



THE FEEDBACK

Volume 98 Issue 06

June 1998

THE AMATEUR RADIO NEWSLETTER

Laurel Amateur Radio Club, Inc.

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

<http://www.webtrek.com/md/larc>

email: larc@webtrek.com

Meetings and Nets:

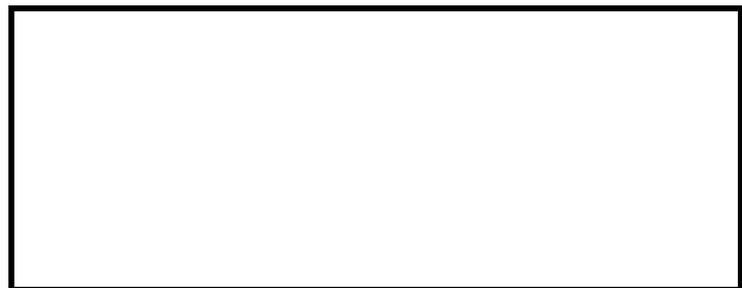
- ▶ 1st, 3rd, 5th Wednesdays:
On-the-air Net at 8:30pm on 147.225+ PL156.7 (no tone required during nets)
- ▶ 2nd Wednesday:
Informal/Social Gathering at 7:00pm – Tubby's Restaurant; Rt. 198, 1 mile West of I-95
- ▶ 4th Wednesday:
Monthly Meeting at 7:30pm - The Woman's Club of Laurel, 384 Main Street,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

Laurel Amateur Radio Club, Inc.

c/o Mark Doore (N3NTQ)
2929 Gracefield Road
Silver Spring, MD 20904-1668



FIRST CLASS MAIL



Next Meeting:

Wednesday, June 24, 7:30pm
384 Main Street
Laurel, Maryland

Topics: Field Day, 4th July, and ICOM FunMobile from 7-8pm



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:	Patty Menard	N3OYN	301-725-1641	
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	creewb3gxw@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:	Scott Rosenfeld	NF3I	301-549-1022	ham@w3eax.umd.edu
	Mark Doore	N3NTQ	301-572-2385	mdoore@webtrek.com
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:	Jim Cross	WI3N	301-725-6829	jcross3@juno.com
Official Emergency Station:				
Official Bulletin Station:	John Creel	WB3GXW	301-572-5124	creewb3gxw@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	creewb3gxw@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
MD/DC Emergency Coord:	Mike Carr	WA1QAA	410-799-0403	bamcc@erols.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

The Feedback is published monthly as the newsletter of the Laurel Amateur Radio Club, Inc. Permission is granted to reprint from this publication provided credit is given.

**Editor: Mark Doore, N3NTQ
 Publisher: Mark Doore, N3NTQ**

President's Ramblings

I was not at the Montpelier Festival on May 3, but I've been given the official "N3MJA list" of operators viz: Roger/W3LM, Pud/W3YD, Jim/WI3N, Phil/K3MEG, Dick/N3MJA, Jerry/N3WSG, Matt/N3JMK, Peggy/KB3CEH, Joe/N3TZA, Kevin/W3VD. It was not a very busy day, and HD/N3LFL was too sick to attend, so word was sent on FM simplex to N3MJA who became net control. He had taken the responsibility of bringing our tent, etc. so it worked out. In contrasting this scenario with the Main Street Festival on May 9, (when N3LFL was not too sick), it shows how much HD contributes to these public service events. I take some risk in singling out any member, because there are so many that have done so much. W3LM, for example, who coordinated and led the event.

Anyway, what about Main Street? I did attend this event (from 6 am to 5 pm), and it was pretty good. The weather was on/off rain, but it didn't really rain on the parade much. Jim/WI3N was the parade organizer, not just for LARC, but for the Main Street Committee too. His new check-in system worked well I think, and we were lucky enough to fill gaps pretty smoothly. This was the first time in about 5 years that I worked the parade. The reason I was drafted this year is because I had a 440 Mhz HT. This UHF stuff was good because intermod was almost non-existent. However, I (and another ham too) was putting out a fuzzy signal because I couldn't remember how to alter the frequency step on my UHF radio. Fortunately, Scott/NF3I fiddled with it and had it fixed in no time. He also had the idea to place a late arriving high school band in the slot for a no-show high school band. This kept the different marching beats sufficiently separated. His last idea was for LARC parade operators to fall in as the last marching unit in the parade. (We do have matching hats.) I don't know if that's such a good idea as it may keep operators from volunteering for parade duty. I know I'll be glad to do it again because now it's actually well organized. Jim did a great job with that, and he was already talking about next year before the last of the parade had even passed.

Our Main Street booth was directly in front of the Women's Club, with the Laurel Police Department on our left which made lost and found easy. There were wallets and jewelry turned in as well as missing children. The police K-9 dogs were very popular. The stage that is usually to our right side was moved down Avondale Street which made things easier for us. The booth was primarily manned by HD/N3LFL and Pud/W3YD throughout the day, with plenty of helpers standing in from time to time. Two radios were used, one being HD's and the other being the club's dual band Kenwood rig from the hospital. This allowed monitoring of several frequencies, mainly 147.54 Mhz simplex throughout the event, and the UHF simplex frequency for parade support. Both antennas were supplied by HD and mounted on his now famous truck hitch mount. I noticed that he even has the 12v power coming directly out of the trailer wiring hookup. And don't worry about the battery, the one that cranks the engine is diode isolated from the spare which was running the radios. (Several people inquired.)

Speaking of inquiries, several interested folks stopped by our booth to learn about ham radio in general or the club in particular. Our little orange pamphlets and bizcards were very helpful for this purpose. Also, our web page was a good possibility for some. One guy asked if earning a license would be easier if he already knew some code. "How fast do you think you can copy", I asked. "Oh, at least 20 words per minute, I guess." he responded. It turns out he's a soldier stationed at Fort Meade, in a communications unit. Of course, I encouraged him to at least come in to the VE

session for a certification at 20wpm. It was so easy to point at the white building behind us and say "right here, 3rd Saturday, 9:00 am. Call the number on this orange pamphlet

or maybe check the web page listed." I keep meaning to have a guest register for people who wish to sign in, but it's been slipping through the cracks. (Hopefully at Field Day.)

We also had plenty of Laurel Leader inserts to offer to inquisitors. I felt it was invaluable for the map centerfold, but it had one of the restroom locations wrong, thus fouling up the question we heard the most. This booklet also gave a semi-good rundown of the music acts including the authentic Elvis imitator. I must admit that he had a very strong voice, and I really enjoyed his family friendly show. He made sure to entertain the littlest kids who, of course, don't know who he's imitating. They think he's original, and they had fun. I was also assigned to work at the 5th Street stage which featured what is known these days as Country music. Some outstanding pickers worked a long day there. I especially liked the fiddle duets, but I don't recall the names of the guys. I also encountered the drunkest patron of the day there, but he was no trouble really. At least that's what he told me about 3 dozen times.

The Laurel Leader printed a few paragraphs about the shadowing operation in their Main Street article. Hester L. and Jerry S. were mentioned by name.

All in all, it was a good day, and we got cool T-shirts.

Mark/N3NTQ has been talking about the trailer he has acquired and aims to use, in part at least, for LARC stuff. I hope we can learn some more at the meeting, but I certainly plan to help with the fixup operation. (Those who can't may like to offer a parking spot.) We now are in possession of stuff we use regularly and stuff we don't. I hope to come up with a list of these items soon. Mark has also been suggesting that we consider a way to preserve Mike's call WB3HUP so a member of his family can claim it under the vanity call program. I wonder if there's a way we could somehow use this call on Field Day, or have some other remembrance involving these call letters. Of all the events we do, this one seems the most empty without him, (to me anyway). Sorry to end on a somber note, but my signal is fading as my deadline approaches.

- 73 from N3GXA

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.



LARC Wants You!

To participate in **Field Day on June 27/28** and the **Laurel Independence Day Parade and Festivities on July 4.**

Field Day, June 27-28

Ahhhh, Field Day. The smell of new mown grass, the sounds of a bunch of guys and gals struggling to put together a big beam while trying not to lose the nuts and bolts in the new mown grass. More grunts and groans while putting up tents, portable 40 foot antenna poles, setting up equipment. All for the expressed purpose of stirring up some electromagnetic fields in an attempt to say a few words to as many people all over this country as we can.

This is one event that is shared by hams throughout the country. It's both a contest and a chance to sharpen our skills for emergency operation. Our Field Day will begin with set up at the Rocky Gorge athletic field at 10 am Saturday morning, June 28. We'll begin operating at 2:00 that afternoon and probably tear down the equipment around 3:00 pm on Sunday. There will be two HF transceivers that will need an operator and someone to log throughout the day and night. We'll also have some packet set up to send traffic and an APRS station to demonstrate that aspect of the hobby. We'll have a VHF/UHF station operating also. We'll try to work the RS-12/13 satellite which gets us 100 points if we do.

All of you club members and your friends and family are encouraged to come by to see what we do and to help operate the stations. At 6:00 pm, we will take a break from operating to enjoy a pot luck meal. This has been a tradition for many years. We will have some hot dogs and burgers to grill. Hopefully many of you will bring a favorite dish or dessert to share. I also recommend including some folding lawn chairs. Its a great time to visit with old friends and make some new ones. While we do try to rack up as many points as possible, we work hard at enjoying ourselves. The dinner is a family affair, so don't be shy about bringing the spouse and kids. If you don't have any, you can probably rent some.

- from Jim/WI3N (1997)

Help Needed for July 4 Parade and Festivities

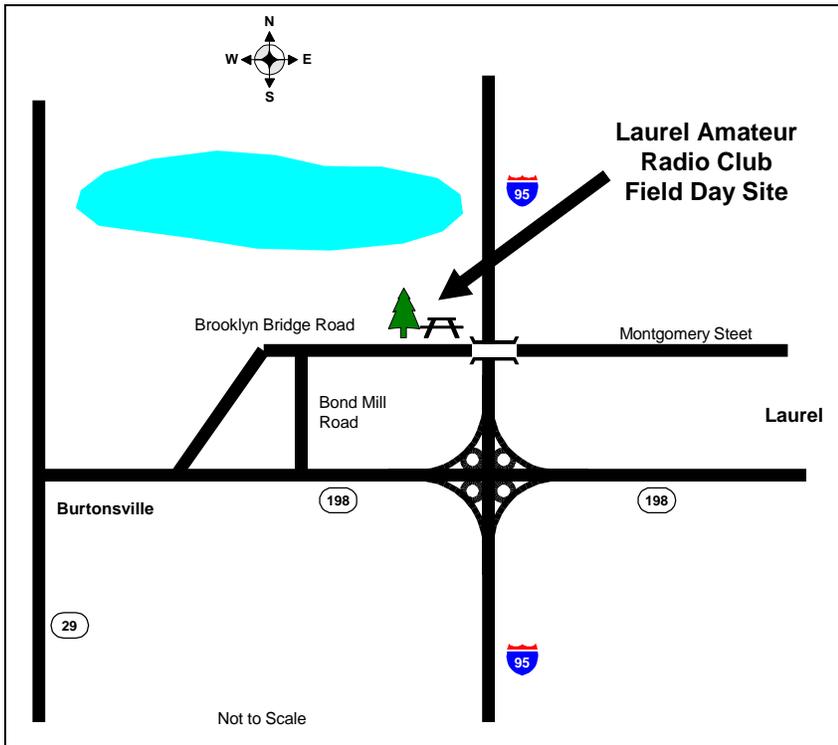
Laurel is counting on LARC to provide communications support for the Laurel Independence Day parade, festivities, and fireworks on Saturday, July 4.

Operations:

- 8:00am - Setup Net Control at Lake/Boat House and 2 outposts on grounds (3-4 people)
- 9:30am - LARC Parade Coordinator @ Montgomery between 6th and 4th Streets (1 person)
- 9:30am - Additional personnel (~3) needed at Lake
- 10:00am – Personnel needed along parade route (4th Street between Montgomery St. & Cherry Lane)
- 11:00am –12:30pm – Parade
- 12:30pm – 10:00pm – Rotation of LARC personnel @ Lake site, 2-4 hour shifts?

This is not difficult nor does it require an experience. Talk-in's on 147.540 and 445.975.

Let Scott/N3BYY or Mark/N3NTQ know if you can help out.



Field Day 1998

Sat 6/27

- 10am setup
- 2pm key down
- 6pm pot luck dinner

Sun 6/28

- 3pm tear down

Bring some show-n-tell, a tent, a friend, or just yourself!

Montpelier Festival



The LARC group supporting the Montpelier Festival on Sunday, 3 May 98. (Jerry/N3WSG, Dick/N3MJA, Matt/N3JMK, Peggy/KB3CEH, Pud/W3YD, Jim/WI3N, Roger/W3LM) Not shown: Joe/N3TZA and Phil/K3MEG.

73 de Roger/W3LM

Subject: Thank-You LARC!
Date: Fri, 27 Mar 1998 22:16:48 -0500 (EST)
From: "Pud Reaver (W3YD)" <preaver@pop.erols.com>
To: mdoore@webtrek.com

Mark:

I'm sure Keith wants this passed to the general membership...but my alias list is still screwed up....can you accommodate and get it to the exploder?

tnx....PUD

>

>Dear Pud,

>

>This note of thanks is really meant for all of those who graciously gave of their time and talents to teach
>the GENERAL CLASS which I just finished. My thanks and appreciation go to yourself; Tom Traughber;
Mike

>Mosely; Kevin Arber; and Scott Rosenfeld for his patience in getting me through the code for at least my
Tech

>Plus license. I am grateful to all of you who gave up your Monday evenings to help me and the other

>newcomers into the fascinating world of Ham Radio. I can certainly appreciate why some say that the Ham

>Radio Hobby is a fraternal organization. Thanks to all of you, I was able to get on the 10 M band yeaterday

>(3/23) and made my very first QSL to Cape Verde (D44BS). Needless to say I was thrilled to get out with
my

>old Kenwood TS-520 working barefoot into a Cushcraft AP8A vertical which Mike Mosely so graciously
helped me

>set up some time ago. Thanks Mike it sure seems to be working good!!! I am now going to persue working

>for that 13 WPM and know that since I've got my heart on the General (which I passed the written portion)
and

>Advanced licenses I'll eventually succeed.

>

>Thanks again to all of you !!

>

>Sincerely,

>

>Keith Klingebiel KB3BWV

>

A herd of buffalo can only move as fast as the slowest buffalo, and when the herd is hunted, it is the slowest

Subject: tubes for sale, 813, 6550, 6L6, 6146, etc

Date: Tue, 5 May 1998 14:33:36 EDT
From: KB3BWS <KB3BWS@aol.com>
To: larc-l@webtrek.com

i have some tubes for sale, selling off some of my extras, to buy some radios. most common tubes are \$2 each. write with needs. thanks 73 scott kb3bws

Laurel Main Street Festival - 09 May 98

On air at: 6:05 AML

QRT at 4:55 PML (just prior to the start of the rain)

Operational frequencies: 147.540 simplex

Tactical/Parade: 445.975 simplex

01) NF3I	Scott Rosenfeld	11) N3LFL	HD (NetCon)
02) W3YD	Pud Reaver (NetCon)	12) N3JMK	Matt Mantich
03) K3IOG	Howard Lehnert	13) N3WSG	Jerry
04) WI3N	Jim Cross	14) KA3GVR	Hesta
05) WB3KXJ	Bob Busch	15) W0ZX	Tom
06) N3NTQ	Mark Doore	16) N3NYM	Paul
07) N3CLL	Jim Lehnert	17) HAM TBA:	Scotty McTaggart
08) KA8YPY	Dan Blasberg		
09) N3GXA	John Menard		

I hope I have not missed anyone.....HD

"Stopped by Booth"

01) KB3CEH Peggy Endicot
02) N3UCE Glenn (GMRA)
03) KB3BWR Toby
04) Laurel Cross

It is becoming scary, as things are happening like they should, with out any problems, how did this happen ?HD

"Problem Areas"

1) The over all consensus of various personnel helping at NetCon trying to locate a Vendors location, felt the old system of using the building street address, would, make it far easier for us to tell vendors where they need to go.

2) LARC personnel functioning with the Parade, should not vacillate between frequencies. The problem is NetCon never knew which freq. to use to find some operators. It is a must, to stay on your frequency till after the Parade.

3) We were still seeing a number of attendees with: Dogs, Roller blades & Bikes.

4) Bungee cords need to be on site in case on wind

"F.Y.I."

Overall: The number of requests for announcement of "Lost" persons were down from the previous year, again.

But, we had a higher occurrence of lost wallet's (2) of which were returned to the owner.

Submitted by N3LFL/ HD

The Laurel 5K Run/Walk **-by N3GXA**

On Saturday, 6 June, the 3rd annual Laurel 5K was held with the help of the LARC; ably organized by Mark/N3NTQ. This is also the 3rd year that we've supported this event, but this was the first time for me. I seem to remember the first running of this race as The Pallotti Day Care 5K, but this year's event was also to benefit the St. Jude's Childrens Research Hospital; so perhaps the name has been altered a bit.

The race course begins at the Pallotti parking lot off Montgomery Street and proceeds on a road loop which eventually works its way down to the path of Riverfront Park at the City Pool. After following the full length of the park, the runners exit the path and go through a bit of Old Town, then working their way back to the start/finish line. The Laurel Department of Public Works, aided by the Laurel Police, close off, or restrict traffic on the road course. The race is very quick moving, so traffic tie ups are minimal. (Of course, it all depends on who you ask, I guess.) There are course marshals located at about 40 positions, with radio operators included at about 10 or 12.

The race check in starts at 6:30 or 7:00, and the start is scheduled for 8:00. The walkers start at 8:15 and skip the first loop, which works out fine. N3NTQ had requested 4 total operators to be available for set up at 6:00, so I readily volunteered along with HD/N3LFL and Jim/WI3N. I arrived to find that N3NTQ was already there with the club trailer set up and ready. As it turned out, N3NTQ had camped the night there with his 2 oldest harmonics, Stephen and Christine. Stephen ran in the race, apparently improving on his time from last year. The race refreshments were impressive with banquet tables full of bananas and apples, and bagels and drinks. Yet by 6:30, Mark had somehow run this gauntlet of health food, safely securing a dozen doughnuts for the LARC trailer.

This was probably one of the best organized events I've worked. There were pages of paperwork outlining the course for the marshals and radio operators; included were a map, schedule, instructions, and comments. The comments appear to be observations or lessons learned from previous years, such as "close to traffic at 7:55, reopen after last runner..."etc..

My hopefully complete list of participants: Mark/N3NTQ, HD/N3LFL, Jim/WI3N, John/N3GXA, Dick/N3MJA, Roger/W3LM, Jerry/N3WSG, John/KK3Z, Roz/N3YIG, Stan/K3JNT, and Joe/N3TZA. We used N3LFL's venerable hitch antenna for net control by parking his truck right next to the trailer. The station was set up in the trailer with HD operating the net, and power was from one of the club batteries in the trailer.

There were 632 total runners; winning time 15:02, breaking the course record of 15:21. Winning women's time was 18:03 which was just 7 seconds off the women's course record.

This was a very nice event. The weather couldn't have been better, and I was home by 10:00 with a new T-shirt, ready to mow the lawn. Or as HD put it: "Are you sure it's over? that means I have to go in to work."



Laurel 5K Run/Walk

6 June 98

“The LARC Contingent”

- 01) N3NTQ Mark (NetCon)
- 02) N3LFL HD (NetCon)
- 03) N3MJA Dick
- 04) N3GXA John
- 05) WI3N Jim
- 06) N3WSG Jerry
- 08) N3LM Roger
- 09) KK3Z John
- 10) N3YIG Roz
- 11) N3TZA Joe
- 12) K3JNT Stan

“Highlights”

- 0605 AML Set up mast & antennas for Net Control, on rear of N3LFL/ HD’s Suburban at the N3NTQ OpCenter
- 0620 AML KB3BLK, NetCon operational.
- 0805 AML "GUN" race start.
- 0818 AML Lead male runner crosses finish line
- 0823 AML Lead female runner crosses finish line
- 0907 AML KB3BLK, Net Control "QRZ"

“Problem Areas”

- A: WI3N, Jim needs charged/ new batteries for his HT.
- B: The City of Laurel needs to *better prep* the course in the area of Traffic Cones and Barricades.
- C: Only send a 440 HT to the starting line, if cross band is going to be implemented, for the starting gun.

“Accolades”

Numerous runners stopping by Net Control, telling us of a “High“ level of confidence, and “Peace of Mind”, they had with us around the course should there have been a “Problem” !

Subject: 1998 Atlantic Division Awards

Date: Sat, 25 Apr 1998 18:37:00 -0400

From: "Craigie, Kay (Atlantic Dir)" <kcraigie@arrl.org>

1998 ARRL ATLANTIC DIVISION AWARD WINNERS
(For Immediate Release)

The Atlantic Division ARRL is pleased to announce the winners of the 1998 Atlantic Division awards.

The "Amateur of the Year" is John Creel WB3GXW, from Silver Spring, Maryland. Licensed since 1967, John is an ARRL Life Member and an Official Bulletin Station. He owns and operates repeaters on 2 meters and 440 MHz. He is active in RACES and in demonstrating Amateur Radio to youth at summer camp. The Foundation for Amateur Radio named John their "Ham of the Month" in April, 1998.

John is also involved in leadership of the Laurel Amateur Radio Club*s Laurel VEC and participates in the annual National Conference of VEC*s in Gettysburg. He is an active Volunteer Examiner for Laurel VEC at monthly test sessions and sessions held at Amateur Radio events in the Washington /Baltimore area.

John belongs to a family of radio Amateurs. His mother, wife, and two daughters are also licensed hams. As the Foundation for Amateur Radio said in their "Ham of the Month" commendation, John "has made significant contributions to the Amateur Radio Service and is an outstanding model of a public and community service volunteer."

The "Grand Ole Ham" lifetime service award for 1998 goes to Rolland Madara W3PWG, from Lansdowne, PA. He was nominated by the Phil-Mont Mobile Radio Club of Philadelphia, PA. Known as "Rollie" to his many friends in the Amateur family, he has been licensed for 47 years and has also been a member of Navy MARS for 36 years and Army MARS for 41 years. For more than 25 years, he was an operator at the Franklin Institute Science Museum*s Amateur Radio exhibit W3TKQ (now W3AA). Although he has turned over trusteeship of the station callsign to a younger ham, Rollie still volunteers one day each week at the Museum.

Now in his late 80*s, Rollie served 24 years in the U.S. Navy, followed by employment with RCA and GE until his retirement in 1972. Since then he has been an active ambassador for Amateur Radio through W3TKQ / W3AA to the thousands of museum visitors of all ages. Another interest in his life is genealogy, and he has traced his lineage through many generations. The Amateur Radio community is indeed fortunate to have a gentleman like Rolland Madara W3PWG on our family tree!

The 1998 awards will be officially conferred at the Atlantic Division Convention, held in conjunction with the Rochester, NY, Hamfest on May 29 -31, 1998.

Contact: Kay Craigie WT3P (610) 993-9623 wt3p@arrl.org

On the Road with ICOM

And visiting LARC on Wednesday, June 24, from 7pm to 8pm.



W7SRZ - usually monitors 146.52 MHz and 446.0 MHz when travelling, also look for on APRS.

Meet ICOM's biggest rig yet! The ICOM Funmobile is over 29 feet (that's about 8.84 meters to you Canadians out there) of rolling ham shack and other ICOM communications gear. Whether you're a pilot, boater, public safety worker, ham, avid SWL listener, or wannabe of any of the above, this is one bus you won't want to miss!

And On the Road With LARC...



The LARC "FunMobile" with John/N3GXQ, HD/N3LFL, Mark/N3NTQ, Stan/K3JNT, and Dick/N3MJA.
(photo by Roger/W3LM)

The ARES Institute

The ARES Institute held on June 13 had a bit of realism added, as two Lines of severe thunderstorms rolled in across Northern Virginia. Skywarn Was activated, and classes and instructors were swapped as some worked Callout lists and passed reports. When a funnel cloud was reported in one of the storms, all present were evacuated from the glass-walled first floor to The Disaster Operation Center on the B2 level. After the last class, we Knew (by monitoring Skywarn, of course) that it was safe to go home.

About 50 hams attended. As usual, organization was efficient and low-key.

The sessions I attended, with their main points of interest were:

- Incident Reporting:What 911 wants to know. As exact a location as possible, and what has happened, so that they know what kind of help is needed.
- Red Cross Disaster Welfare Inquiry. The importance of maintaining confidentiality while passing messages to and from the central database of inquiries and victim locations.
- Organizing Large Events. Notes from the Marine Corps Marathon. Planning has already started for next year! The biggest problem is that you can't match sign-ups to show-ups until the day of the event.
- Alternative Power Sources. Non-battery sources and an in-depth discussion of battery types and care. NiCads are the clear winners, with Absorbed Glass Mat (AGM) lead-acid close behind. NCAC is looking into getting some retired aviation AGMs donated.
- Incident Control System. A framework for organizing coordination among many groups in response to any sort of emergency. Communication is part of logistics. Radio operators should avoid the use of Q signals and 10 signals in an emergency, since there are people listening who won't understand them.

There were also sessions on National Traffic System message handling, directed net procedures, packet, and Skywarn reporting. The ARES Institute is a day well spent for any ham who wants to be able to provide emergency service, and learn a bit more about operating when it's not easy.

73 de N3WSG/Jerry

APRS Update

Most APRS operations across the country have moved from 145.790 to 144.390. The LARC ARPS Digipeater (KB3BLK-1) has been temporarily relocated from ATR to Calverton (N3NTQ's shack). The LARC trailer has been outfitted with an APRS tracking unit and is identified as KB3BLK-13.

Mark/N3NTQ

The Death of the Mighty Larsen

-by N3GXA

I recently installed a new VHF radio in my truck, intending to use the Larsen NLM150 antenna that I first installed about 8 or 9 years ago. That's a 5/8 wave, base loaded, 2 meter antenna, with a grey plastic base and stainless steel whip. It uses a Larsen NLM mount which is sort of a cross between a low profile Motorola mount, and a SO239 kind of UHF mount. Basically, the size of the hole is a bit smaller.

I bought the antenna used, so I don't know its true age. I do, however, remember that sometime in the past 5 years there was evidence of a rain water leak into the slightly cracked plastic base. (The clear part, not the grey part.) I repaired this (I thought), with plastic cement.

When the new radio failed to receive anything but the strongest stations, I considered the antenna and feed line. I found the mounting fixtures to be somewhat rusted. So, I disassembled and wire brushed. Upon testing with an ohm meter, there didn't appear to be much continuity between the mount and the center whip. None, in fact. ("Is this meter working? Seems to be.") I tested some other antennas, and they seemed to work. I decided to open up that plastic part to have a look, but I suspected I would be replacing it.

Well, at first I tried to pry it apart from the top or bottom. It didn't take long to realize that it couldn't be that easy. Next, I placed a 17mm socket wrench around the circumference of the plastic insert and tapped it with a hammer. (This method has always worked for GM valve springs.) No luck. I broadened the definition of the word "tap" (not wanting to force it), but it just wouldn't slip loose. I wasn't getting a solid hit using my workbench, so I put the thing onto a scrap of wood which I laid on the concrete floor. I progressed from "tapping" to "hitting". Still didn't budge. By the time I had sung 2 verses of "The Ballad of John Henry", (the steel drivin' man), I noticed that the wood was becoming heavily dented with many circular impressions the size of a Larsen antenna mount. Ridiculous.

O.K., so it's not going to tap loose. I then took a Dremel cut off saw and sliced a cut neatly down the side of the Kryptonite...er, I mean plastic, part. This is the only thing that went smoothly. However, it still would not come apart. I used a cold chisel to peel it open at the slot I had cut, but still nothing. I then returned to the 17mm socket method but this time with a bigger hammer, (not wanting to force anything). After about 10 good whacks, I detected a small hairline crack forming opposite of the cut. One more mighty swing and it cracked open. Success!?

It was certainly corroded in there. Time to replace this thing with the Motorola mount version I found in my junk box. Yes, it passed the ohm meter test before I installed it. And yes, I intend to ensure that it's watertight.

There's a lesson in this saga somewhere, but heck if I can figure out what it is.

Subject: [SPECIAL-EVENTS] Tri-County ARC Event Jun 27

Date: Thu, 11 Jun 1998 09:58:50 -0500 From: David <kb5ylg@gte.net>

Tri-County ARC North Texas WC5C will host a special event station on **Jun 27, 1998, 1300 - 1700 UTC only**, for the debut of the club's Mobile Communication Center. The Mobile Communications Center is a portable office trailer, 18x8 feet in footprint, and has been refurbished by the club members. Interestingly enough, the trailer was turned over by freak high winds (at its temporary site for the refurb project, near Azle, Texas) on June 10, 1998, but sustained no known damage, not even a broken window. Bands for the event will be 80,40,20,15,10,6 all modes. The event ends one hour before Field Day starts, so this is a contact that can be added as you warm your station up for Field Day!

Commemorative certificates will be mailed to all who QSL.. QSL to Tri-County ARC North Texas WC5C, c/o David Johnson KB5YLG, 820 Wood Lane, Azle, Texas 76020.

--- Submissions special-events@qth.net

TECHNICAL TOPICS

Kevin Arber, W3DAD

Propagation Indices

Note: The following article appeared in the November issue of FEEDBACK. Because of the interest in the new sunspot cycle 23 and requests for information about the various indices, I thought it would be worthwhile to reprint the article.

The Federal Government, the National Institute of Standards and Technology (NIST), offers a very informative service to the amateur radio community in the form of time and propagation broadcasts. The propagation broadcasts are given at 18 minutes after each hour over WWV and contain the daily solar flux, geomagnetic A-index and Boulder K-index, along with a short statement on past solar and geomagnetic activity and a forecast for the upcoming 24 hours. For example, the broadcast from 9 November at 0018 UTC hours stated:

"Solar terrestrial indices for 8 November follow. Solar flux eight zero and Boulder A-index three, repeat, solar flux eight zero and Boulder A-index three. The Boulder K-index on 9 November one, repeat one, Solar terrestrial conditions for the last 24 hours follow. Solar activity was low, the geomagnetic field was quiet. The forecast for the next 24 hours follow. Solar activity will be very low to low, the geomagnetic field will be unsettled to active."

This month we will look into the information provided by NIST and see how it can be used.

Solar Flux Index: The solar flux is a measure of the energy put forth by the sun. It also called the 10.7 cm solar flux because it is measured at 2800 MHz. The measurements are taken daily at the Algonquin Radio Observatory, Ontario, Canada at 1700 UTC and passed to NIST for inclusion into the 1818 UTC WWV radio broadcast. The solar flux number is used by amateurs to predict the MUF (maximum usable frequency) for HF transmissions over a given path. A class of computer programs, such as IONSOUND [1], are available for this purpose. Even without a computer, the number tells a story. Lower flux values, say 75 or less, indicate poor propagation on the 10 to 20 meter bands. Higher values, say 80 to 100 indicate good conditions from 15 to 20 meters with some openings on 10 and 12 meters. Above 110 indicates that the upper HF bands should be open. Propagation will improve on the higher bands and they will stay open longer the higher the solar flux number. At flux values above 200, openings can be expected on 6 meters.

Sunspot numbers are often used as a measure of HF propagation conditions. High numbers mean that the ionization in the F-layer will be greater and thus support a higher MUF. The sun follows an 11 year cycle, with sunspot number waxing and waning over the period. Currently we are on the downward side of cycle 22. Although sunspot numbers show a trend, the 10.7 cm solar flux is a better number to use in predicting the MUF for a given path.

The solar flux number can be converted to a smoothed sunspot number by using the equation [2]:

$$S = 33.52 (85.12 + F)^{1/2} - 408.99$$

Where S = Smoothed Sunspot Number

F = Solar Flux

The chart below was prepared using the above equation and solving for S for an F range of 70 to 240.

F	S	F	S
70	9	160	116
80	22	170	126
90	35	180	137
100	47	190	147
110	59	200	157
120	71	210	167
130	83	220	177
140	94	230	186
150	105	240	195

Table 1. 10.7 cm solar flux and sunspot number

The formula above is not exact, but was derived from smoothed (12 month running average) values. There is no exact correlation between sunspot number and solar flux but the formula gives a close enough approximation to be useful to those who would like an approximate sunspot number. Reference 2 includes a table showing inconsistencies in the correlation between the two values.

The A-Index: The A-index is a daily value indicating the state of the earth's magnetic field. It is updated with the 1818 UTC WWV bulletin. The earth's magnetic field is composed of lines of force between the North and South magnetic poles (not the same as the geographic poles) around which electric currents flow. The earth's magnetic field becomes disturbed when high currents are introduced and circulate in the ionosphere. These currents are superposed on the normal currents and are stronger at higher latitudes and at night. An eruption on the sun will cause ionized particles to leave the sun, some of which will strike the earth. These charged particles cause extremely large currents to flow, especially in the polar regions, and create a disturbance in the earth's normal magnetic field. The particles also cause intense ionization of the ionosphere, which, in-turn causes very high absorption of radio waves. It is too much of a good thing. The A-index is derived from the previous eight K-indices. A-index values can range from 0 - 400. During the solar storms late last Winter the highest I can remember the A-index was around 70. The number tells you where you have been over the last 24 hours, however, it is a good predictor of what to expect in 28 days.

The K-Index: The K-index is a number from zero to nine recorded every three hours starting at 0000 UTC. It is an index of the relative geomagnetic activity to a normally quiet day. The Boulder K-index is taken at Boulder, CO by NIST; other observatories throughout the world also are recording the K-indices for their area. This information is shared by the scientific community. To obtain a world index, a corrected K-index is prepared for each of 12 selected observatories in both the northern and southern hemispheres lying between 48 and 63 degrees. A mean value is then calculated. The Boulder K-index is indicative of conditions for the continental United States. A rising K-index indicates poorer propagation paths in the higher latitudes. It is an indicator of aurora when values reach the 3 - 4 range and are rising. The K-index is converted to an "a-factor" which, when averaged, is converted to the A-index.

K	0	1	2	3	4	5	6	7	8	9
a	0	3	7	15	27	48	80	140	240	400

Table 2 K-index to a-factor [3]

At the onset of a solar flare, a large amount of ultraviolet (UV) radiation will be emitted from the sun. The UV will strike the earth about eight minutes after the flare event. The flare will increase D-layer ionization on the sun illuminated side of the earth and may last from a few minutes to a few hours.

The increase in the D-layer ionization will cause increased absorption of HF radio waves and disrupt HF communications. Charged particles are also emitted by the flare and arrive at earth some 20 to 40 hours after the event. They will be directed to the poles by the earth's magnetic field and cause a

decrease in the F-layer. At times the F-layer may disappear. The charged particles also cause an increase in the D- and E-layers, especially in the higher latitudes. This is bad news for HF but can bring the E-layer to an ionization level high enough to support communications at 6 and 2 meters. This phenomena is called sporadic E (Es). A rising K-index indicates the possibility of Es communications. Last winter, during the storms, 2 meters was open to the North as far as southern Canada.

The last portion of the WWV broadcast gives a short narrative report on conditions now and a forecast for the next 24 hours. This can be helpful in deciding on operating schedules for the following day.

The DX Cluster networks record and report the WWV broadcasts. They may be read by typing "sh/wwv" after connecting to the cluster. The format is:

Date	Hour	SFI	A	K	Forecasts
2-Mar-1994	18	94	8	3	LOW/QUIET-UNSET;LOW/QUIET-UNSET
7-Feb-1994	21	96	50	5	VY LOW/MNRSTM-MAJSTM; LOW/ACTIVE-MNRSTM

Table 3. DX cluster WWV Bulletins

Reading across from left to right is the date, the hour, in this case it refers to the 1818 UTC broadcast, a solar flux of 94, an A-index of 8 and a K-index of 3. The LOW/QUIET refers to the conditions for the last 24 hours. The solar flux is divided into five categories for this purpose; very low, low, moderate, high and very high. The quiet to unsettled refers to the geomagnetic field. This geomagnetic condition is also reflected in a low range value for the A-index. A-indices under 8 are quiet, 8-15 are unsettled, 16-29 are active and the storm category starts at 30. A minor storm is 30-49, major storm 50-99 and a severe storm 100-400. The LOW/QUIET following the semicolon refers to the forecast for the next 24 hours. In this case the solar activity will be low and the geomagnetic field will be quiet to unsettled. The unsettled is reflected in a K-index of 3. Note the difference in the report for February 7. The solar flux was about the same, 96 vs. 94, however, the A-index is 50 and the K-index is 5. A minor to major storm is reported for the last 24 hours and the forecast says that the sun will be active with a possible minor storm. The high K-index would indicate the possibility of Es or aurora forming. VHF DXers would be well advised to keep an ear to the radio for that mode of propagation.

Other information is sometimes included in the narrative on such things as major flares, satellite observations of proton and alpha particles and other events.

	<p>Michael C. Martin N3RWF</p> <p>Interference Investigator <i>ESO&C Substation Operations & Test-Electronics</i></p> <p>8400B Old Marlboro Pike Upper Marlboro, MD 20772</p> <p>Office/Fax 301 967-5230 Pager 202 530-3731 Email MCMARTIN@PEPCO.COM</p>	<p>Knoll Rd., Lexington, MA 02173 p. 23-25</p> <p>The Weekly News ARRL Audio News Geophysical Alert Broadcasts, DX Magazine, This Week in Amateur Radio, Amateur Radio Newslines, and /or The R.A.I.N Report</p> <p>may be broadcast locally by John/WB3GXW at one or more of the following times:</p> <p>Saturday @ 8:00pm on 147.225+ PL156.7 Sunday @ 8:00pm on 147.225+ PL156.7 Tuesday @ 7:15pm on 147.180+ PL156.7</p>
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Subject: Closing of maryland radio

Date: Fri, 05 Jun 1998 06:59:52 -0400
From: Irv McWherter <irvmc@thenavy.com>
To: Laurel ARC <larc-l@webtrek.com>

Received from a friend, W3LEO.

Forgot to mention it on the MADRAS net tonight:

On Wednesday afternoon, a sign was placed in the window of Maryland Radio stating that they would be closing on June 30th. Apparently, everything is now 15% off and they will be opening certain evenings, but don't know which ones yet.

Sad to see another local ham radio store bite the dust.

73 - Irv - K3IRV

Update: I visited MRC on Tuesday, June 16 – discount was at 50% and not much left. I suspect the final day was June 17 or 18. Jerry will continue with his software business. I suggested to the owner of Electronics Plus in Beltsville that he may want to expand his amateur radio offerings – sounded interested but noncommittal.

Mark/N3NTQ

Anne Arundel Radio Club - Two Meters Childrens Net

The Anne Arundel Radio Club (AARC) is sponsoring a Children's Net on the 1st, 3rd, and 5th Saturdays of the month at 7PM local time on the 147.105+ Davidsonville, Maryland Repeater.

The purpose of the net is to give youth an opportunity to experience and learn about amateur radio through participation and develop new interests within our communities. Each net will have a theme question to start the net discussion and get things going.

Grandparents, Aunts, Uncles, Moms and Dads, this is a time to give your children and neighborhood friends' children some air time and meet other kids on the air. All licensed hams who can reach the AARC repeater are encouraged to check in with or without a child and participate in the discussion.

One April 4th, 1998 we had our first net and it was a great time. Children of all ages joined in. It was a great time!

We also need licensed AARC operators for net control operators. Please contact Doug Ellmore/N3XQP via the Internet at n3xqp@amsat.org or via the AARC 147.105+ repeater during the daily commute for more information.

THX, 73 Doug/N3XQP

(reprinted from the June 1998 AutoCall, published by the Foundation for Amateur Radio (FAR))

Subject: Please help us if you can

Date: Mon, 18 May 1998 22:13:43 EDT
From: KF4PSY <KF4PSY@aol.com>
To: mdoore@webtrek.com

I have a HUGE favor from one Ham to another. Let me introduce myself. I am Shirley (nee Gasch) Shanahan of Woodbridge VA (formerly KF4PSY). My father, Larry Gasch (W3SFY - I took his callsign after his death) was a Lifetime resident of Washington DC and for the past 39 years of Forestville Maryland. He passed away in February after suffering a stroke. He was a Ham (extra class) for nearly 50 years. I learned early in life that whenever a Ham was in need, others came to help. This is what I need. My brothers (Jim Gasch, N4VIA of Arlington, VA and John Gasch, former ham of Davidsonville, Maryland) and I put his home in Forestville on the market and we got a buyer much sooner than expected. We have a tower in the backyard (FREE) to anyone that can take it down and haul it away. Please put the information out to your club and whoever else can advertise it. We are desparate!!!!!! Please help us. The following is the information that will be posted on the web in Warrenton, VA.

65ft Vesto Tower

Free for the removing (must disassemble and remove from Forestville, Maryland, former residence of W3SFY, Larry Gasch, who passed away in February. 39 years old, approx 65 ft tall, base roughly 12 ft apart. Almost mint condition. All cable and transmission lines around it are free too. Various other antennas are available onsite. Will require approx 100 manhours to remove it. Must sign a liability release prior to removal. Contact Shirley Gasch-Shanahan (W3SFY, formerly KF4PSY), 703-490-3582 or Jim Gasch (N4VIA), 703-553-0020 or John Gasch (executor of estate) 410-721-9007. Time critical as tower must be removed by the settlement of the property sale (July 15th).

All I'm asking for is advertisement for a family in a crisis situation!!!!!!

Thank you for your assistance and 73s,
Shirley Shanahan, W3SFY

Subject: Re: [Fwd: Please help us]

Date: Tue, 19 May 1998 08:20:14 -0400
From: Komkit Listisard <w3kit@olg.com>
Organization: Become a HAM and talk to the World
To: mdoore@webtrek.com
References: 1

The tower is a 12x12 and 62 feet WIND MILL and you guys will need to have an impact tool to take the thing down because the total about 400-800 nuts and bolts. Whoever taking it plan to spray WD40 on the tower 5-7 day before the acting begins.

I have been up there so many times, the tower is very strong. You guys can almost have a party up on the platform.

Central Maryland Amateur Radio Club (CMARC) – Morse Code Practice Nets

CW Practice Net: Every Wednesday and Thursday, 9:00pm, 145.230 MHz repeater.

Repeater: N3EZR/R 145.230 MHz. Users must transmit a 110.9 Hz CTCSS Tone for full area coverage. No tone necessary for local coverage.

June 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				

July 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	

August 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					

Upcoming Club Activities

June

23	Tue	8:30pm	PG County ARES Net	
24	Wed	7:30pm	LARC Monthly Meeting	
27-28	Sat-Sun		Field Day	145.350- 384 Main Street WSSC/Panther Field

July

1	Wed	8:30pm	LARC Net	147.225+
4	Sat	8am-10pm	Laurel 4th July Parade, Festival, Fireworks	Lake & 4 th /Montgomery
8	Wed	7:00pm	LARC Social	Tubby's Restaurant
15	Wed	8:30pm	LARC Net	147.225+
18	Sat	9:00am	VE Test Session	384 Main Street
22	Wed	7:30pm	LARC Monthly Meeting	384 Main Street
26	Sat		VE Test Session @ BRATS HamFest (large crowd)	Timonium
29	Wed	8:30pm	LARC Net	147.225+

August

5	Wed	8:30pm	LARC Net	147.225+
8-9	Sat-Sun		MD/DC QSO Party	TBD
12	Wed	7:00pm	LARC Social	Tubby's Restaurant
15	Sat	9:00am	VE Test Session	384 Main Street
19	Wed	8:30pm	LARC Net	147.225+
26	Wed	7:30pm	LARC Monthly Meeting	384 Main Street

Sept 13	FarFest @ Gaithersburg
Sept 21	Novice/Tech Class Starts
Sept 25-26	Boy Scout Camp?
Sept 26	Pallotti Invitational Run (anybody got a dirt bike?)
Oct 3?	Laurel ReaverFest
Oct 3-4	ARRL Simulated Emergency Test (SET)

Hamfests and Other Events

July 4 + Harrisburg RAC - Harrisburg, PA
 July 5 + Murgas ARC - Dallas, PA
 July 12 + North Hills ARC - Pittsburgh, PA
 July 12 + Genesee RA - Alexander, NY
 July 12 Mid-Atlantic DX & Repeater Assn - Brunswick, MD
 July 12 + Mid-Atlantic ARC / Valley Forge - Kimberton, PA
 July 18 + Utica ARC - Frankfort, NY
 July 18 + Jonestown Mountain Repeater Assn - Beach Haven, PA
July 26 + Baltimore Radio Amateur Television Society, Timonium, MD,
 Bob Koblisch, N3HAT, PO Box 5915, Baltimore, MD 21282-5915, 410-467-4634 (voice or fax), E-mail:
n3hat@erols.com, E-mail: brats@smart.net, <http://www.smart.net/~brats>, setup Saturday 2pm, public
 Sunday 6am to 5pm (tailgating), 8am – 5pm (inside vendors), talk-in 147.030, 224.960, 448.325.
 VE exam check-in @ 8:30, pre-registration required (John/WB3GXW @ 301-572-5124).

Sept 13 + Foundation for Amateur Radio, Gaithersburg, MD
 Al Brown, KZ3AB, 8645 Tower Dr., Laurel, MD 20723, 301-490-3188, E-mail: Amateur_Radio@hotmail.com