



# THE FEEDBACK

Volume 98 Issue 01

January 1998

THE AMATEUR RADIO NEWSLETTER

Laurel Amateur Radio Club, Inc.

P.O. Box 3039, Laurel, Maryland 20709-3039

<http://www.webtrek.com/~laurel/org/larc>

email: [larc@webtrek.com](mailto:larc@webtrek.com)

## Meetings and Nets:

- ▶ 1<sup>st</sup>, 3<sup>rd</sup>, 5<sup>th</sup> Wednesdays:  
On-the-air Net at 8:30pm on 147.225+ PL156.7 (no tone required during nets)
- ▶ 2<sup>nd</sup> Wednesday:  
Informal/Social Gathering at 7:00pm – Tubby's Restaurant; Rt. 198, 1 mile West of I-95
- ▶ 4<sup>th</sup> Wednesday:  
Monthly Meeting at 7:30pm - The Woman's Club of Laurel, 384 Main Street, Laurel
- ▶ Nightly:  
Informal Net/Rag-Chew from 10-11pm on 147.540

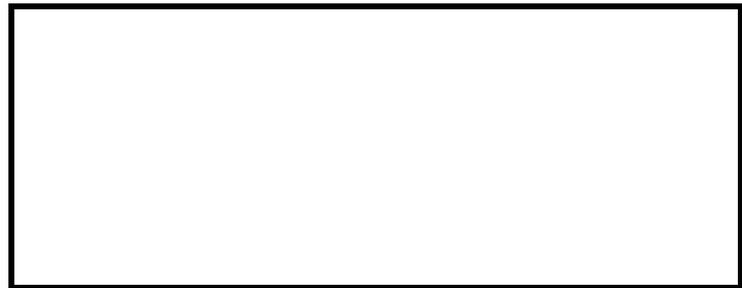
## **Laurel Amateur Radio Club, Inc.**

P.O. Box 3039  
Laurel, MD 20709-3039

### **GENERAL CLASS**

Licensing Upgrade  
Class Starts Monday  
February 2, 7-9pm

## **FIRST CLASS MAIL**



## **Next Meeting:**

Wednesday, January 28, 7:30pm  
384 Main Street  
Laurel, Maryland

**TOPIC: Emergency Communication Services**



**THE LAUREL AMATEUR RADIO CLUB**

**Officers:**

President:	John Menard	N3GXA	301-725-1641	n3gxa@hotmail.com
Vice-President:	Jerry Siegel	N3WSG	301-937-1174	j_siegel@compuserve.com
Secretary:	Mark Doore	N3NTQ	301-572-2385	mdoore@webtrek.com
Treasurer:	Patty Menard	N3OYN	301-725-1641	

**Other LARC Positions and Contacts:**

Immediate Past President:	Mark Doore	N3NTQ	301-572-2385	mdoore@webtrek.com
Membership:	Mark Doore	N3NTQ	301-572-2385	mdoore@webtrek.com
FAR Representatives:	Dan Blasberg	KA8YPY	202-667-5780	dan.blasberg@juno.com
	Joe Seaseley	KA3UZI	301-725-5822	jseaseley@erols.com
Laurel VEC:	Bob Busch	WB3KXJ	301-317-7819	rbusch@erols.com
LARC VE Testing:	John Creel	WB3GXW	301-572-5124	creewb3gwx@aol.com
AutoCall Reporter:	Jim Cross	WI3N	301-725-6829	jcross3@juno.com
T-MARC/D-MARC Rep:	Kevin Arber	W3DAD	301-725-0038	karber@smart.net
Public Information Officer:	Pud Reaver	W3YD	301-498-6293	preaver@erols.com
Youth Programs:	Mark Doore	N3NTQ	301-572-2385	mdoore@webtrek.com
	Scott Rosenfeld	NF3I	301-549-1022	ham@w3eax.umd.edu
Education and Training:	Pud Reaver	W3YD	301-498-6293	preaver@erols.com
Technical Specialist:	Kevin Arber	W3DAD	301-725-0038	karber@smart.net
ARES/RACES Coordinators:	Mike Moseley	WB3HUP	301-317-8546	wb3hup@aol.com
	Jim Cross	WI3N	301-725-6829	jcross3@juno.com
Official Emergency Station:	Mike Moseley	WB3HUP	301-317-8546	wb3hup@aol.com
Official Bulletin Station:	John Creel	WB3GXW	301-572-5124	creewb3gwx@aol.com
Official Bulletin Station:	Pud Reaver	W3YD	301-498-6293	preaver@erols.com
Official Relay Station:	Pat Gormley	KK3F	301-864-4694	pgormley@nova.umuc.edu
Official Relay Station:	Pud Reaver	W3YD	301-498-6293	preaver@erols.com

**LARC Special Interest Groups and Mentors:**

Antennas	Kevin Arber	W3DAD	301-725-0038	karber@smart.net
Packet Radio				
APRS	Mark Doore	N3NTQ	301-572-2385	mdoore@webtrek.com
QRP	Scott Rosenfeld	NF3I	301-549-1022	ham@w3eax.umd.edu
Repeaters	John Creel	WB3GXW	301-572-5124	creewb3gwx@aol.com
Satellite/EME				

**ARRL Field Organization:**

Atlantic Division Director:	Kay Craigie	WT3P	610-993-9623	wt3p@arrl.org
Atlantic Division Vice Director:	Bernie Fuller	N3EFN	814-763-1529	w3efn@arrl.org
MD/DC Section Manager:	Bill Howard	WB3V	410-551-6775	wb3v@erols.com
MD/DC Asst Section Manager:	Jerry Gavin	NU3D	410-761-1423	k2ilq@aol.com
Affiliated Club Coordinator:	Tony Young	WA3YLO	301-262-1917	tonyy@juno.com

**Items to be published in *The Feedback* should be submitted by the 15th of the month. Email submissions may be made to [larc@webtrek.com](mailto:larc@webtrek.com)**

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**Editor/Publisher: Mark Doore, N3NTQ ([mdoore@webtrek.com](mailto:mdoore@webtrek.com))**

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## President's Ramblings

As I sit down to type this, I find myself wondering why I'm here. Is the real president out sick this month? For my own benefit as much as anyone else's, I will try to introduce myself just this once. I first became interested in amateur radio in about 1973, but never moved ahead once I realized that I just wasn't cut out for it. Years later, with the confidence of a grown-up, I tried again and learned things much more quickly. In about 1988 or 89, I tested with the Laurel VEC and received my novice call of KA3TYR. A few months later I upgraded to my current call of N3GXA. I'll probably keep this call as long as I'm in the 3 call area. I'm a civil engineer by trade, working for a general engineering firm in Baltimore, but I've also been with both the State and Federal governments. My XYL is Patty/N3OYN who is currently the club treasurer. Like me, Patty gave up on her radio study when she decided she just wasn't the technical type. But with a little arm twisting by John/WB3GXW, (bless him), and the guidance of Pud/W3YD, Russ/N3AUQ, Jim/WI3N, and all our other class teachers, she passed her last written exam with a perfect score, making the whole family proud of her. I mention all this because it illustrates how diverse the amateur radio service is with regard to the various interests and goals of each operator.

When I joined the LARC in 1990, we were a club small in numbers, but big in talent. Our numbers have grown, perhaps to their highest level, but I am still impressed by the talent and knowledge of many members, as well as their unselfish willingness to share these skills with others. This means not only technical talent, but also the ability to make a good time out of difficult tasks; to find the maturing scientist in wandering youths; to turn an unknown person into a friendly face.

Like most new guys, I was rather reluctant to take on many tasks when I first joined the club. This is mainly due to a lack of confidence and the fact that I'm just not very social. But I did have some talent with graphic design and paste-up, so I started working on the Feedback. Newsletter publishing can be very rewarding, and it was also a help in my professional life when it came to writing on a deadline, for example. In the past year Mark/N3NTQ has slowly taken on the Feedback duties, so I have moved on from something I'm semi-good at (writing), to things I'm no good at, (the presidency). But I think it'll work out with so many experienced helpers. Now, new projects are really moving along; for example our emergency services, our club equipment is being put to use regularly, our last novice/tech class was possibly our largest ever, our youth services continue, we've received awards from Laurel City and other groups who have benefitted from our help.

**For the January meeting** (the 28th) Jim/WI3N will be discussing our new emergency station at Laurel Regional Hospital. Due perhaps to the technical difficulties that have cropped up, there's been a lot of interest and talk about this on the air. Jim/WI3N, Mike/WB3HUP, Pud/W3YD and Kevin/W3DAD have been working on this project as part of our Emergency Services and the Laurel City snow emergency plan. If anyone is interested in working on this project, please speak up. There will be a need for operators when the plan is put into effect. This winter has been easy on us so far, but only 2 years ago things were much different, and that's what prompted the City to accept our offer for help. Also read the article elsewhere in this issue about the ARES Institute.

Another Emergency Service item; the Rotary Club of Rockville led by Stan K3JNT has donated a 386 computer with monitor and printer to the club for ARES packet use. The Rotary has an ongoing program to organize donations of such equipment worldwide. I seem to remember Stan mentioning that one of their projects is in the Philippines. (Potential meeting program; how about it Stan?)

The annual treasurer's report for 1997 is published elsewhere in this edition. Our rapid financial growth has made categorization of accounts difficult. For example, almost all of our income was formerly from dues, and now we have several different sources, sometimes earmarked for specific use. The VEC burden has lessened and is probably even lower than shown, because some funds shown as "donations" are given because of, or specifically for, the VEC. I hope to make 1998 somewhat more conservative fiscally.

However, there are funds floating around for specific projects that LARC may qualify for. An example is recent funding by FAR for the ARES station at NWS, and for a portable repeater.(about \$2000 total). These items are shown in the FAR minutes printed in the November Feedback. My point here is we should be careful that efforts to reduce spending don't make us gun-shy. On the bottom line, our account has remained healthy all year, so that's a plus.

There are also a lot of ideas popping around for programs at our meetings. Please bring your ideas. I recently read in the January 1989 Feedback that the club was hoping to start doing something like this maybe 3 or 4 times a year. Last year we had a program at every meeting; that's about 10 or 11 per year. However, I've noticed some of the meetings had to be rushed a bit, so I was thinking of a more relaxed schedule thus allowing us to clear up necessary business, and perhaps be better prepared for some of our events.

This month, we should discuss our plans for the coming year's events. This is good for people who are new to this. It will be good to talk over, (argue about), things that could have been better last year. (The Montpelier Festival comes to mind; but if that's the worst of our problems, we're doing well.)

A rundown of 1998 events and their likely dates based on recent history:

- Feb 2            General Class begins
- Feb 15         DCRRC Washington's Birthday Marathon
- May 3          Montpelier Festival
- May 9          Main Street Festival
- June 6         Laurel 5K Run
- June 27-28    Field Day
- July 4         Laurel Independence Day Parade
- Aug 8-9       MD/DC QSO Party Contest
- Sept 13        Gaithersburg Farfest
- Sept 21        Novice/Tech Class
- Sept 26        Pallotti Invitational Cross Country Run
- Oct 3          Laurel Riverfest
- Oct 3-4        Simulated Emergency Test (SET)
- Oct 4          CROP Walk
- Oct 17-18     Boy Scouts Jamboree on the Air
- Nov 14-15     Sweepstakes SSB Contest
- Dec 5          Laurel Christmas Tree Lighting
- Dec 6          LARC Banquet
- Dec 26        DCRRC 10K/20K Run

One recent year, we had a Spring Social at the clubhouse, and that was fun and relaxed. Kind of like Field Day, but not as sweaty and tiring. Think of a good date to do it.

I notice by looking at the "Birthdays" column of my November Feedback, that Russ/N3AUQ was born on Christmas Eve and his XYL Barbara/N3LFLK was born on New Year's Day. Must make for a pretty busy holiday season at their house.



73, de John /N 3G XA

Research causes cancer in rats. (from Pud/W3YD)



## Laurel Regional Hospital Update

The new dual band Diamond antenna and 325' of the 350' of 9913 coax that was furnished by Prince George's County have been installed in the Laurel Regional Hospital. Currently the coax is looped in a closet by the second floor conference room which will act as the command center during a widespread disaster and terminated in a conference room on the first floor beside the security office. We envision operating the 4 wheel drive program out of the basement location and eventually installing a coax switch in the closet.

As you know, the Woman's Club of Laurel has already donated \$300 towards radio equipment for the hospital and indicated that they would be sending at least another \$300 and probably more after another fundraiser. Based on that, the club has purchased a Kenwood TM-V7A FM Dual Bander radio. By moving quickly we took advantage of an end of year rebate of \$50. We also purchased a 35 amp Astron power supply and a 2M filter for \$66. We found that the radio was being desensed, and the filter really made a huge difference. Thanks to Joe/N3TZA, Bob/WB3KXJ, and Howard/K3IOG for helping out with tests and equipment. Installation and testing at the hospital was done by Pud/W3YD, Mike/WB3HUP, Kevin/W3DAD, and me. The radio and power supply are safely stored in the second drawer from the bottom in a locked filing cabinet in the security room just inside the emergency room entrance. The hospital had a special locking device put on the cabinet just for us.

With phase one completed, the installation of the equipment, we can now turn toward phase two. At the meeting I hope to have some time to discuss with you in more detail what we hope to accomplish with the station. At this point, we will be needing to compile a list of who will be available for what type of duty in the event of various types of emergencies. We need to know how to contact you (we'll be establishing a phone tree), what kind of equipment you have, eg, mobile, mag mount antenna, can you operate from someone else's vehicle, what bands, etc. We'll pass around a sheet at the meeting for you to fill in. If you can't be at the meeting and would be available for service, please send the info to Pud so he can put you on the list.

Our plan is to establish a program in conjunction with the hospital to deal with the 4 wheel drive program. We also hope to integrate ourselves with the nursing home across the street and the outpatient dialysis center. They operate independently of the hospital. The second Tuesday is the statewide Commex for the RACES program and our plan is to check in from the hospital and test the range of our system. We also hope to see how well we cover with Montgomery County, since it is likely we will have to work with them on occasion. We will of course be able to use the system in conjunction with anything we are called upon to help out with in the City of Laurel.

There will be some group sessions at the hospital to familiarize everyone with the operation of the station. They will probably let us use the conference room for training. Everyone needs to know how to access the equipment and put it on the air. I hope that a lot of you will be available to help out.

**73 de Jim/WI3N**

### Renew Your ARRL Membership Through LARC

When you renew your ARRL membership through LARC, the club gets to keep \$2. It's easy to do: Just complete the ARRL renewal form and send with check made out to LARC to:

Laurel Amateur Radio Club  
c/o Patty Menard/N3OYN  
905 Montrose Avenue  
Laurel, Maryland 20707-3835

Please don't wait until the last notice from ARRL to renew! **New ARRL memberships** can also be done through the club.

## The ARES Institute, January 1998

*-by John/N3GXA*

The National Capital ARES Council (NCAC), is made up of ARES and RACES members and officials from DC, Maryland, and Virginia. They coordinate emergency planning between the jurisdictions, and hold these training classes about twice a year. On Saturday January 10, in Bethesda, Maryland, The Laurel club was well represented by Jerry/N3WSG, Jim/WI3N, Dick/N3MIH, John/KK3Z, Roz/N3YIG, and me. This is the first time I've attended one of these, but I had heard many useful tips and ideas from hams who had attended previously.

There were two tracks offered to attendees; one included topics entitled "After the Hurricane", "When Repeaters Go Down", "The National Traffic System", and "Incident Command". Track Two (in a different classroom), was aimed at the National Weather Service Skywarn program, and Search and Rescue for Amateur Radio. Students could choose a combination of programs if it suited them, and this kept people from having to attend a class which they may have attended last time. (I would like to point out, however, that even for people who may have attended previously, there is still some excellent discussion). WI3N and I stayed with the Skywarn/SAR track all day, N3WSG worked at Track One most of the day, and KK3Z, N3MIH, and N3YIG did a bit of both. (My memory may be mixing things up a bit, but you get the idea).

I really liked the Skywarn stuff on severe weather spotting. The instructor, Melody Hall of the NWS in Sterling, said that about 60% of their Skywarn spotters are hams. She had some slides and video showing footage of tornadoes and other storms. There was a class on Skywarn Net Control in the afternoon by George Saunders, KR4MU (a very good speaker). The Weather Service at Sterling has a call sign now, WX4LWX. Interestingly, we were told that during the blizzard of 1996, all communications at LWX (the Sterling Weather Service office) were through hams. After completion of the class, I received an ID number and wallet card, as well as the opportunity to take more advanced classes when offered.

The search and rescue class was addressed by Marian Hardy of Mid-Atlantic D.O.G.S.; a SAR dog tracking team. Tracking with well trained dogs is an amazing science. For instance, I was unaware that a good dog can sniff out a scent, (usually the victim), from underwater. One particular case involved the recovery of a body from a depth of about 75' in a reservoir. Marian and her cohorts were mobilized for an earthquake in Mexico City as well as the well known bombing in Oklahoma City. In these situations, the victims discovered quickly by scent following dogs would very possibly have died in the rubble before rescuers could otherwise locate them.

To be fair, I should point out that the Skywarn class was one of the things that got me interested in the possibility of attending this particular symposium. But I also had heard from others about the different ideas and suggestions that have come from these classes in years past. We were provided with plenty of literature on such things as how to construct a J-Pole antenna from ladderline, and what sort of power requirements are needed to keep a VHF emergency station running for several days. The \$10 fee to attend covered the cost of producing these items and also includes a pretty good lunch and other refreshments. The whole thing was well run with everything going off smoothly and on time.

## From the E-Mail Bag...

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**Subject: Save your AES receipts!**

Date: Wed, 26 Nov 1997 19:06:44 -0500

From: Jerry Siegel <J\_Siegel@compuserve.com>

Amateur Electronic Supply (AES) has a program which gives ham radio clubs a credit of 1% of all AES purchases by members. The basics:

We need copies of your AES invoices!

The accrual period is 9/1/97 - 9/1/98, no carry-over

Requests must be made on club letterhead, with any difference between the total rebate and the amount for the order paid with a club check.

Details on page 135 of the Winter catalog. Free equipment for the club sounds like a good deal to me.

73 de N3WSG/Jerry

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**Subject: Classes and Examinations**

Date: Thu, 4 Dec 1997 12:21:01 -0500

From: Anita Arcidiacono <aarcidiacono@bop.gov>

Hi,

I hope this message finds its way to all the appropriate persons. I wanted to thank everyone involved in offering the Novice/Technician classes this past fall.

It was a generous gift of your time to instruct us over a 10 week period, and your enthusiasm of the hobby is evident!! Your organization truly has been helpful, not just in offering the classes, but also in answering my goofy email questions too!

I plan to continue in my studies, but I admit that my primary goal is for my son, Joey, to pass at least the technician exam for licensure.

We'll be around and listening.

73,

Anita Arcidiacono  
KB3BXR (!!)

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**Subject: Ham Equipment**

Date: Sun, 21 Sep 1997 15:31:37 -0400  
From: Daniel C Clark <wb4arc@erols.com>

Re the Ham equipment. Yes I do Mark. I have a scope, freq. counter and an audio oscillator. All of it the old 'brown' Heathkit stuff with docs. If anybody wants to risk using it I might even throw in a 2036 (a fine 2 meter sweep generator ;-)). All of it to be donated to a worthy cause or a needy Ham.

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**Subject: Technician Class**

Date: Tue, 2 Dec 1997 13:43:29 +0000  
From: Keith Klingebiel [KRKLINGEBIEL@postoffice.worldnet.att.net](mailto:KRKLINGEBIEL@postoffice.worldnet.att.net)

Dear Mr. Pud Reaver,

Just a quick note (which is overdue) to you and the other members of the Laurel Amateur Radio Club (LARC)- Tom, Roger, Jim, Mike, and Kevin (if I left anybody out, I apologise) who so graciously gave up their Monday evenings for ten weeks to teach us the fascinating world of amateur radio; specifically the necessary information to obtain the Technician Class license. The class was most interesting and taught in an enthusiastic and professional manner. All of you folks did such a good job that I was able to pass the Novice and Technician written elements with flying colors. (97 on the Novice portion and 100 on the Technician element). From the bottom of my heart "Thanks" to a great group of people. Mike Mosley was even so kind as to allow me to borrow his antenna analyzer (for many weeks as the weather was so poor ) to set up a vertical antenna. It was a great deal of help! Thanks again Mike for your generosity and help. I picked up an old Kenwood 520 at the Howard County Ham Fest in the fall and am enjoying listening in to the "happenings" on the bands. Now I have no excuse for not proceeding with my learning in order that I can participate in this phase of the hobby. I have decided that I am interested in going forward with learning the Morse Code and getting into the HF and DX portion of radio. I am slowly learning the code with the help of the program MTGOLD. I have already purchased the ARRL book on the General Class license and hope to look at it soon. Due to my Dads failing health I haven't been able to spend as much time as I would like to but I have hopefully many years ahead to pursue my goal. Mike Mosely indicated that there may be a General class taught my LARC in the spring. If so, I would be very interested in obtaining information about it.

Again, my hat off to you and LARC for such a great job. Thanks to all!

Sincerely,

Keith Klingebiel KB3BWV

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**Subject: ANNOUNCING: Ten-Tec T-kits 10% off group purchase!**

From: Scott Rosenfeld [NF3I] <ham@w3eax.umd.edu>

Date: Wednesday, January 21, 1998 8:12 AM

Overwhelming response has told me that the \$500 overall minimum order is a no-brainer.

The GROUP PURCHASE is a reality!

**WHAT'S INCLUDED**

Ten-Tec makes a lot of really nice kits - HF/2m wattmeter, 6m & 2m xverters, 50/144/220 MHz FM mobile rigs, 20/30/40m CW QRP rigs, a dummy load, a general coverage receiver, single-band receivers, module boards, and much more.

These kits can be viewed at [www.tentec.com](http://www.tentec.com). Questions can be sent to [sales@tentec.com](mailto:sales@tentec.com) or via telephone at 1-800-833-7373.

**HOW THIS WORKS**

As with the four previous LDG antenna tuner/balun kit purchases we've done, everything has to be purchased at once by a single person, and shipped to that person. That person would be me.

**STEP ONE**

You tell me what kit(s) you want from Ten-Tec.

I need a shipping address (UPS).

I need home and work phone numbers.

Your e-mail address helps, too.

**STEP TWO**

I figure out the price given the 10% discount, shipping TO my house, and re-shipping (UPS is just down the street from my house) and insurance to your location.

Examples:

The Model 1208 20-to-6m transverter lists \$95, and becomes \$85.50.

The Model 1340 40m QRP rig lists \$95 and is \$85.50.

The Model 1230 220 MHz FM xcvr lists \$295, and is \$265.50.

The broadband preamp module board, Model 1001, lists for \$9 and is \$8.10.

**STEP THREE**

You reply by sending me a check or money order, payable to me, for said amount.

An ADDRESS LABEL is appreciated but not required.

**STEP FOUR**

I notify you of its arrival Chez Rosenfeld.

STEP FIVE

I deposit it and verify that everything clears, and once the purchase closure date has passed, make the purchase.

STEP SIX

I receive several big boxes, make a mess of my living and dining rooms for a weekend, and re-package everything.

STEP SEVEN

I address everything and run it over to UPS and/or the Post Office, completing the process.

Thanks to all of you, Ten-Tec, and whomever owns this Internet thingy these days, for making this possible! Most importantly, see you on the air!!!

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**Subject: CLOSING DATE of Ten-Tec Group Buy!**

From: Scott Rosenfeld [NF3I] <ham@w3eax.umd.edu>

Date: Wednesday, January 21, 1998 8:40 AM

Dummy, silly me, forgot to include that tidbit.

I'll keep the order window open the exactly THREE WEEKS FROM TODAY, WHICH PUTS IT AT **February 11**.

This should guarantee that I receive payment by the 18th, and can make the order and receive everything, and have everything in the owners' hands by the end of February.

\* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 \*

\* 6m 82 grids on 8w \* DXCC WAS WAC \* QRP-L #147 \* QRP ARCI #9054 \*

\* <http://w3eax.umd.edu/~ham> \* ARRL Life Member /Laurel ARC/UMARA \*

\*\*\* 301-549-1022 h 301-982-1015 w \*\*\* 35 wpm HF mobile CW Neon \*\*\*

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**Subject: RE: AM RFI, THANKS, TRACED PROB TO MAIN FEED, BG&E PROB?**

Date: Mon, 5 Jan 1998 11:44:07 EST

From: KB3BWS <KB3BWS@aol.com>

THANKS FOR THE SUGGESTIONS ON TROUBLE SHOOTING MY HUM PROBLEM.  
DIMMER SWITCH ONLY GAVE INTEFERENCE WITHIN 2 OR 3 FEET.  
HAD TO SHUT OFF BREAKERS ONE BY ONE, DIDNT STOP HUM,  
CALLED BG&E, WILL SEND A MAN WITHIN 2 WEEKS

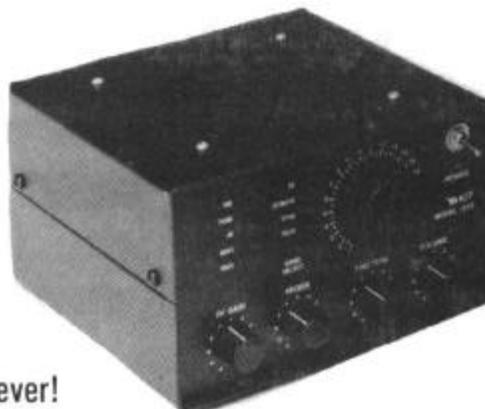
73 THANKS

SCOTT KB3BWS

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**TEN-TEC Kit - just one example  
(see Scott/NF3I's email about group purchase)**

**9-Band  
Shortwave  
Receiver**



The classic "first radio kit" is back better than ever! We've combined the very same audio output circuit of TEN-TEC transceivers with a modern FET design for classic regenerative SWL receiving plus one-button electronic bandswitching. The result is an easy-to-build shortwave radio that's fun and interesting for the whole family. No alignment required. Simply install all parts as directed, put together the high-quality mechanical parts, and start enjoying the magic of shortwave radio. Explore 9 smooth-tuning SWL and ham bands from 1.8 to 22 MHz at the push of a button! Receives AM, SSB, CW and all those other magical shortwave sounds.

**FEATURES:** Front-panel RF gain, Volume, Regeneration, Tuning and Fine-Tuning controls • generous audio from Signetics TDA2611A to built-in speaker or stereo phone jack • Electronic switching of 9 tuning ranges • rugged, rounded-clamshell steel enclosure • simple, clear linear logging scale for large tuning knob • requires 8 alkaline C cells or external 12VDC.

**KIT No. 1253, \$59.00**

On a tight budget with a club of eager radio builders? Our 4-Band Model 1054 Module Board Kit has comparable features for only \$24! See page 14.



**February Birthdays**

12	(not yet)	Christine Doore
15	W3KD	Chris Imlay
16	N3RER	Ken Wood
22	N3IZU	Dick Devol
22	W3PPB	George Pynn
24	N3HLY	Ken Easton

first year: 1911, last year: 1991

**Missing Birthdates For:**

KB3BWP	John Cavallo
KB3BWS	Fred Perry
KB3BWX	George Gassner
KB3BXR	Anita Arcidiancono
KB3BYN	Bethany Smith
K9ICF	I. J. Hudson
N3IYG	Roslyn King
W3WCQ	Bob Bennett
KK3Z	John King III
N3ZJG	Jim Brent
N3ZPK	Ed Kirchman
N3ZQV	Paul Grodt

Please email to [mdoore@webtrek.com](mailto:mdoore@webtrek.com), voice mail to 301-572-2385, or otherwise get to us. Thanks.

## DC Roadrunners 10/20 Mile Run - 27 Dec 97

*Submitted by HD/N3LFL (Net Control)*

KB3BLK, NetCon operational: 09:03 AML

Cross Banding on 147.540/446.100 Leaving 445.975 open for emergency traffic and the 147.225 repeater on standby for backup

Conditions were less than optimal, raining when I arrived on site, changing to rain/snow mix at approximately 12:30 PML.

The "gun" went off at: 10:03 AML

Finish: 1:00 PML

We transported one (1) runner to the main staging area.

We, also, had "NO" incidents of an open microphone locking up the operational frequency as we have in the past.

LARC Members participating in Communications:

- N3LFL / HD NetCon Op
- WB3HUP / Mike Assisting at NetCon
- N3TZA / Joe
- W3LM / Roger
- W3YD / Pud
- N3LDY / Irv
- N3WSG / Jerry
- K3IOG / Howard
- N3NTQ / Mark
- WI3N / Jim

LARC member participating in race:

- WB3KXJ / Bob No. 414 (no-HT)

### 1998 Dues

1998 dues are now due:

Regular Member	\$ 15.00
Each Additional Family Member	\$ 7.50
Blind	\$ 10.00
Under 21 (oldest ham in house)	\$ 10.00
WB3GXW Autopatch (2m/70cm)	\$ 17.00

Please make check payable to LARC and mail to:

Laurel Amateur Radio Club  
 c/o Mark Doore (N3NTQ)  
 2929 Gracefield Raod  
 Silver Spring, MD 20904-1668

We hope you will continue your membership with the Laurel Amateur Radio Club. Your membership dues allow us to do VE testing, provide training classes, publish The Feedback, support many community events, provide emergency communication services, and many other worthwhile activities. Thank you for your support!

## Technical Topics

**Kevin Arber, W3DAD**

### Correction to November Article

A square root sign was left out of the formula for  $Z_0$ , the characteristic impedance of a coaxial transmission line. The correct formula is:

$$Z_0 = 138 / (\text{sq root } E)^* \log D/d$$

Where E = dielectric constant  
D = ID of outer conductor  
d = OD of inner conductor

### Coaxial Cable Measurements and Tables

As was pointed out in a previous article, coaxial cable degrades over time when exposed to the elements. It is useful to test coaxial cable from time to time, make a record of the results and compare them with published attenuation tables. In this way you may be able to detect degradation and fix the problem before it takes you off the air.

SWR measurements at the input end of a transmission line are helpful in determining changes to the complete transmission line – antenna system. Usually SWR is measured at the time a new antenna is installed. This measurement can serve as a benchmark for subsequent measurements. A record should be made of the measurement, including the exact measurement configuration, coax cable length, and any other pertinent information, such as weather and temperature. A degrading coaxial cable, connector or antenna will cause changes in the SWR which, in turn, point to the need for maintenance. The disadvantage of using the above method is the difficulty in determining small changes in SWR and in isolating the problem to the antenna or transmission line.

A better way of checking a transmission line, especially one which is buried or tied to a tower, is to disconnect it from the antenna and either leave the far end open or apply a short circuit to it. An open-end coaxial line will show low impedance at the input end if it is  $\frac{1}{4}$  wavelength and high impedance if  $\frac{1}{2}$  wavelength long. A shorted line has the opposite characteristic. In either case, and for random lengths of line, an SWR measurement taken at the input end of the cable should be very high. A low SWR indicates trouble with the cable or connectors. Most SWR meters will not accurately read a high value of SWR, however, so this test can be difficult. A return loss bridge which reads reflection coefficient,  $p$ , may give better results than an inexpensive wattmeter / reflectometer. The reflection coefficient may also be obtained from  $(SWR-1)/(SWR+1)$ . Using the transmission line equations, cable loss can be shown to be:  $\text{Loss (dB)} = -4.343 \ln(p)$ . [1]

When comparing a measured loss with the manufacturer's stated value, remember that the measured loss will likely be different. If care is used in making the measurement and consistent results are obtained, the result should be valid. However, a higher than expected loss value does not necessarily mean that the cable is bad. Look at other factors that may be influencing the reading, such as, connectors and adapters, limitations of the test equipment, and losses in the test jig itself.

A noise bridge is an accurate instrument for measuring coaxial cable parameters and allows the measurement of both scalar and vector (reactive) impedance. A noise bridge contains a wideband noise generator as well as a bridge and makes use of the station receiver, tuned to the frequency of measurement, as a detector. The bridge is balanced by changing a bridge capacitor and resistor

while listening to the receiver for a noise null. The resistance and reactive values are read directly off a scale on the bridge panel and may be converted to an SWR or Z value. The noise bridge may lack the precision of a laboratory instrument; however, it has sufficient capability for normal amateur use. The resistance substitution method is used with the transmission line equation to obtain a cable loss value.

Recently, self-contained instruments have come on the market that read impedance and SWR directly, such as, the RF Analyst by Autek Research and the SWR Analyzer by MFJ. These instruments contain a signal generator, bridge and display. They are small portable devices that may be easily taken to the field or antenna. For coaxial cable loss measurements, the analyzer is swept over the frequency range while the impedance display is monitored for the lowest (null) reading. Once this value is found a formula ( $\text{Loss dB} = 8.69 (Z/50)$  for 50 ohm cable) is used to convert the reading to the cable loss at that frequency.[2] For example, for 116 feet of RG-214 (use RG-213 values), I measured a Z value of 9 at 33.6 MHz on the Autek RF Analyst. This is a loss of 1.56 dB. To calculate the expected loss from the tables, choose the loss value at the closest frequency (28 MHz) and multiply by the fractions.  $\text{Loss dB} (116') = 116 \times 1.2 \times 33.6 / 100 \times 28 = 1.67 \text{ dB}$ . The difference between the measured and calculated loss can be attributed to measurement and rounding errors.

Transmission line loss may also be measured with a signal generator and oscilloscope by using the substitution method. Because this method requires that both ends of the cable be connected to the test jig, it can be difficult to use on installed cable. The signal generator is connected to the oscilloscope via a short low loss cable and a calibration reading is taken. Next, the cable under test is substituted for the calibration cable and a reading obtained. The difference between the two readings in dB is the loss of the cable over the calibration cable. At HF and low VHF frequencies the measurement should be very close to the cable's actual loss. Care should be taken to terminate both the signal generator and the oscilloscope properly. A 3dB 50-ohm attenuation pad at the respective output and input is a good practice.

Transmission line and antenna measurement details are covered in the *ARRL Antenna Book*. The 18<sup>th</sup> edition contains a software program called *TLA.EXE* that is useful in calculating transmission line losses. In addition, manufacturers of test instruments include practical applications for their devices in the instruction manual.

The question arises as to just how much loss is tolerable in any given installation. There is always a trade-off between the cost of a cable and its loss, with the high cost cable providing the lowest loss. For hams engaged in weak signal work at VHF and above, extremely low loss cable may be necessary to keep signals above the noise (cable loss adds directly to noise figure). At HF, or for FM work, cable attenuation requirements are less stringent, however, it may be worthwhile to do a cost/loss analysis using tables or your own measurements. Frank Donovan, W3LPL, published an article in the January/February 1996 issue of the *ARRL National Contest Journal (NCJ)* which compared many common cables. It is included below with Frank's permission.

The last of Frank's tables show the results of a trade-off using LDF-5 and LDF-4 cable. They are useful; however, one may be interested in determining a trade-off for some other cable. This can be done from information presented in the first table, Cable Attenuation in dB/100'. For example, to calculate the feet required for a one dB advantage using RG-213 over RG8x cable at 28 MHz, proceed as follows:

- A. Calculate the difference in dB/100' between the two cables at the selected frequency:  $(1.9 - 1.2)/100 = .7/100$
- B. Set up the equation:  $100'/\text{delta dB} = x (\text{feet})/1 \text{ dB}$ :  $100/.7 = x/1$
- C. Solve for x: 143'

As you can see, one would have to run about 140 feet of cable before RG-213 would yield a 1dB advantage over RG-8x, assuming the cable is used under matched conditions. Cable losses increase if the cable is unmatched. In those cases, use the lowest loss cable that you can afford. The unmatched loss can be calculated using the *TLA.EXE* program mentioned above.

Frank's tables do not include the Times Microwave LMR series cables so an abbreviated table is shown below for the convenience of those using LMR cable.

**Cable Attenuation (dB/100 feet)**

<b>Band (MHz)</b>	<b>14</b>	<b>28</b>	<b>50</b>	<b>144</b>	<b>440</b>	<b>1296</b>
LMR-200	1.2	1.7	2.29	3.9	6.88	
LMR-240	0.91	1.29	1.73	2.95	5.17	
LMR-400	0.42	0.65	0.88	1.5	2.68	4.74
LMR-500			0.7	1.2	2.14	3.8
LMR-600			0.55	0.94	1.7	3.1

From Times Microwave attenuation & power handling on-line calculator at <http://www.timesmicrowave.com>.

- [1] Phil Salas, AD5X, Measure Your Coax Cable Loss, *Communications Quarterly*, Summer 1997, p68
- [2] *ARRL Antenna Handbook*, 18<sup>th</sup> edition, the American Radio Relay League, Newington, CT, 1997, p27-28

**Coaxial Cable Attenuation and Trade-Offs**

**By Frank Donovan, W3LPL, Internet: [donovanf@sgate.com](mailto:donovanf@sgate.com)**

I've developed and used the following charts for some years. The contesters I've given copies to have found them most useful as well. The first table shows the usual attenuation per 100 feet, but with specific values for each ham band.

The second table is in cable feet per decibel of loss, which can be very handy for trade-off analysis (eg, do I really need to use Andrew LDF5 for my 1000-foot run to my Beverages, or is RG-8X good enough?).

The third table shows the results of just such a trade-off analysis. Each entry in the table represents the cable length in feet before Andrew LDF5 offers a 1-dB advantage vs the various cables listed.

The last table is identical to the third table, except these trade-offs are for Andrew LDF4.

Enjoy.

**Cable Attenuation (dB per 100 feet)**

<b>Band</b>	<b>1.8</b>	<b>3.5</b>	<b>7</b>	<b>14</b>	<b>21</b>	<b>28</b>	<b>50</b>	<b>144</b>	<b>440</b>	<b>1296</b>
LDF7-50A	0.03	0.04	0.06	0.08	0.10	0.12	0.16	0.27	0.5	0.9
FHJ-7	0.03	0.05	0.07	0.10	0.12	0.15	0.20	0.37	0.8	1.7
LDF5-50A	0.04	0.06	0.09	0.14	0.17	0.19	0.26	0.45	0.8	1.5
FXA78-50J	0.06	0.08	0.13	0.17	0.23	0.27	0.39	0.77	1.4	2.8
3/4" CATV	0.06	0.08	0.13	0.17	0.23	0.26	0.38	0.62	1.7	3.0
LDF4-50A	0.09	0.13	0.17	0.25	0.31	0.36	0.48	0.84	1.4	2.5
RG-17	0.10	0.13	0.18	0.27	0.34	0.40	0.50	1.30	2.5	5.0
SLA12-50J	0.11	0.15	0.20	0.28	0.35	0.42	0.56	1.00	1.9	3.0

FXA12-50J	0.12	0.16	0.22	0.33	0.40	0.47	0.65	1.20	2.1	4.0
FXA38-50J	0.16	0.23	0.31	0.45	0.53	0.64	0.85	1.50	2.7	4.9
9913	0.16	0.23	0.31	0.45	0.53	0.64	0.92	1.60	2.7	5.0
RG-213	0.25	0.37	0.55	0.75	1.00	1.20	1.60	2.80	5.1	10.0
RG-8X	0.49	0.68	1.00	1.40	1.70	1.90	2.50	4.50	8.4	

**Cable Attenuation (feet per dB)**

<i>Band</i>	<i>1.8</i>	<i>3.5</i>	<i>7</i>	<i>14</i>	<i>21</i>	<i>28</i>	<i>50</i>	<i>144</i>	<i>440</i>	<i>1296</i>
LDF7-50A	3333	2500	1666	1250	1000	833	625	370	200	110
FHJ-7	2775	2080	1390	1040	833	667	520	310	165	92
LDF5-50A	2500	1666	1111	714	588	526	385	222	125	67
FXA78-50J	1666	1250	769	588	435	370	256	130	71	36
3/4" CATV	1666	1250	769	588	435	385	275	161	59	33
LDF4-50A	1111	769	588	400	323	266	208	119	71	40
RG-17	1000	769	556	370	294	250	200	77	40	20
SLA12-50J	909	667	500	355	285	235	175	100	53	34
FXA12-50J	834	625	455	300	250	210	150	83	48	25
FXA38-50J	625	435	320	220	190	155	115	67	37	20
9913	625	435	320	220	190	155	110	62	37	20
RG-213	400	270	180	130	100	83	62	36	20	10
RG-8X	204	147	100	71	59	53	40	22	12	

**Feet Required for a 1-dB Advantage, LDF5-50A Versus**

<i>Band</i>	<i>1.8</i>	<i>3.5</i>	<i>7</i>	<i>14</i>	<i>21</i>	<i>28</i>	<i>50</i>	<i>144</i>	<i>440</i>	<i>1296</i>
LDF4-50A	2000	1430	1250	910	715	625	435	250	165	100
RG-17	1666	1430	1110	770	560	475	420	120	60	30
FXA12-50J	1250	1000	770	525	435	355	255	120	75	40
9913	835	590	455	320	280	220	150	85	53	29

**Feet Required for a 1-dB Advantage, LDF4-50A Versus**

<i>Band</i>	<i>1.8</i>	<i>3.5</i>	<i>7</i>	<i>14</i>	<i>21</i>	<i>28</i>	<i>50</i>	<i>144</i>	<i>440</i>	<i>1296</i>
RG-17	-	-	-	-	-	-	-	220	90	40
FXA12-50J	-	-	2000	1250	1100	835	625	250	145	65
9913	1430	1000	715	500	455	345	235	135	75	40
RG-213	910	600	285	200	150	120	85	45	20	12

## Treasurer's Report for 1997

The following roughly summarizes the credits and debits over the past year. This summary is produced by an accounting program which makes categorizing somewhat difficult. The categories are presented in alphabetical order. Dues for 1997 that were paid in '96 are credits to '97. Similarly, any '98 dues paid in '97 are credits to next year's report. Other income/expense is shown for the date it occurs. The '96 banquet was inserted as an expense to eliminate it from the amount shown for Dues 97.

INCOME	\$	EXPENSE	\$
26 Feb Mtg	16.50	'96 Banquet	975.00
26 Mar Mtg	17.00	Antenna masts	34.00
28 May Mtg	7.00	Badges out	151.20
7 July Mtg	7.00	Banquet out	1227.01
Banquet '96	175.00	Books out	419.55
Banquet in	1200.00	Books; ARRL	268.34
Books in	292.00	CIGNA Ins.	325.00
Donations	1200.00	Entertainer	150.00
Dues '97	2119.00	Flowers	75.00
Hats in	80.00	Hats out	81.50
J-pole build	15.00	P.O. Box	104.00
QST in	569.00	Plaques Engrav	166.38
Repeater in	98.00	QST out	578.00
VEC in	39.39	Repeater out	98.00
		Supplies	1163.31
		sweepstakes	25.00
		VEC out	152.15
TOTAL INCOME	\$5835.39	TOTAL EXPENSES	\$5993.44

**Our checking account opened Jan 1997 with approximately \$1600 and closed Dec 1997 with about \$1300.**

## **HAM RADIO SAVES THE DAY IN ICE STORM'S WAKE**

*from The ARRL Letter Online - Volume 17, Number 4 (January 23, 1998)*

Some ham radio emergency communication operations across the Northeast wound down this week as the ice storm disaster moved from the response to the recovery phase. Telephone service and electricity are being slowly restored, but in many areas ham radio remains a primary--and in some cases the only--means of communication. And barely more than two weeks after the initial disaster, New Yorkers were bracing for the possibility of additional severe ice storms. The story to date is one of a great ham radio response peppered with small acts of heroism and dedication.

Hams--in many cases working as ARES and RACES volunteers--continued to operate from emergency operation centers, shelters, meals centers, and government offices throughout the region. In New York alone, more than 1000 people are still living in shelters. ARES and RACES groups were cooperating with the American Red Cross, the Salvation Army, and government agencies, including the National Guard.

Repairs to the utility infrastructure are expected to take months. Ice loading from the storm brought down utility poles (one estimate said 180,000 poles in New York will have to be replaced), countless trees, and even steel transmission-line towers. Several deaths were attributed to the ice storm, and damage estimates ranged in the billions of dollars. Ham volunteers too numerous to mention mustered to help and many have been on the job for more than a week straight. Simplex and HF became the rule in some areas as repeaters were brought down by a lack of power or storm damage. Some repeaters were brought back up on emergency power. For a look at the storm response in New York, see <http://www.nysemo.state.ny.us/IceStorm98/teamwork/>.

The initial response to the ice storm disaster would not have been possible without ham radio, according to Jim Edmonds, WA1KPG, who lives near Syracuse, New York. "Everything was knocked out," he said. "I've never seen a situation where everything was so dependent on ham radio." A Civil Air Patrol group commander, Edmonds was called in January 8 by CAP and soon found himself at the Syracuse Red Cross office, training disaster relief volunteers and coordinating ham radio efforts on behalf of the Red Cross. "The first request by the Red Cross and the New York State Emergency Management office was, please send us all your hams'," he said. His wife, Sue, N2GNN, also helped out.

Across the Empire State, other hams worked with Red Cross damage assessment teams. Steve Auyer, N2TKX, said many hams in unaffected parts of the state took time away from work to help out in the disaster areas, staying in the shelters for days at a time. Offers of help came from New York City ARES/RACES and from as far away as Minnesota, where residents had to deal with floods and ice last year.

ARRL PIC Viv Douglas, WA2PUU, in Syracuse reports that a number of hams from Western New York traveled from shelter to shelter in hard-hit Jefferson County moving out health-and-welfare traffic. Ham radio was even able to get word to a Naval officer at sea, concerned for the safety of his elderly mother who lived alone, that she was safe and had been moved to a shelter. Edmonds told of how hams used multiple relays to dispatch an ambulance to an injured elderly man in Potsdam, New York, who had managed to get word to his daughter via his almost-dead cell phone. The whole process took ten minutes.

Douglas said ham radio became a focal point in the shelters, too. "When updated condition reports were being given over the ham radio, people would run to cluster around. It became apparent that ham radio was the lifeline to the outside world for communication," she reports. "Many watching asked

how they could get into ham radio so it would be available to them during times like this. It became a teaching experience."

As Jim Edmonds put it: "The guy on the street corner with the hand-held saved the day."

In some areas of New England, new snowfall hampered recovery efforts. That was the case in Vermont, where six northern counties were declared disaster areas and more than a foot of additional snow fell in the ice storm's wake. Throughout the region, stores quickly sold out of portable generators and other emergency supplies. Out-of-state line crews were called into help restore electricity. In New York, National Guard generators moved from dairy farm to dairy farm so herds could be milked--and thus saved.

All 16 Maine counties eventually were declared disaster areas. State RACES Director Rod Scribner, KA1RFD ("Ready for Disaster"), said about half of the state's repeaters were not working after the storm, but the wide-coverage KQ1L machine on 146.85 MHz in Dixmont stayed up and got a lot of use. It was that repeater that Vice President Al Gore spoke over from RACES Headquarters when he visited the state capital to survey the damage earlier this month. Scribner said parts of Maine are still without electrical power, and he praised the efforts of hams there in dealing with the emergency--which he characterized as the most serious he'd ever seen in terms of the number of people affected. "I think ham radio really did a yeoman's job in the areas affected," he said this week. Scribner singled out for special mention Maine SM Michelle Mann, W1GU (who has an infant at home), as well as Mike Smith, N1UHR, who camped out in the Waldo County EOC for a week and helped handle local, door-to-door health-and-welfare checks on rural residents, and Max Jacques, K1MAX, who helped organize a Red Cross meals program in the Winthrop vicinity.

Husband and wife Red Cross volunteers Connie Morrison, N1OCE, and Paul Shapter, N1SWM, of Worcester, Massachusetts, just back from three weeks assisting in the Typhoon Paka recovery on Guam, were called in to help with ice storm relief efforts in Maine. Morrison is an attorney and a registered nurse, while Shapter is an accountant. Although her work did not involve disaster communication, Morrison carried along her dual-band H-T on both trips just in case she needed it.

North of the Border, the Province of Quebec was especially hard hit with ice damage and power and telephone blackouts. "The scope of this emergency is beyond the meaning of the word catastrophic," said RAC Quebec Director Daniel Lamoureaux, VE2ZDL. Hams in affected areas set up round-the-clock emergency nets and assisted in the relief effort. Without Amateur Radio, "there is absolutely no way that many emergency and support activities could have taken place," said *The Canadian Amateur* Editor Rob Ludlow, VE3YE.--*This Week in Amateur Radio*; RAC; Albert Hayeck, N1EFR; and many others

The ARRL Letter is published by the American Radio Relay League, 225 Main St, Newington, CT 06111; tel 860-594-0200; fax 860-594-0259. Rodney J. Stafford, KB6ZV, President; David Sumner, K1ZZ, Executive Vice President. The ARRLWeb page at <http://www.arrl.org/arrlletter/> includes any photographs. For email delivery, send e-mail to [listserv@netcom.com](mailto:listserv@netcom.com) (no subject needed), the body of the message should say subscribe letter-list.

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**Saturday @ 8:00pm on 147.225+ PL156.7**  
**Sunday @ 8:30pm on 147.225+ PL156.7**  
**Tuesday @ 7:15pm on 147.180+ PL156.7**



**Page Pyne  
W3EOP  
W3HAM**

**Dec. 10, 1997**

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# 73 PAGE



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Jim (WI3N) 301-725-6829 [jcross3@juno.com](mailto:jcross3@juno.com)

#### **Laurel Amateur Radio Club**

<http://www.webtrek.com/~laurel/org/larc>

email: [larc@webtrek.com](mailto:larc@webtrek.com)



Offered by the Laurel Amateur Radio Club, Inc.  
An ARRL Special Service Club



January 1998						
Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

February 1998						
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22	23	24	25	26	27	28

March 1998						
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15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

## Upcoming Activities and Events

### January

7	Wed	8:30pm	LARC Net	147.225+
14	Wed	7:00pm	LARC Social Meeting	Tubby's Restaurant
14	Wed	8:00pm	FAR Meeting	Alexandria, VA
17	Sat	9:00am	VE Test Session	384 Main Street
21	Wed	8:30pm	LARC Net	147.225+
28	Wed	7:30pm	LARC Monthly Meeting	384 Main Street

### February

<b>2</b>	<b>Mon</b>	<b>7:00pm</b>	<b>GENERAL License Class Starts</b>	<b>384 Main Street</b>
4	Wed	8:30pm	LARC Net	147.225+
11	Wed	7:00pm	LARC Social Meeting	Tubby's Restaurant
11	Wed	8:00pm	FAR Meeting	Takoma Park, MD
<b>15</b>	<b>Sun</b>	<b>9:00am?</b>	<b>DCRRC GW Marathon Run</b>	<b>Greenbelt/Beltsville</b>
18	Wed	8:30pm	LARC Net	147.225+
21	Sat	9:00am	VE Test Session	384 Main Street
25	Wed	7:30pm	LARC Monthly Meeting	384 Main Street

### March

4	Wed	8:30pm	LARC Net	147.225+
11	Wed	7:00pm	LARC Social Meeting	Tubby's Restaurant
11	Wed	8:00pm	FAR Meeting	Alexandria, VA
18	Wed	8:30pm	LARC Net	147.225+
21	Sat	9:00am	VE Test Session	384 Main Street
25	Wed	7:30pm	LARC Monthly Meeting	384 Main Street

## GENERAL Licensing Class Starts Monday, February 2<sup>nd</sup>

### Some Upcoming Hamfests and Conferences

**January 25 - Maryland Mobileers ARC, Odenton, MD**

Bill Ziegler, KA6TYT, 1307 Ashburton Dr., Millersville, MD 21108, 410-987-2384

E-mail: [ka6tyt@juno.com](mailto:ka6tyt@juno.com)

**February 8**

+ Chestnut Ridge ARC, Latrobe, PA, William Demosky, K3AFS, 1740 Raymond Ave., Latrobe, PA 15650, 412-539-1552

**February 14**

+ Harrisburg RAC, Oberlin, PA, Tom Hale, WU3X, PO Box 418, Halifax, PA 17032, 717-232-6087

March 15 Keystone VHF - York, PA (note corrected date)

March 15 Two Rivers ARC - Monroeville, PA

March 28-29 Baltimore ARC - Timonium, MD

April 4 Appalachian ARG - Fredericksburg, PA

Side 1

## Emergency Communication Service – Volunteer Information

In preparation for an emergency situation where we might be called on to provide communications support, we are requesting that LARC members complete this form.

Please send the form in with your membership renewal, drop it off at a meeting, snail mail it to Pud Reaver (W3YD) @ 6516 Brooklyn Bridge Road, Laurel, MD 20707, or email the content to [preaver@erols.com](mailto:preaver@erols.com).

Completing the form in no way obligates you to respond to a situation, but does help us to assess our potential capability to respond and develop a plan for doing so.

Name \_\_\_\_\_

Call Sign \_\_\_\_\_

Home Phone \_\_\_\_\_

Work Phone: \_\_\_\_\_ Hours: \_\_\_\_\_

Work Location: City \_\_\_\_\_ State \_\_\_\_\_

Is it OK to call you at work:

- Right away for any emergency situation
- As 2<sup>nd</sup> tier of support, only after exhausting all primary contacts
- To borrow equipment
- Never
- Other: \_\_\_\_\_

Pager #: \_\_\_\_\_ PIN #: \_\_\_\_\_ Numeric or Alphanumeric

Service Provider: Pagenet MobileComm BellAtlantic SkyTel Other: \_\_\_\_\_

Is it OK to page you?  yes  no

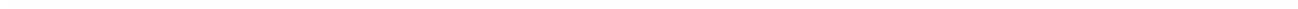
Cell Phone #: \_\_\_\_\_ OK to call you on cell phone?  yes  no

Which repeater (or simplex) frequencies do you most frequently use or monitor?

\_\_\_\_\_

\_\_\_\_\_

**(PLEASE COMPLETE BOTH SIDES)**



## Emergency Communication Service – Volunteer Information

Have an ARES Card?  yes  no

Worked with ARES before?  yes  no What jurisdiction/area?: \_\_\_\_\_

RACES Member ?  yes  no For what government entity? \_\_\_\_\_

Have 4 wheel drive?  yes  no (Can drive it in bad weather??  yes  no)

Would you need transportation?  yes  no

Types of activities I feel comfortable helping with:

- net control station from site
- net control from my house
- use radio from home
- operating mobile from my vehicle
- operating from a vehicle other than my own
- operating from a shelter site
- operating from an incident site
- surveying remote area
- search and rescue
- other ways I can help \_\_\_\_\_

Any relevant or special experience? (i.e. done SAR before?) \_\_\_\_\_

May be able to help during which hours:

daylite  nite time  anytime

Equipment

- have mobile radio in vehicle  2M  440  Dual bander
- have portable rig(s) Type \_\_\_\_\_
- have mobile MAGMOUNT antenna(s)
  - 2M 1/4 wave  2M 5/8 wave
  - 440  Dual Bander
- have portable antenna J-pole:  copper pipe  wire
- emergency battery how many amp hours \_\_\_\_\_
- gasoline generator (watts \_\_\_\_\_), availability \_\_\_\_\_
- packet
- cell phone
- I can plug HT or mobile into a cigarette lighter
- Other equipment I have that may be helpful :

**(PLEASE COMPLETE BOTH SIDES)**