RF output stage is sole source from a supplier in Bangladesh.

*This appeared in the September 1997 ARNS Bulletin - Steve Auyer-N2TKX Editor.*

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### 1997 PA QSO PARTY SCORES & FINAL REPORT

***by Ray, W3TDF***

**There were 19 logs shipped to Nittany.**

I received $37 of which $32 went to Nittany, $5 postage, $0.85 for the money order. The total scores for those 19 logs is 763,200. My knowledge of other scores which were sent direct brings our total up slightly of 1.3Mil. There may be some that I don't have a record of and the total could possibly reach 1.5Mil. Could we win the trophy with that score? Your guess is as good as mine. From my observations, Erie, and Dauberville are strong possible contenders.

Hylights include **Rick,N3XR** operating in the Rover clas from 11 counties; High club score is **Bob,N3QQ=180,460**; and **Bud,W4YID** all CW for **59,509Pts.**

**Now comes the waiting !**

***de Ray, W3TDF***

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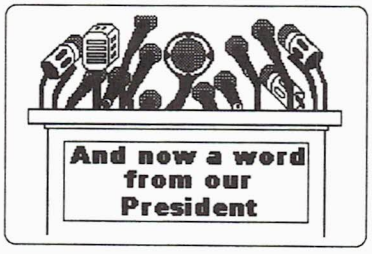
# The Prez Sez

## A Soldering Demo, Some Thoughtful Gifts, and a New Opportunity

***By Joe, W3JD, President***

In the midst of our business during the November club meeting, **Ray, W3TDF**, shared the news that, despite a good effort on the part of a few dozen of our members, this year's club **PA QSO Party** score is likely to be considerably lower than that of the past several years' performances. Whether that means the winner's plaque passes to another club or not has yet to be seen. What's important, though, is that those who did participate enjoyed the spirit of friendly competition that is particularly characteristic of this contest. We heard a number of the same familiar voices from around the state and around the country, some linked with unfamiliar new vanity calls!




Ray also reminded us of the upcoming holiday season by announcing the open time slots for the special event station of our sister organization, the Christmas City Amateur Radio Club, **WX3MAS**. Make it a point to stop by the club station at Gracedale on December 13th or 14th, to operate, keep the log, or just join in some holiday camaraderie.

As a special treat for many of us in attendance, **Don Metley, N3ZNO,** arrived at the meeting with boxes filled with custom-crafted wooden call sign cutouts on desk bases. They were gifts, pure and simple: No one asked him for them in advance, and he accepted no payment. They were just made, in his words "in friendship." While he's relatively newly-licensed, Don represents the spirit of generosity that has been a long-time tradition in ham radio. Thanks, Don, for showing us that people still do kind actions for their own sake.

For our night's program, **Tom, N3LLL**, and **Chris, NU3L**, shared some of their expertise gathered from years of electronic construction by demonstrating basic soldering techniques. A video camera and monitor provided excellent views of both the tools they used and the processes they described. While the program was particularly intended for some of our more recently licensed hams, a number of those who stayed for it had considerable experience of their own. Maybe they were just making sure that Tom and Chris did it right!

It's fitting that Tom Frobase had the chance to be in the spotlight for a program at this time, because, on the day this column is being written, Tom shared with me and the rest of the (early) Wednesday morning breakfast group that he will be leaving the area before the Christmas holiday. He has accepted a position as Manager of Communications for the Texas East Products Pipeline Company (TEPPCO) in Houston, Texas.

During his two years as **DLARC** president, Tom provided clear leadership while maintaining an atmosphere of congeniality and mutual respect. His technical competence always went unquestioned, and he was consistently ready to share his knowledge with anyone who asked for advice or assistance. He always had just the right electronic component in one of his many junkboxes.

While we all regret Tom's leaving (and the departure of his junkboxes), we send him our best wishes for an exciting new opportunity for himself and his family. I know for a fact that he's already making connections with space shuttle astronauts through **N3CXP** for some leads on housing developments in the Houston area without antenna restrictions!

Thanks, Tom, for all you have contributed to the Delaware-Lehigh Amatuer Radio Club.. Good luck in all that the future holds for you.

***de Joe, W3JD***

# SKYWARN Winter Terms

Our SKYWARN net does participate in the winter storm activations and here are some of the terms for winter weather and their meanings: Fall/Winter Weather Terms Adivisory Terminology

**The following advisories will be used to ALERT the public of situations that may cause some inconvenience or difficulty to travelers or people who must be outdoors.**

**BLOWING/DRIFTING SNOW ADVISORY** Used when wind-driven snow intermittently reduces visibility to 1/4 mile or less. Travel may be hampered. Strong winds create blowing snow by picking up or new snow.

**FREEZING RAIN or FREEZING DRIZZLE ADVISORY** Generally used only during times when the intensity of freezing rain or drizzle is light and ice accumulations are less thean 1/4 inch. to 8 inches in 12 hours over the northern Great Lakes region.

**SHORT TERM FORECAST (NOWCAST)** A short-term forecast designed to give specific, detailed forecast information for the next 1 to 6 hours on a county basis. Non-severe, addvisory, and warning information is contained in these forecasts which are routinely issued several times per day, and more often in some events. **continued on page 10**

## continued from page 9

**SLEET ADVISORY** Issued for expected sleet accumulations of less than inch.

**SNOW ADVISORY** used when a snowfall generally exceeds 2 inches but is not expected to accumulate 6 inches or more in a 12 hour period. May be uesed for 1 or 2 inch snowfalls if occurring at the beginning of the snow season or after a prolonged period between snow events. Some mountain locations have snow advisories issued for 4 to 7 inch accumulations in 12 hours.

**SEVERE WEATHER STATEMENT** Issued when the forecaster wants to follow up a blizzard warning with important information on the progress of the blizzard.

**SPECIAL WEATHER STATEMENT** Issued when the forecaster wants to pass information on to the public about widespread, developing or approaching weather that is not expected to be severe, but nonetheless is significant.

**WINTER WEATHER ADVISORY** Used when a mixture of precipitation is expected such as snow, sleet and freezing rain or freezing drizzle. Warning Terminology The following terms WARN the public of more serious winter weather situations that may cause impossible traveling conditions and could pose a threat to life and property.

**BLIZZARD WARNING/GROUND BLIZZARD WARNING** Issued for winter storms with sustained winds or frequent gusts up to 35 mph or greater and considerable falling snow (Blizzard Warning) and/or blowing snow reducing visibility to less the 1/4 mile. If there is only blowing/drifting snow occurring, then it is called a Ground Blizzard Warning. These conditions are expected to last at least 3 hours.

**HEAVY SNOW WARNING** Issued for snowfalls of 6 inches or more in 12 hours or less; or 8 inches or more in 24 hours or less (less amounts early or late in the season). Light winds (less then 10 mph) generally accompany these situations, with the primary hazard being heavy snow. Some mountainous regions have thresholds of 8 inches or more in 12 hours, or 10 or more inches in 24 hours. Some areas of the country have lower threshold values, such as 4 inches or more in 12 hours, or 6 inches in 24 hours, such as in southern Ohio, Kentucky, etc.

**ICE STORM WARNING** Issued when damaging ice accumulations are expected during freezing rain situatios; walking and driving becoming extremely dangerous. Ice accumulations are usually 1/4 inch or greater.

**LAKE SNOW WARING** Issued when accumulations of lake-effect snow squalls is expected to be 6 inches or more in 12 hours, or 8 inches in 24 hours in the southern Great Lakes region; and 8 inches in 12 hours or 10 inches in 24 hours over the northern Great Lakes region.

**SEVERE WEATHER STATEMENT** Issued when the forecaster wants to follow up a blizzard waning with important information on the progress of the blizzard.

**SHORT TERM FORECAST (NOWCAST)** A short-term forecast designed to give specific, detailed forecast information for the next 1 to 6 hours on a county basis. Non-severe, advisory, and warning information is contained in these forecasts which are routinely issued several times per day, and more often during buzy weather periods.

**SLEET WARNING** Issued when accumulations of sleet covering the ground to a depth of inch or more are expected. This is a relatively rare event.

**SPECIAL WEATHER STATEMENT** Issued when the forecaster wants to pass information to the public about widespread, developing or approaching weather that is not expected to be severe, but nonetheless is significant.

**WINTER STORM WATCH** Issued when conditions are favorable for the development of hazardous weather elements such as heavy snow and/or blizzard conditions, or significant accumulations of freezing rain or sleet. These conditions may occur singly, or in combination with others. Watches are usually issued 24 to 48 hours in advance of the event(s).

**WINTER STORM WARNING** Issued when hazardous winter weather conditions are imminent or vey likely, including any occurance or combination of heavy snow, wind-driven snow, sleet and/or freezing rain/drizzle. Winter Storm Warnings are usually issued for up to a 12 hour duration, but can be extended out to 24 hours. The term "near-blizzard" may be incorporated into the "winter storm warning" for serious situations which fall just short of official blizzard conditions. Non-preciptation Weather Terms

**The following advisory terms are used to ALERT the public of weather situations that are not necessarily associated with precipitation, but need to be highlighted. The warning terms are used to WARN the public of non-precipitation events that could be a threat to life and/or property.**

**FROST ADVISORY** Issued in growing season to indicate formation of widespread frost. Overnight lows in the 30s will usually result in widespread frost, especially in the lower to middle 30s with light winds.

**WIND ADVISORY (also LAKE WIND ADVISORY)** Issued when sustained winds of 30 mph or greater are expected to last for 1 hour or more, or guest of 45 to 57 mph for any duration. Lake WInd Advisories are issued for area lakes in some of the Northern Plains states when sustained winds of 30 mph or more are expected.

**WIND CHILL ADVISORY** Issued for wind chills of 35 below zero (F.) or colder for sustained period of time. Winds are expected to be at least 10 mph. Threshold values will be "warmr" in more southern latitudes.

**HIGH WIND WARNING** Sustained winds of 40 mph or greater are expected to last for 1 hour or longer. Also issued if winds of 58 mph or more are anticipated for any duration. Some mountain locations have threshold values of 50 mph sustained for 1 hour or more, and any duration gust to 70 mph or more.

**FREEZE WARNING** Used during the growing season when temperatures at/near the ground are expected to drop well below freezing (32 Degrees F.) over a widespread area for a significant amount of time, regardless of whether frost forms or not.

**WIND CHILL WARNING** Issued when wind chill values are expected to reach 50 below zero or lower (upper Midwest, Northern Plains, some mountain areas)along with wind speeds below 10mph. Other locations in the eastern or southern parts of the U.S. have a warning threshold of 35 below zero, or perhaps even "warmer".

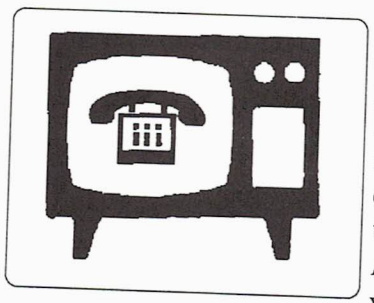
This information is courtesy of the Milwaukee Area SKYWARN Association. **de John Holmes, N3IGA**
**Lehigh Valley SKYWARN Coordinator**

# New Media Systems

## Dangers of Federal Preemption

*by Joe Chuk, W3JD*

Among the provisions of the Telecommunications Act of 1996 that were intended to facilitate the introduction of new technologies is the jurisdiction it gives the FCC to preempt local zoning restrictions on certain antenna structures. For instance, the Act specifically prevents municipalities from controlling the installation of consumer satellite receiving dishes with a diameter of 36 inches or less.



As discussed in previous columns in this space, the introduction of digital television (DTV) brings with it the demand for more transmission tower locations. Some broadcasters are hoping that the FCC will use the authority of the Telecommunications Act to introduce regulation that will simplify the siting of DTV transmission towers by preempting local zoning restrictions. Others, however, see the potential for problems if the federal government steps into an area traditionally under local control.

Many municipalities are already concerned by the recent proliferation of towers and antennas needed for cellular and, more recently, personal communications services (PCS) networks. Petitions for tower construction have become almost a regular agenda item in many zoning board meetings. Because the assumption is that most residents are against aesthetic intrusion by transmission facilities, it becomes a more difficult fight with each request. The deliberation process, however, still gives the municipalities a measure of control. Federal action to leave local authorities out of the decision process for DTV tower siting could well create a backlash that would manifest itself in areas where local control remains, such as in providing routine variances and issuing construction permits.

A compromise proposed by the National Association of Broadcasters (NAB) would allow local zoning boards to retain control, but would impose timelines on the actions of the boards. For instance, zoning boards would be required to act within 21 days on requests to modify existing transmission facilities, and within 30 days on requests to relocate or extend the height of such facilities. The NAB is also asking the FCC to preempt any local restrictions that "unreasonably prohibit or delay the DTV rollout and other ongoing broadcast transmission facilities construction."

While amateur facilities would not be covered under any of these preemptions, the manner in which any new rules would be implemented may well influence how zoning boards consider requests from amateurs for tower construction permits. The existence of PRB-1 has proved helpful in a number of instances. However, even its codification in FCC rules ("State or local regulation of amateur antennas may not preclude, but must reasonably accommodate, such communications, and must constitute the minimum practicable regulation to accomplish the local authority's legitimate purpose."[97.15(e)] ) hasn't prevented some long and costly legal contests.

If federal preemption for broadcast facilities is mishandled, amateurs can reasonably expect more opposition from zoning boards relative to their tower requests, simply because of the boards' increased sensitivity to the issue. Just as broadcasters are seeking greater federal relief to meet their needs, so the amateur community may well need more federal protection than that currently provided by PRB-1 and 97.15(e).

***de Joe, W3JD***

### Amateur Radio calendars available from ARRL!

CQ Amateur Radio Calendar: 15 Month 1998/99 calendar, with beautiful color photos of stations, antennas, and well-known amateur radio personalities. Calendar detail includes notable contests, phases of the moon (and perigees/apogees), meteor showers, and holidays. ARRL Order #6516 $9.95, plus $3 shipping (UPS). CQ Radio Classics Calendar: The rigs of yesteryear are remembered on the pages of this 15 Month 1998/99 calendar. Beautifully photographed vintage ham equipment introduces each new month. Calendar detail includes notable contests, phases of the moon (and perigees/apogees), meteor showers, and holidays. ARRL Order #6532 $9.95, plus $3 shipping (UPS). These calendars and other new products can be quickly ordered via ARRL's New Products Web page, http://www.arrl.org/catalog/new.html or call toll-free 888-277-5289, Monday through Friday from 8 AM to 9 PM Eastern time.

## Somewhat Digital Communication

*by Joel Elston, K9TBD,*

### WHAT's the A,B,C's of Radio?

I regret that I have taken a short time off from contributing articles to the W3OK OK Corral, newsletter. Personal and business life has taken my time. That's my excuse but not an answer to supporting our local club and its fine newsletter and club activities.



So "What's the A,B,C's of radio?" Well there is this radio on my bench that has a brass plate reading:

Westinghouse, Licensed for Amateur and Experimental use only.

The left hand brass plate reads: "180 -- 700 meters" - style 307189 with a serial number 78945, patented 6-30-08 and 10-6-14. This is the "Receiving Tuner" unit Type RA.

The right-hand side reads: Style 307190 with a serial number 61917 and patented 4-17-06 10-6-14 7-3-17 5-10-21 and is titled "Detector Amplifier" type DA.

The unit is divided into two approximately equal parts 6" x 10" (wide x high) front panels each. The left hand unit knobs read: Top middle **"(0 - 100)"**, Left bottom reads **"Vernier (min - max)"**, and the Right bottom dial reads "**Tickler (min - max)".**

The knobs on the right half panel of the unit read: "off ----> Det-Fil-Rheo" and "off ----> Amp-Fil-Rheo". There are also three 1/4" inch phone jacks labeled - left to right: DET, 1 Stage, 2 Stages.

There is a copper mesh screen in the top middle which has no label but you just look in there and fiddle with the "Rheo's" until it glows just right.

Inside, there are three silvery bottles - one reads: 'Cunningham CX-301-A-'. There is another one that looks the same and has a funny top label saying something like "RCA" if you breath on it just right. Each have four prongs on their bottoms. You push them in and twist a little. You get at these 'bottles' by opening a little 4" x 6 " trap door on the top of the wooden box.

The back of the wooden box has a bunch of knurled knobs - the wires connecting adjacent knobs are maybe 1/16" in diameter. They read:

| | |
|---|---|
| **Grid** | **Grid** |
| **Fil Gnd** | **Fil Gnd** |
| **Tickler** | **Tickler** |
| **Plate** | **Plate** |

Below these strapping terminals are single connectors labeled:

| | | |
|---|---|---|
| **+A -B** | **Bat.** | **Antenna** |
| **-A** | **Bat.** | |
| **+Det** | **B. Bat.** | |
| **+Ampl** | **B. Bat.** | |

That's all the back panel has to offer. There is nothing at all labeled ground or anything like that! I guess that you did not need a ground in 1906 or there abouts.

Maybe you have heard of "C" cells for your flashlight - maybe "AA" or "A" cells for a small one - But, what is a 'B' cell? What is an 'A' battery?

I found a little piece of paper inside this box. It was in my handwriting but most certainly dictated to me by my father (W9IDI/K9YYB). It reads:

| | | | |
|---|---|---|---|
| **A** | | **6v** | **DC** |
| **B** | **det** | **22-1/2** | **V** |
| **B** | **plate** | **90** | **V DC.** |

There was also a little diagram:

```
(-)        (+22-1/2)      (+45)
 |           |              |
 |           |              |
 |           |              |
 |           |              |
```

The box still works - But, where the heck can you get 'B' batteries.

What is the "180 to 700 meter band"?

What are these "silvery bottles" anyway?

**RHEO** - is that some old car?

**Filament** - is that some string which holds the 'Gossamer wings of the Albatross together?'

**Vernier** - is that some sort of varnish or inlay you put on furniture?

I only hope to see the **Tickler""** in the next Batman movie.

***de Joel, K9TBD,***

**Learn all about the internet at the December 4th meeting in Kiva Hall, NCC. 7:30 PM**

## CQ DX

*by Bill, K3ANS*

*(Bill will be our new contest editor)*

Hook up your low band antennas. Get set for the biggest DX contest on CW all year! Digest your turkey and stuffing while sitting at your station. CQ Magazine's World Wide DX **Contest starts at 7 PM Eastern Standard Time, 0000 Universal Time (GMT), Friday night Nov. 28 and runs 48 hours nonstop until 7 PM Eastern Standard Time , Sunday night Nov. 30.**

Work DXCC plus in one we weekend. It is not unusual to work 250 countries in one contest weekend! The world works the world, so USA stations are not in demand. However, since USA has more active DX contest hams than any other country, they will look for you. They need your QSO to count for score. Your exchange is signal report, always s 599, even if you hardly copy, and your CQ Zone 5. CQ has 40 Zones. You can get a special exotic Worked All Zones for collecting QSOs and QSLs for working all 40 zones. You can mix bands and modes, and you can get separate awards for separate bands and modes. (I have them so visit to see what they look like ).

Submit your log to CQ magazine. See your call in print! Read CQ magazine for details. Your score is a combination of scores for each separate band. You multiply the number of good QSOs by the total of the DXCC countries plus zones you work for all bands.

If you need help want to know more ask any serious contester. Our club, DLARC, has many, especially those who belong to the Frankford Radio Club, the very best contest club in the world. Not bragging, just fact. **ARRL's 160 meter contest is December 5 through 7; and 10 meter contest is December 13 through 14.** 160 meters is best at night, and 10 meters is usually best during the day.

Read QST for details. 10 meters is a fun contest which attracts many novices who may not operate phone on other low bands. But do not forget CW, the very best method for working DX. Most DX stays at the low ends of the bands, accessible only by Extra and Advanced class licensees. However, do not despair, many foreign stations will come higher in the bands during DX contests. They need novice, tech plus, and general class QSOs too.

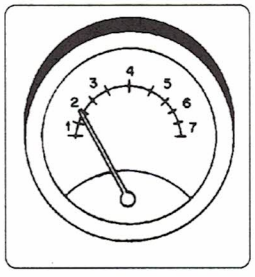
***de Bill, K3ANS***

## Top signs that you may need an Elmer

*by Jeffrey S. King, N1DJS*

An Elmer is the guy you go to, to ask questions about topics in Ham Radio that you don't understand. In that vein, you know it's time for you to find an Elmer if...

* Your friend tells you he has a new two meter radio and you figure one of the meters must be for swr and the other for power out.




* You hear a conversation on the low bands about CW and you think they're refering to the cold war.

* You hear someone sign this is N8XXX mobile 4 and you think it's because he has three other radios

* You hear that someone won a 40 meter radio at a hamfest and you wonder how they're going to get something that large in their house.

* You build a morse code key out of plexiglass and can't figure out why it won't key your radio.

* You think the difference between short wave and can't figure out why it won't key your radio.

* You think the difference between short wave and long wave is the speed at which you move your wrist back and forth.

* You're thinking about joining your other ham frineds in the local ATV group because you own a four wheel drive vehicle that will go just about anywhere.

* You won't use a repeater because you've heard that using a repeater could be dangerous. You've heard an alligator could get you.

* You think a colinear antenna can only be used with two amplifiers.

* You think fm is the modulation type that came after em, dm, cm, bm and am.

* You wouldn't mind getting into packet radio but no matter how much you practice you can't get the hang of sending those beeps and braps with your keyer.

* You wonder what sound a short wave makes and why anyone would want to listen to one.

* You think the repeater owner would be a lot happier if instead of talking about his cavities he just went to the dentist and got them filled.

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 Chris Hornaman, NU3L
The Nets are held on Sundays at 9:30 AM and Wednesdays at 7:00PM

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

==1997-1998==

## CLUB OFFICER

President - Joe Chuk.....(chuk@kutztown.edu).....W3JD.799-0337
Vice President Don Reamer(donster@enter.net)...KA3JWE..252-3063
Secretary - John Holmes....( jholmes@fast.net).....N3IGA..837-7487
Treasurer - Dick Dech.....(ka3mou@enter.net).....KA3MOU.837-1585

## EXECUTIVE COMMITTEE

Tom Frobase.....(tfrobase@ptdprolog.net).....N3LLL.395-4327
Barry Vogt.....(n3nva@enter.net).....N3NVA.863-7204
Dan Ruth.....(heathkit@juno.com).....W3ZF....791-2777
Mark Petruno.....(k3mp@enter.net).....K3MP.. 264-8343
Al Krensavage.....(wo4h@ enter.net).....WO4H...559-1836
Glenn Brodt.....(gbrodt@epix.net).....N3ULW...588-6977

## NEWS STAFF

Editor - Clarence Snyde .....(csnyder@fast.net).....W3PYF..252-2109
Circulation Bill Broad (bbroad@iu20.cniu20.k12.pa.us)KA3OEG.253-0729
Mailing List - Richard Dech.(ka3mou@enter.net)... KA3MOU .837-1585
Printer- Norm Zoltack.....(k3nz@juno.com).....K3NZ..799-4044

## 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 Northampton County Community College
TALK IN ON 146.70
Any comments or articles contributed to this newsletter
should be addressed to *(csnyder@fast.net}* or Clarence Snyder, W3PYF Editor.
717 Porter Street, Easton, PA 18042-1548

visit our web page
**http://www.kutztown.edu/faculty/chuk/dlarc/**

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