



# THE FEEDBACK

Volume 97 Issue 10

October 1997

THE AMATEUR RADIO NEWSLETTER

Laurel Amateur Radio Club, Inc.

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

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

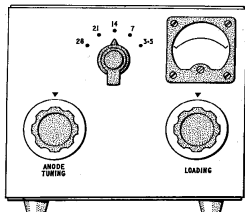
email: [larc@webtrek.com](mailto:larc@webtrek.com)

### Meetings and Nets:

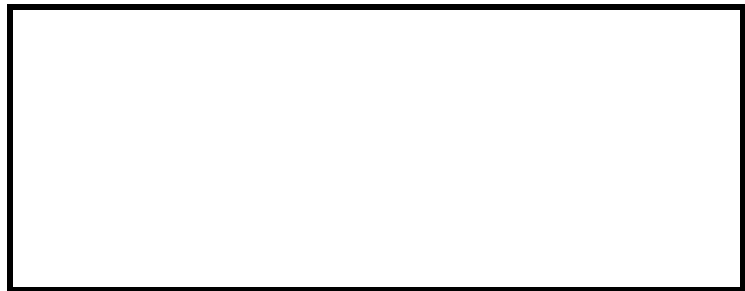
- ▶ 1<sup>st</sup>, 3<sup>rd</sup>, 5<sup>th</sup> Wednesdays:  
On-the-air Net at 8:30pm on 147.225+ PL156.7 (no tone required during nets)
- ▶ 2<sup>nd</sup> Wednesday:  
Informal/Social Gathering at 7:00pm – Tubby's Restaurant; Rt. 198, 1 mile West of I-95
- ▶ 4<sup>th</sup> Wednesday:  
Monthly Meeting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



## FIRST CLASS MAIL



### **Next Meeting:**

Wednesday, Oct 22 – 7:00pm

@ Historical Electronics Museum

**Presentation: Tour of Museum by Heru Walmsley (W3WVV)**



**THE LAUREL AMATEUR RADIO CLUB**

**Officers:**

President:	Mark Doore	N3NTQ	301-572-2385	mdoore@webtrek.com
Vice-President:	Roger Davis	W3LM	301-776-6961	rldavis2@juno.com
Secretary:	John Menard	N3GXA	301-725-1641	n3gxa@hotmail.com
Treasurer:	Patty Menard	N3OYN	301-725-1641	

**Other LARC Positions and Contacts:**

Immediate Past President:	Jim Cross	WI3N	301-725-6829	jcross3@juno.com
Membership:	Patty Menard	N3OYN	301-725-1641	
FAR Representative:	Joe Seasey	KA3UZI	301-725-5822	
FAR Representative:	Dan Blasberg	KA8YPY	202-667-5780	dan.blasberg@juno.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	aa0005@mail.pratt.lib.md.us
Public Information Officer:	Pud Reaver	W3YD	301-498-6293	preaver@erols.com
Youth Programs:	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	aa0005@mail.pratt.lib.md.us
Emergency Operations:	Mike Moseley	WB3HUP	301-317-8546	wb3hup@aol.com
Emergency Operations:	Jim Cross	WI3N	301-725-6829	jcross3@juno.com
Club Emergency Station:	Mike Moseley	WB3HUP	301-317-8546	wb3hup@aol.com
Official Bulletin Station:	Pud Reaver	W3YD	301-498-6293	preaver@erols.com
Official Relay Station:	Pud Reaver	W3YD	301-498-6293	preaver@erols.com
Official Relay Station:	Pat Gormley	KK3F	301-864-4694	pgormley@nova.umuc.edu

**LARC Special Interest Groups and Mentors:**

Antennas	Kevin Arber	W3DAD	301-725-0038	aa0005@mail.pratt.lib.md.us
ATV				
Contesting				
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
Affiliated Club Coordinator:	Tony Young	WA3YLO	301-262-1917	tonyy@juno.com

<p><b>Items to be published in <i>The Feedback</i> should be submitted by the third Wednesday of the month. Email submissions may be made to <a href="mailto:larc@webtrek.com">larc@webtrek.com</a></b></p>
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*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: John Menard, N3GXA**

**Publisher: John Creel, WB3GXW**

## President's Ramblings

Looking forward to an interesting meeting this month at the Historical Electronics Museum. Note that we will start the meeting there at 7pm. This should allow us to get through business and start the tour around 7:30pm.

We will have our election of officers at the October meeting. The nominating committee has sought out the following candidates: John/N3GXA for President, Jerry/N3WSG for Vice-President, Mark/N3NTQ for Secretary, Patty/N3OYN for Treasurer, and Dan/KA8YPY for Primary FAR Rep. This is a great set of volunteers! Speaking of elections, don't forget to mail in your ARRL Atlantic Division Director ballot.

We had a wonderful demonstration of Amateur Television (ATV) by Bob Bennett (W3WCQ) at last month's meeting. Bob has operated an ATV repeater in Baltimore for about two decades now! He brought some good show-n-tell, showed us video of one of the ATV nets, and even put us all on TV (across the room). Bob/W3WCQ and Heru/W3WVV (our host this month) have a "Answerman" talk-in on 147.030+ Saturday afternoons at 1:20pm.

Also at September meeting was George/W3PPB and his cat's whisker crystal radio with long wire setup in the parking lot. It really worked!

John/WB3GXW's 440 repeater (444.250+ PL156.7) is back on the air – better than ever and with autopatch. It is really nice to be able to make a patch from downtown Laurel with NO INTERMOD! The patch codes are the same as the ones on the 147.225+ machine. Give it a work out. Radio Shack has recently advertised a clearance sale on the HTX-404 HT (440) for \$149.95, and we thought \$179 was a good price!

This Saturday, Oct 18, we plan to have some cub scouts out to the shack for a demonstration and some JOTA activity. This is good time for members to stop-by and even bring friends along. We'll probably be there from about Noon to 4pm. The shack is located at ATR in North Laurel. Going North on Route 1 make a right (East) on Whiskey Bottom Road and make your very first right into the industrial park – then look for the tower and ATR sign up on the left.

Next Saturday, Oct 25, we plan to have a Copper Pipe J-Pole build session, also at the ATR shack. You may come by anytime between 9am and Noon to work on an antenna, but we need you to RSVP (to me) by this Sunday (10/19) so we know how much material to buy. The cost will be about \$15 per antenna. Mike/WB3HUP has perfected the 2-meter J-Pole. If there is enough interest we may be able to do some 440, 2m/440 dual band, or 6m versions – let me know your preferences so we can dig out the best plans. Mike/WB3HUP has an antenna analyzer for 2 meters but not the other bands, so we will need someone to provide a loaner.

We are planning to give John Riehl (NV3C) some help with his antenna and rig situation the afternoon of Saturday, Oct 25.

I made it to part of the ARRL/TAPR Digital Communications Conference (DCC) last weekend – the APRS part on Friday and the dinner on Saturday evening. I found the most interesting (and entertaining) part of the APRS sessions to be Ralph Fowler's (N4NEQ) accounting of the use of APRS at the 1996 Olympics in Atlanta, GA. They had planned to use APRS to track the torch but that was nixed for security reasons – they were afraid that people might know where the torch was (like you couldn't turn on the TV and find out). But APRS was used for something much more practical. Motorcycles with TV cameras were used to film most of the road events. Given the large coverage area and terrain the TV transmissions could not be broadcast back to a central location directly. So each motorcycle had a helicopter that flew above it and retransmitted the signal back to the central site. APRS trackers were put on each motorcycle and each helicopter so the central control site could monitor and direct the helicopter to stay above its motorcycle. The helicopters had to fly high enough to clear buildings and other obstacles so this could not be accomplished visually by the helicopters. On at least one occasion this allowed a helicopter so actually flew above the IFR (fog) conditions and maintain the TV rebroadcast link. This activity was not done for NBC(?) but for broadcast to the other 150-odd countries viewing the Olympics – they actually got better coverage of the road events that we did in the US.

The keynote speaker Saturday evening was Yutaka Sakurai, JF1LZQ who is Vice President of Japan's Packet Radio User's Group (PRUG). He was one of the six founders of the group back in 1985, and has had pictures of



his home printed in the Japanese version of PC Computing magazine as one of the most technologically advanced residences. A couple of the other co-founders also attended the conference. It was very interesting to hear how packet radio has developed along a different path than over here. Much of their focus has been on attaining higher speeds than on applications – they had not even heard of APRS. The phone service pricing in Japan is all usage based – pay per minute even for local calls. This makes BBS's and Internet access very expensive. One of their objectives was to make internet access over packet feasible – one home-based ISDN line that provided internet access to the packet users, thus the focus on speed. They were very ingenious and cost-conscious in building the systems. To attain 9600bps they used the modems from junked fax machines. To attain 768k they used parts from very cheap (almost give-away) cell phones running in the 1.2Gz band. He had a couple \$49 cameras hooked to his laptop at the table and through the internet so his family home in Japan could watch his talk. In the end he did admit the most of the packet users in Japan were still running 1200bps, so things aren't that different for us common folk here and over there.

The annual banquet is coming up on December 7 at Timbuktu. This is not a ham-only function, but also an opportunity for non-ham spouses and significant others to get out and socialize with the gang. Pud/W3YD has sacrificed several lunch hours to visit the Timbuktu in preparation for our gala event. We are always looking for door prizes – let me know if you have something you would like to donate (no boat anchors) or a local business that might like to donate a prize. Hope to see you all there!

The new year is around the corner with means time for dues. If you don't like writing a lot of checks then go ahead and include your 1998 dues in your banquet check – Pud will get it to the right place.

I have six people signed up for the Ham Radio Class at the OASIS Thursday evenings starting Oct 16. Five are Middle/High School age and one adult. It will be a six week program that is not geared towards licensing (directly) but to introduce and demonstrate various aspects of the service. Let me know if you have a subject you would like to talk about or demonstrate. I found out that OASIS stands for Opportunity for Achievement, Support, Involvement, Success.

Don't recall if I mentioned it last month, but Mike/WB3HUP has setup two TNC's at the shack. One is on 145.790 which acts as an APRS digipeater for the area and the other one on 145.030 for traditional packet operations. We are still tinkering around with them but feel free to use and test them out. The 145.030 node is KB3BLK-1. There is talk between the APRS and AMSAT communities about moving APRS ops over to 144.390 – maybe we will take a lead on this in our area.

Almost forgot, Sweepstakes is right around the corner, November 15-16 at the club shack. Another great operating/contesting opportunity for young-n-old/new-r-experienced.

Till next time...



73, de M ark/N 3N TQ

“Hard work never killed anybody but why take the chance?” – Edgar Bergen

**Copper Pipe J-Pole Build Project**

**Saturday, October 25**, Start Between 9am and 12Noon

Hosted by Mike/WB3HUP @ ATR

2-meter and possibly a 440 version

**Please register by October 19:** Mark/N3NTQ 301-572-2385

[mdoore@webtrek.com](mailto:mdoore@webtrek.com)

Cost will be about \$15

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## **Minutes of LARC Meeting – 24 September 1997**

- Called to order at about 7:30pm, President Mark/N3NTQ presiding; held at The Woman's Club of Laurel, 384 Main Street. Approximately 28 members were in attendance.
- The treasury was reported at about \$1374.
- John/N3GXA displayed and presented a Certificate of Appreciation received from the Fourth of July Committee of Laurel. An award from Mayor Casula was presented to Mark/N3NTQ, as a member of the committee, by N3GXA, (who covered the City Council meeting for LARC).
- Emergency Coordinator Jim/WI3N reported that he intends to pick up equipment very soon that will be installed at the Laurel Hospital, as discussed previously. The national Simulated Emergency Test (SET) will be upcoming on 4 October. LARC intends to participate from the station at the Riverfest.
- Mark/N3NTQ reported that Scott/N3BYY will be coordinator for the 1998 Fourth of July.
- The LARC has been officially declared winner of the MDC QSO Contest. A plaque will be presented at the Christmas Dinner. The banquet is scheduled for Sunday, 7 December at the Timbuktu Restaurant, 4:00 pm cocktails, 5:00 pm dinner.
- Plans were made for the upcoming Pallotti Run on 27 September, and the Laurel Riverfest on 4 October.
- The Laurel VEC will do testing at the CARA Hamfest in Howard County on 5 October. The CROP walk is the same day.
- John/WB3GXW said that his UHF repeater is going to be back in service on 444.250 Mhz and will have open autopatch and improved controller. He also pointed out that a local 2 meter frequency pair at 145.37 Mhz is likely to become available.
- The October meeting will be held at the Electronic Industries Museum located near BWI airport. This was voted on and carried.
- Mark/N3NTQ expects to be working in the Oasis program at Eisenhower Elementary School on Thursday evenings.
- Preliminary nominations for slate of officers is John/N3GXA for President, and Patty/N3OYN to remain Treasurer. Mark/N3NTQ will be Feedback Editor. Nominations for Vice President and Secretary are still open.
- Dan/WB4ARC has equipment he would like to donate to the club, mostly Heathkit.
- Scott/NF3I will be teaching a Novice class at his home on Saturday mornings for 5 or more students who are too young or otherwise unable to attend the Monday evening class. Interest appears to be quite good.
- John/WB3GXW reports that the Space Shuttle launch on Thursday evening should result in a good view of the flight over the U.S. east coast.
- The program was a presentation on Amateur TV by Bob Bennett, W3WCQ. Mr. Bennett was presented with a Certificate of Appreciation by Mark/N3NTQ.
- The meeting adjourned at about 9:30pm.

**-Respectfully submitted, John/N3GXA**

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## **Laurel 4th of July; Out With a Bang**

**-by N3GXA**

I recently attended a meeting of the Laurel City Council on 22 September at the request of the Fourth of July Committee. At this meeting, the City recognized and congratulated the people and organizations involved in the events. Because the meeting was at the same time as the LARC novice/tech class, Mark/N3NTQ asked Patty/N3OYN and me to attend.

Each person on the committee received a very nice certificate with proclamation and signature of the Mayor, Frank Casula. One was for Mark which I accepted in his place. Carol Bounds, the committee chair, gave out Certificates of Appreciation to various groups, including LARC. A few other awards were handed out as well, and I noticed that there was only one recipient of the Harrison-Beard award. I don't quite recall which group that was, but I do remember that for the 1996 award it was LARC. I only now realize that the Harrison-Beard Award is somewhat prestigious, based on its distinctiveness.

The hams can be proud.

## **Bicycle Mobile at the Pallotti Run**

**-by N3GXA**

As many readers have been informed, one of our biggest events was scheduled to go on without an important volunteer; that being Duane/N3AUJ the motorcycle rider. In years past, Duane followed the race, thus covering many otherwise unseen parts of the course. I can remember at least 2 occasions when he was the first to report a bad injury. I figured that a bicycle rider could do the job in a pinch, and so offered to ride Patty/N3OYN's mountain bike around the course. One of the lessons learned was that dirt biking takes more energy than road riding. Also, the last runner in a race is not too tough to keep up with, but in order to make the next event, you have to catch up to the first runner.

One problem I had anticipated was that my HT batteries were not going to work. Therefore, I had packed wiring and adapter for 12 volt operation hoping to borrow a gel cell, but that never did materialize. Fortunately, Michele/WK3X loaned me a spare rig. The next thing which I hadn't anticipated was how rough the ride and vibration would be. This meant I kept the radio and other items in my fanny pack instead of the bike pack. Even my tool kit which featured a 5mm allen wrench. However, the saddle on the bike was vibrating loose from its mount held by an 8mm allen screw. Fortunately, Paul/N3NYM came through with the wrench which I finally had to carry along with me because the part needed more tightening than I had bargained on.

It didn't take too many races before my legs were too tired to climb steep hills unnecessarily. So I cut across open grassland when possible. I quickly learned that steep grasses make for very tough riding. So I ended up sticking to the trail, and found that as the racers got faster, I was working harder to keep up. This was not a problem since I could make up time when we got to the paved road portion. However, when the seeded boys race took off, I found that even the slowest entrant was able to outrun a man on bicycle. When we reached the paved road I took off after them and just caught up with the last runner by the time we reached the boat ramp. It was at that point that I finally realized that I was the one who was likely to go to the hospital, so I turned for home and called it a day.

This could probably be done if we have 4 riders on bikes. Each operator would only have to ride a portion of the course before turning back for the next race. Either way, there were very few problems, likely because of the dry course and pleasant weather.

## My Eyeball QSO with the Space Shuttle -by N3GXA

At the September meeting, John/WB3GXW announced that the Shuttle launch on the following Thursday would be at night and therefore, visible to most of the east coast. Since launch time was for about 10:30 pm, I expected it all to happen by about 10:40. Since I live in the city now, my skygazing opportunities are limited by local light pollution and obstructions. So I took my binoculars and 2 handi-talkies and laddered up to the roof. The first radio was set to listen to the retransmission by the Goddard Amateur Radio Club. The second rig was so I could check in with others on 147.54 who were trying to see the same thing. I seem to remember that Pud/W3YD, Dick/N3MJA, Russ/N3AUQ, and Howard/K3IOG were all on and able to receive my signal. This shows the advantage of being on the roof with a 5/8 wave antenna. Anyway, I listened to the radio signals as I scanned the southeasterly horizon, and I did see the space shuttle moving rather quickly across the sky. It was just a moment later that W3YD came on to say he saw it, thus confirming my sighting. Had it not been for the radio traffic, I never would have been able to do this. The sight was less than spectacular on its own, but knowing what I was looking at made it very exciting to me.

My neighbors were probably wondering what I was doing on the roof at 10:45 pm, but none of them has had the nerve to ask.

### Electronic Equipment for Sale

If interested call Joe Tippett @ 301-572-4323

#### HEATHKITS WITH MANUALS

Audio Generator Model 1G-72  
RF Signal Generator Model 1G102  
Signal Tracer Model T-4  
Vacuum Tube Voltmeter V-7A  
Digital Multimeter 1M-1202  
Tube Checker 1T-17  
Transistor Tester 1T-27  
Transistor Tester 1T-18  
Color Generator 1G-5240  
Battery Eliminator Still in dit form 1P 2760  
Scanner GR110

#### HEWLETT PACKARD

Timer counter 5326A  
Wide Range Oscillator 200 CD  
Oscillator 204B

#### TELEQUIPMENT

Oscilloscope D54

#### KNIGHT

Motor Speed Light Control KG201

#### ARCHER

CB-Watt/SWR Meter

#### CORNELL-DUBILIER ELECTRONICIS

Decade Capacitor CDA  
Decade Capacitor CDB

#### SYSTRON DONNER

Pulse Generator 110D

#### RCA

Senior Voltomyst WV 98C  
Transistor Tester WT 501

#### DATA PRECISION

Digital Voltmeter - 245

#### DYNASCAN

Tube Test Dyna-Jet Solid State Dynamic Mutual  
Conductance 749

#### HICKOK

Tube Tester & Caro Case and Cards

#### HOME MADE

DC & AMP Power Supply 0-50V 0-2A  
Square Wave Generator  
Isolation Transformer 110V  
Curve Tracer

#### PRINTERS

Digital LA 50  
AT&T 5310

#### COLOR STAR VCR

Viewmax GVT 9100M

#### SEARS TV MONITOR

Total Video System 195-21353452

#### RECEIVING TUBES

Many

#### TUBES

Electronic

## **From the Keyboard of Pud/W3YD...**

### **PALLOTTI REPORT**

The LARC did a fantastic job, once again, in support of the Pallotti Invitational Cross Country Race. About 800 runners completed the course, and there were no major incidents to report this year. We supported the race without our usual motorcycle support (he has moved to WV), but N3GXA/John provided noble service on his mountain bike....he followed the runners from the start, through the field, and up to the lake, where we had excellent visual support for the last half of the race. Next year, if we can get two (or three) cyclists, we may be able to follow the last runner all the way around....several folks have already started their training regimen, as a matter of fact! Thanks to all who supported this event, which I (W3YD) personally think is our premier event of our year....amateur radio at its best!

### **RIVERFEST REPORT**

RIVERFEST was another great event....wx was good (almost too good), the crowd was bigger than last year, and we were well recognized at the debrief. We showed up around 0700, put up our tent, put up their tent, did crowd direction and control, worked some terrific DX, and then took down our tent, did crowd direction and control, and were all home by 1700. We also participated in the SET, where we reported the dam was opened, we needed sandbags, and the Laurel Red Cross was forced to relocate their downtown headquarters. (We also copied a message from another jurisdiction that reported that Governor Glendening was being attacked by a flock of Canadian geese....sometimes some folks don't take these things too seriously!) Preliminary reports from SET say the exercise was a fantastic success, but highlighted some areas where further training was necessary. That's why they have the SET.

### **NOVICE/TECH CLASS**

We are hanging in there, still, with an amazing class size that still exceeds 24 students. Instructors include W3YD, W0ZX, W3LM, WI3N, WB3HUP, W3DAD, and NF3I, who has a CW class that is numbering around 10! The last class session (the testing session) is scheduled for Nov 24. If you, or anyone you know, is considering upgrading, that is a good, relaxed, place/date to pencil in.

### **CROP WALK**

WI3N/Jim, WB3HUP/Mike, and W3YD/Pud provided communication support to the annual CROP WALK through Laurel. There were approximately 40 walkers, who took a leisurely stroll through parts of Laurel, including part of the Historic District downtown. The weather was perfect, and we all got a final look at Cooks Hardware, which was demolished on the next day.

### **SWEEPSTAKES IN NOVEMBER**

Finally, mark your calendars for the weekend of November 15-17....the annual ARRL Sweepstakes, phone. We will be "doing our thing" from the contest station at WB3HUP's place, looking for that elusive clean sweep award....which should be a piece of cake....the sun is getting cooperative again!

## **Technical Topics**

**Kevin Arber, W3DAD**

### **VHF Propagation**

Lately you may have noticed interference from distant stations to your local repeater. This effect is caused by tropospheric ducting and is quite common during the Spring and Fall months. It is weather related and appears when temperature inversions occur in the troposphere. Normally, temperature decreases with increasing height above earth, however, warm air masses may create an inverted temperature curve close to the ground, causing the temperature to rise from earth to a thousand feet or so. Then, the temperature will decrease normally with increasing height, until at about 3500 to 4000 feet, where another inversion appears. The area between the two inversions forms a duct that conducts VHF radio waves very much like a waveguide. Antennas that are placed in the duct will permit communication over very long distances (up to 2500 miles or more) with strong signals. VHF enthusiasts often exploit the ducting phenomena to QSO distant stations and, therefore, anticipate weather conditions that are favorable to forming a duct. For repeater users, however, ducting is a nuisance.

For weak signal VHF operators the workhorse propagation mode is VHF tropospheric scatter. In this form of propagation, small gradients in the lower atmosphere's index of refraction scatters and rescatters the VHF signal far beyond the line-of-sight. Stations with high gain antennas and sensitive receivers can communicate quite well over distances of 200 miles or more using SSB or CW. Scattered signals are not likely to be heard by the repeater as they are too weak to break the squelch, and because a local signal will capture the demodulator when the repeater is in use.

Other forms of VHF propagation exist, such as, Sporadic E (Es), transequatorial spread-F (TE) and aurora. For further information consult your ARRL Handbook or Antenna Book.

### **RS-10 and RS-12 Satellites**

As you may be aware the Russian RS-10 satellite has fallen silent over the summer. My last QSO was logged at 1751Z on May 25th with KA9JBD. RS-10 was operating in Mode-A, that is 2 Meters up and 10 Meters down and was quite popular. Another Mode-A satellite, RS-15, is operational but is suffering from an insensitive receiver. It is difficult to use unless medium power and gain antennas are used. RS-12 has been operational in Mode-K for a number of years, that is, 15 Meters up and 10 Meters down. Unfortunately the 15 Meter segment is 21.210 to 21.250 MHz, falling in the Advanced/Extra portion of the band. The Russian controllers have recently changed the mode of RS-12 to "A". I have seen no explanation for this, however, it opens this satellite to the Technician class license. I worked VE5SWL via RS-12 using Mode-A at 1906Z on September 29th using 30 Watts to a 5/8 wave whip and a 10 Meter vertical for receive. A J-Pole antenna is also a good choice for the 2M uplink. If you are interested in trying satellite operation without spending a fortune for directional antennas and controllers give RS-12 a try. The beacon is on 29.408 MHz. Uplink 145.910 - 145.950 MHz; downlink, 29.410 - 29.450 MHz. The transponder is non-inverting; therefore, an USB signal on 145.930 MHz will appear as USB on 29.430 MHz plus or minus doppler.

## Directions to the October Meeting at the Historical Electronics Museum

Coming from the Laurel area:

Take I-95 NORTH or MD-295 (Parkway) NORTH towards Baltimore

Take I-195 EAST towards BWI airport

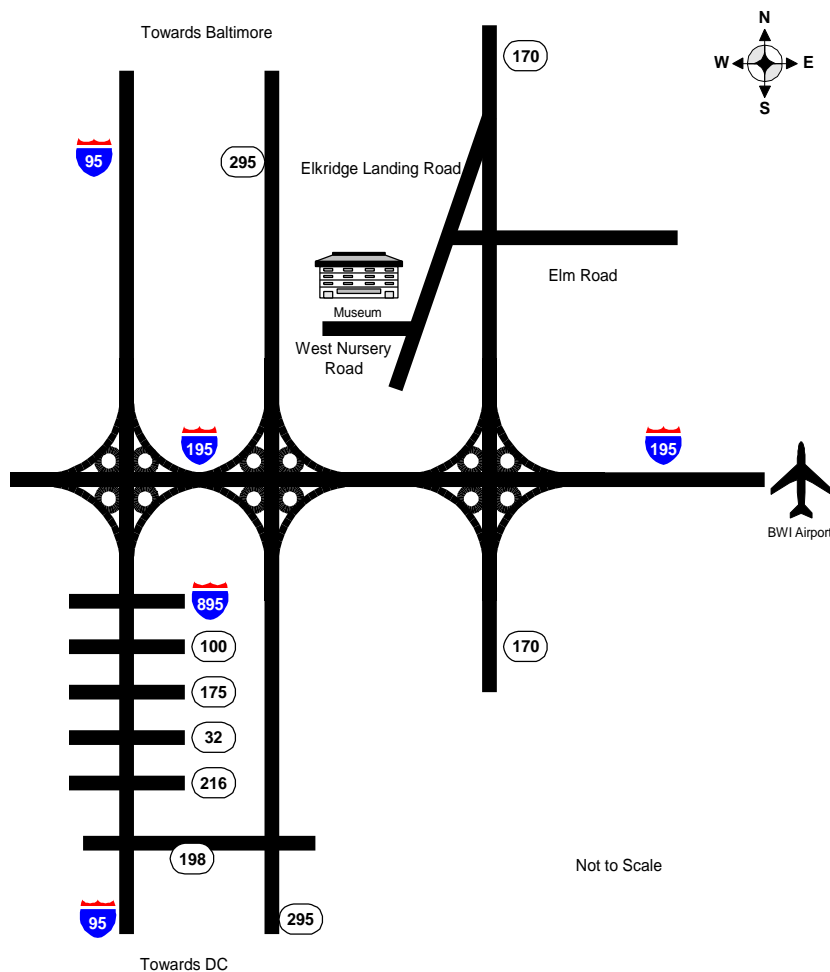
Take EXIT 1A (Rt. 170 North) – be careful of construction barriers, exit hard to see (20 MPH)  
(this exit is about 4 miles from I-95, but very close to 295/Parkway)

LEFT at 1<sup>st</sup> light, ELM Rd

LEFT at light, ELKRIDGE LANDING Rd

RIGHT at 1<sup>st</sup> light, WEST NURSERY Rd

Museum is on the right (across from Comfort Suites)



# ATTENTION!!!

**The October meeting  
(10/22)**

**will start at**

# 7:00PM

at the

**Historical Electronics  
Museum**

**(not the regular  
meeting place)**

## Officer Nominations and Elections

The nominating committee is submitting the following slate of candidates:

President	John Menard N3GXA
Vice President	Jerry Siegel N3WSG
Secretary	Mark Doore N3NTQ
Treasurer	Patty Menard N3OYN
Primary FAR Rep	Dan Blasberg KA8YPY

Nominations may also be made from the floor prior to the election at the October 22 meeting.

## **The FAR Report – September 10**

The meeting was called to order at 8:05pm by FAR President Chuck Sommer N4OSD, at the Lee Center in Alexandria, VA.

There were 18 trustees and one guest representing 22 clubs. The August minutes were approved as mailed. The treasurers report was given by Charles Johnson N3HFO and accepted.

The grand prize, an Alinco DX-70T, from FARfest was presented to the winner, Walt Parsons KT3EL.

Auto Call - Tony Young WA3YLO apologized for the names of those who purchased subscriptions in memory of Ethel Smith not being printed in the September Auto Call. The names will be published in the November issue. There were 55 subscriptions at FARfest, most for multiple years. There were 82 renewal notices mailed out.

Survivor's Assistance - Equipment available was displayed at FARfest. Approximately \$200 worth of equipment was sold.

Scholarship Committee - Hugh Turnbull W3ABC reported that the Board of the Northern California DX Foundation (NCDXF) has requested that the Foundation administer a \$1000 award on their behalf starting next year. The Scholarship Committee is working with them to develop a mutually agreeable criteria for the scholarship. The Maryland Mobileers have established a \$1000 scholarship for the Foundation to administer beginning in 1998. The Scholarship Committee is also working with them to develop the necessary criteria. Hugh W3ABC also announced that although we rarely have representation from the Columbia Amateur Radio Association (CARA) and the Baltimore Radio Amateur Television Society (BRATS), they help support the Foundation by sponsoring scholarships as well.

ARRL Report - Hugh Turnbull W3ABC, ARRL Vice-President reported that various League officials are visiting China. Hugh also reported that the US Congress is back in session and everyone is waiting on them on various measures.

FARfest - The FARfest review meeting is scheduled for September 17 at 7:00pm at the home of Tony Young WA3YLO in Bowie, MD. Talk-in will be on 147.105+.

The Shenandoah Valley Amateur Radio Club modified its FAR trustee listing. The trustees present approved Wayne Koehler KE4PMS as the new trustee from the club.

Offers were made to change the location of the Maryland meeting site. Those under consideration are: the Historical Electronics Museum near BWI airport, the West Laurel Recreation Center, and a conference room at the National Institutes of Health in Bethesda, MD.

### **\*Announcements\***

Chip Weems W4PBG announced the HEMARC Hands-on Upgrade Class starting September 24 for 13 weeks. For more information, contact: Ray Robley KD3KK at (410)-859-0789 or Heru Wamsley W3WVV at (410)-766-3545.

Lenny Schrachter N3RPQ requested help for the Marine Corps Marathon on October 26. See page 17 in the September issue of Auto-Call for details.

Hugh Katz KB3TB suggested hams in the Hyattsville area consider joining and/or supporting the Prince Georges' Wireless Association. PGWA has a station available for use and is looking for new membership.

Mary Morris N4TCI extended her appreciation to all those who helped make FARfest 97 the success it was.

A motion to adjourn was entertained at 8:58pm.

The next meeting of the Foundation will be October 8 at 8:00pm. It will be held at Columbia Union College in Takoma Park, MD. See Auto-Call magazine for directions. All guest are welcomed and encouraged.

**Respectfully submitted.**

**Dan Blasberg KA8YPY      Alternate FAR Representative**

## **The FAR Report – October 8**

- \* FAR President, Chuck Sommer (N4OSD), called the meeting to order at 8:00 p.m. at Columbia Union College in Takoma Park, MD.
- \* The attendees introduced themselves. There were 23 trustees in representing 24 clubs.
- \* Secretary's Report - The September minutes were approved as mailed.
- \* The Treasurer's Report was given by Charles Johnson (N3HFO) and accepted.
- \* Auto-Call - Tony Young (WA3YLO) reported success at the CARA Hamfest, which was held on October 5. Millie and Ed Mumford (N3KGG and N3IRO, respectively) reported 17 new subscriptions or renewals. They also sold eight copies of Auto-Call.
- \* Survivor's Assistance - Tony Young (WA3YLO) reported that he has sold most of Ethel's gear. He also has a 40-foot tilt-over tower, rotator, antennas and control box for \$300. It is located in "greater Bowie, MD." For more information, contact Tony at 301-262-1917.
- \* Scholarship Committee - Hugh Turnbull (W3ABC) reported that he has received \$1,000 from the Ole Virginia Hams ARC to be added to the Silent Key Memorial fund. Hugh attended the Virginia Beach, VA Hamfest and he met with some of the scholarship recipients and their parents. Hugh also reported that the scholarship write up has been submitted to John Queen for inclusion in Auto-Call and publicly thanked Mary Morris (N4TCI) for her assistance. Next year, there will be 64 scholarship awards.
- \* ARRL Report -- Hugh Turnbull (W3ABC), ARRL Vice-President, reported that the ARRL has published its latest DXCC Countries List. It is available from the ARRL for \$2.00, postpaid. The Gettysburg FCC office is now accepting electronic filing for license renewals. The US State Department has decided to become involved in reciprocal/universal amateur radio licensing. Finally, Hugh received 12 new ARRL memberships at the CARA Hamfest.
- \* FARFest -- Chuck Sommer (N4OSD) reported that the date of September 13, 1998 has been secured with the Montgomery County Fairgrounds in Gaithersburg for FARFest 98.
- \* An application to join FAR was submitted by the Calvert Amateur Radio Association. Receipt of their check for \$25.00 was noted. They proposed trustees Donald Kirby (KR3A) and Steven Urquiza (N3IDX). After a brief discussion with both Donald and Steve and a supporting statement by Tony Young (WA3YLO), the trustees unanimously accepted their application. Congratulations to the Calvert Amateur Radio Association and thank you for supporting the Foundation. A modification was received from the Mt Vernon ARC to add Jeanne Rexroad (N4GZI) as their second trustee. The modification was approved.
- \* The FAR Board will hold a meeting on Thursday, October 23 with the exact time and place to be announced. The major issue up for discussion is the National Capital ARES Council's (NCAC) proposal for FAR support. For more information, contact Chuck Sommer (N4OSD) on 301-286-6790.
- \* There was a discussion about changing the Maryland meeting site. The trustees decided to continue holding meetings at Columbia Union College and try to secure a meeting room on the ground level of the HMS Richards Building instead of the usual third floor meeting room.
- \* Chuck Sommer (N4OSD) proposed chartering a flight for a one day trip to the Dayton Hamfest. Please refer to article submitted to this newsletter.
- \* Hugh Turnbull (W3ABC) showed the attractive certificate that was sent out to winners in the Maryland-DC QSO Party which was sponsored by the Antietam Radio Association. Page Pyne (WA3EOP) and Al Brown (KZ3AB) also displayed a plaque that will be presented to the club category winner, the Laurel Amateur Radio Club. Tony Young (WA3YLO) made the motion for FAR to support next year's Maryland-DC QSO Party by offering to pay for four of the plaques, not to exceed \$150. The motion was approved. A similar offer will be made to the Sterling Park ARC if they are sponsoring next year's Virginia QSO Party.

\* Lenny Schachter (N3RPQ) announced the Marine Corps Marathon and the need for support on Sunday, October 26. For more information, call 703-359-3414.

\* A motion to adjourn was entertained at 8:40 p.m.

\* The next meeting will be held at Lee Center in Alexandria, VA at 8:00 p.m. on Wednesday, November 12. See Auto-Call magazine for directions.

**Respectfully submitted,  
Dan Blasberg, KA8YPY  
Alternate FAR Representative**

**DAYTON --- DAYTON --- DAYTON --- DAYTON --- DAYTON**

The Foundation for Amateur Radio is soliciting interest in a charter flight to the Dayton Hamvention on Saturday, May 16, 1998.

The 1-1/2 hour flight will leave Baltimore (BWI) at 5:00 am and fly directly to Dayton on a Boeing 737. Buses will provide transportation both ways between the Dayton airport and the Hamvention site. This will allow you to take in a full day at the Hamvention. The return flight will be at 7:00 pm that same evening. Yes, a full day at the Dayton Hamvention and home by evening.

OK, What's the cost you ask? If, and only if, we fill the plane, that's 150 people, the cost per person is approximately \$210.00 plus your Hamvention ticket (\$15, I think).

Checked luggage will be limited to 20 kilograms, 44 pounds per person. But UPS, FedEx, etc. will be on-site to ship anything back home, at a nominal additional cost.

The airlines tell me that the earlier we can commit, the firmer the price gets. So, what I propose is, if you're interested let me know ASAP. Phone or e-mail is the best way to contact me, Chuck Sommer. My phone number is 301-286-6790 and my e-mail addresses are: CSommer@pop500.gsfc.nasa.gov or CSommer@juno.com.

I'll keep a list of interested people. If there are enough people who want to go this way, then we'll proceed. If not, the idea will be dropped.

I'd really like to have responses back to me by November 15, 1997. If there is enough interest, \$112 of the fare will be due by December 10, 1997. The balance will be due by February 10, 1998.

Please note: Once committed, there will be \*no\* refunds. However, if you can find a substitute to take your place, that's fine.

OK, if you're ready to go, contact Chuck Sommer 301-286-6790 days or e-mail CSommer@pop500.gsfc.nasa.gov or CSommer@juno.com or mail to Chuck Sommer, 16106 Atlantis Drive, Bowie, MD 20716

**Amateur Radio Newsline**

**is broadcast locally by John/WB3GXW as time allows:**

**Saturday @ 8:00pm on 147.225+ PL156.7**

**Sunday @ 8:30pm on 147.225+ PL156.7**

**Tuesday @ 7:15pm on 147.180+ PL156.7**

# TIMBUKTU Rides Again!

This will be the third consecutive year that we visit Timbuktu for our annual Christmas/Installation Banquet. And this will be the third consecutive year that we probably run them out of doggie bags!

**PARTICULARS:**

- Sunday, December 7, 4-9 PM
- 4-5...Happy Hour
- 5-7...Dinner
- 7-9...Installation and Entertainment

(4PM is actual....other times approximate, as usual!)

Price, as usual, is \$25.00, and you have several entree's to choose from:

**APPETIZER** (Pick one)

- Chilled Tomato Juice \_\_\_\_\_
- Chilled Grapefruit Juice \_\_\_\_\_
- Chilled Orange Juice \_\_\_\_\_
- Soup du Jour \_\_\_\_\_
- Fruit Cup \_\_\_\_\_

**ENTREE** (Pick one)

- Roast Prime Rib of Beef....how cooked? \_\_\_\_\_ [no choice = medium]
- Stuffed Flounder \_\_\_\_\_
- Broiled Maryland Crabcakes \_\_\_\_\_
- Milk Fed Veal Parmigiana \_\_\_\_\_

For the super-hungry....we can offer SURF & TURF....\$37.00  
(cold water lobster and NY strip) (how cooked?\_\_\_\_\_)

All entrees include tossed salad, two vegetables, bread, butter, coffee (or sanka or tea), and dessert.

**The price includes tax and gratuity.**

Cut-off date for the TIMBUKTU is around Thanksgiving....so please let me know your pleasure.

Send your checks and choices to me..... PUD REAVER, W3YD  
6516 BROOKLYN BRIDGE ROAD  
LAUREL, MD 20707

Please put your name (and call sign) on your response, and other names, if responding with more than one reservation.

## **1998 Dues**

Consider sending in your 1998 LARC Dues with your banquet reservation:

- Regular Member \$ 15.00
- Each Additional Family Member \$ 7.50
- Blind \$ 10.00
- Under 21 (oldest ham in house) \$ 10.00

If you are not going to the banquet then you may send your dues to:

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

## **Excerpts from *The ARRL Letter***

**Volume 16, Number 38 (September 26, 1997)**

### **NEW USES FOR THE OLD CODE: MORSE 2000 WORLD CONFERENCE SET**

Morse 2000 Worldwide Outreach is giving Morse code a new lease on life to help rehabilitate and educate people with special needs and disabilities. The first Morse 2000 World Conference is now set for late October in Minnesota.

Because it can be sent using a binary-opposition movement pattern, Morse code can be generated with left-right, push-pull and puff-sip control. The code--used in communication for the past 150 years and being phased out in many spheres--has proven to be among the best of several adaptive computer-access methods and augmentative or alternative communication techniques for many people with special needs. The ARRL Foundation has supported the program through grants.

"We now have over 2,000 participants in 27 countries!" exclaims Debra R. King, N9GLG, the director of Morse 2000 Worldwide Outreach. King manages the Office of Continuing Education in Human Sciences and Services at the University of Wisconsin--Eau Claire, and enthusiastically promotes the use of Morse code in rehabilitation and education.

Through her encouragement, various Morse code programs are being used or tested to allow people such as those with spinal cord injuries to converse. She provides information for occupational therapists or speech pathologists and promotes the advantages of using Morse code to help their patients. Occasionally, though, it works the other way around: sometimes patients hear about Morse 2000 and put their therapists in touch with King! The bottom line, however, is that the information she provides can save the therapist-patient team years of research attempting to find the best methods and selecting reliable equipment.

Results have generated heart-warming success stories, especially at learning centers and children's hospitals around the world, as reported in MORSEIs, the Morse 2000 newsletter. One researcher told of the case of a woman with ALS (commonly called Lou Gehrig's Disease) who had lost her ability to speak but was able to communicate using Morse code--at first by blinking her eyes and later by using an optical switch activated by jaw movement that was wired to a PC. The same researcher told of a stroke patient who employed his very limited movement to send Morse code messages to his wife. Another report tells of a stroke victim who is able to talk in Morse code by activating a chin switch.

Speech pathologist Thomas King, WF9I--Debra King's husband and the editor of MORSEIs--called Morse code "one tool of many" in providing "adaptive access" for those unable to communicate through conventional means. He told of a young man he called Barry who had been severely injured and rendered a quadriplegic after being hit by a car as a youngster. He retained facial movement and can speak (although he's on a ventilator), but he can use Morse via a puff-and-sip switch to write 20 WPM or so. Now in the high school, Barry hopes to eventually attend college. "The use of Morse for taking notes without calling a lot of attention to yourself has worked out very well," Thomas King said.

The first Morse 2000 World Conference will be held October 25-26, 1997, in Bloomington, Minnesota. Featured speaker is rehabilitation engineer Kevin Caves of the Rancho Rehabilitation Engineering Program in California. Although the conference is aimed at clinicians, teachers, therapists, assistive technology users, researchers and product developers, Amateur Radio operators also are encouraged to attend and share their technical knowledge, and to help develop equipment and code skills to train others. Registration prior to October 1 is \$98.

For more information on the conference or on Morse 2000, contact Debra King, Morse 2000 Worldwide Outreach, Human Sciences & Services Outreach Office, University of Wisconsin-Eau Claire, Eau Claire, WI 54702-4004; tel 715-836-3990; e-mail kingdr@uwec.edu. Morse 2000 can also be found on the World Wide Web at <http://www.uwec.edu/Academic/Outreach/Morse2000/morse2000.html>. --thanks to Richard Regent, K9GDF

**HAM RADIO NOW AN "OFFICIAL" ISS PAYLOAD**

Amateur Radio is now considered to be an official payload on the International Space Station (ISS). In fact, reports Matt Bordelon, KC5BTL, at Johnson Space Center, ham radio was the first payload to become official. Bordelon already has started the training program for the first crew who will be putting together the ISS starting in January 1999.

Based on our initial request to be manifested onboard, the ISS Payloads Office is listing Amateur Radio as being onboard with (1) a transportable station (H-Ts), (2) a site on the EXPRESS pallet, and (3) a permanent station on the Habitation Module. Amateur Radio soon will be assigned a Payload Integration Manager (PIM) for each of these.

## **Volume 16, Number 39 (October 3, 1997)**

### **WALL STREET JOURNAL ARTICLE FEATURES MORSE CODE**

Without looking at the "translations," most hams would have a hard time deciphering the Morse code represented in an article that appeared in the October 1 edition of prestigious Wall Street Journal. That's because most of the code shown is American Morse, not the International code hams use. The report, "The Internet Generation Taps into Morse Code," by Anna Wilde Mathews, focuses on a resurgence of interest in American Morse Code--the version Samuel F. B. Morse invented in the 19th century and used for many years by railroad and Western Union telegraphers.

The ARRL and ham radio also are mentioned, but Mathews' otherwise interesting article fails to distinguish between American Morse, the telegrapher's code, and International Morse, the radioman's code.

### **JOTA to mark 40 years:**

JOTA 1997 will mark the 40th Jamboree On The Air. This year, JOTA will take place on the weekend of October 17, 18 and 19. The ARRL Scout Handbook has lots of details on JOTA, and on the Radio merit badge. It's available at <http://www.arrl.org/ead/#scout>. Some DX stations already have indicated they'll be active in this year's JOTA event. Look for HB9JAM, the official call sign of the Swiss Scout Federation, Bern, Switzerland on HF, as well as HB4FF and HL9BSA (dependent children of US military and civilian personnel stationed in Korea). -- thanks to Glenn Swanson, KB1GW; Ulrich Fierz, HB9AIK; and Vernon Eubanks, HL9VE/KOLVS

### **AMSAT board election results:**

The results are in for the annual AMSAT Board of Directors balloting. A total of 1386 members voted in this year's election. Elected to two-year terms were Bill Tynan, W3XO (1234 votes); Stan Wood, WA4NFY (1161 votes); Dick Daniels, W4PUJ (1114 votes); and Joe Holman, AD7D (933 votes). Barry Baines, WD4ASW (842 votes), will serve as the alternate until the next AMSAT Board election. The newly elected board will gather during the AMSAT-NA annual meeting later this month to elect officers.--AMSAT News Service

## **Volume 16, Number 40 (October 10, 1997)**

### **ARRL AUDIO NEWS DEBUTS OCTOBER 17**

The League will inaugurate ARRL Audio News, a weekly, Web-based audio news service, on October 17. Compiled from The ARRL Letter, ARRL Audio News will include the week's top news from the world of Amateur Radio and the League. ARRL Audio News will be available in RealAudio format via the ARRLWeb, <http://www.arrl.org/>. Tucson Amateur Packet Radio -- TAPR -- has generously agreed to provide space on its Web server to permit the League to offer this service.

Senior Assistant Technical Editor Rick Lindquist, N1RL, who compiles and edits The ARRL Letter will be the regular on-air voice for ARRL Audio News. The service will be available free to anyone and may be retransmitted in whole or in part for bulletin purposes provided ARRL Audio News is credited as the source.

Each edition of ARRL Audio News will contain up to 10 minutes of timely Amateur Radio news. It will be available via the ARRLWeb every Friday by 9 PM Eastern Time. Dial-up telephone access to ARRL Audio News will be announced later.

For more information, contact Rick Lindquist, N1RL, e-mail n1rl@arrl.org; tel 860-594-0222.

### **MAYORS ON BOTH COASTS LAUD HAM RADIO**

For the second time in his administration, New York City Mayor Rudolph Giuliani recognized Amateur Radio by issuing a proclamation declaring Amateur Radio Awareness Day in the Big Apple. The September 19 ceremony was attended by Howard Price, KA2QPJ, NYC ARES EC for media and public relations/NYC RACES deputy radio officer; Charles Hargrove, N2NOV, Staten Island EC/radio officer; Matt Evans, WA2UKM, Brooklyn AEC; Scott Swanson, N9SAT; John Kiernan, KE2UN; and Jerry Cudmore, K2JRC.

On the West Coast earlier this year, San Francisco Mayor Willie Brown praised a local ham radio emergency organization during a meeting of the City and County of San Francisco Disaster Council in late April.

"I must also tell you that I have been frankly fascinated with that unpaid group of people with those ham radios, the Auxiliary Communications Service," the mayor said. Brown said that the ACS makes available "a wireless system that seldom if ever can be totally disrupted by a disaster" and that "ham radio operators are the heart and the soul and the life blood of that system." --thanks to Barry A Schwartz, N2SHP, The Hudson Loop, and Dave Larton, N6JQJ

### **SOLAR UPDATE**

Solar soothsayer Tad Cook, K7VVV, Seattle, Washington, reports: Solar flux was down this week, an average of four points below the previous week. Sunspot numbers were also down, an average of almost 8 points. Average solar flux for the previous 90 days rose another point on Monday to 84, on the same day the solar flux finally dipped below the 90-day average when it hit 83.7. The solar flux was above the average for the previous 90 days for 62 consecutive days, which is a good trend. Cycle 23 is definitely on the rise.

Solar flux is expected to rise again immediately, above 85 by October 12, above 90 a week later, and up around the low to mid-90s around October 23. It may be back to the mid-80s around the end of the month. Look for disturbed geomagnetic conditions with possible high absorption of high latitude signals around October 12, 18, 25, and 28.

When the solar flux is high and A and K indices are low, look for good 10, 12, 15 and 17 meter conditions, especially on north-south paths. Twenty meters is still the best band during daylight and early evening hours. The 30, 40 and 80-meter bands will get better as we move toward winter and nighttime static levels subside.

Sunspot numbers for October 2 through 8 were 26, 27, 26, 26, 24, 35 and 17 with a mean of 25.9. The 10.7-cm flux was 85.9, 85.7, 83.4, 84.4, 83.7, 83.5 and 82.9, with a mean of 84.2, and estimated planetary A indices were 4, 7, 4, 2, 3, 7, and 14, with a mean of 5.9.

### **Pre-teen ham among volunteers during flooding:**

Jevon Gegg-Mitchell, KE6YLH, of Chico, California was the youngest person to answer a call for Red Cross volunteers to help with flood relief efforts in California early this year. Jevon, who was 12 at the time, spent 38 hours on the air helping to deliver information between the Red Cross in Chico and emergency shelters in Butte County. His efforts earned him a mention in the Bay Area Red Cross newsletter.--thanks to W. David Shultz, KA6JHS

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.

## Excerpts from *Ham Radio Online*

### Digital Packet Radio for Communication when Traveling

by Nedra Ewart, KK5PN, Nedra@worldnet.att.net

**WHY SHOULD I BOTHER TO GET MY AMATEUR RADIO LICENSE? AND WHAT GOOD IS THIS 'AMTOR' or 'PACTOR' THING?**

#### **THE FIRST QUESTION "WHY BOTHER?"**

Many of us (cruisers) think, "I have a well equipped boat, with marine radios, radar, and GPS (or Loran). Why should I bother to get a 'Ham Ticket'?"

When you are in a mobile lifestyle, whether driving a truck, traveling the U.S.A. in a camper, or cruising the ocean, one challenge you face is how to keep in touch with family and friends back home. Family members worry about how to reach you in case of an emergency. This is even more vital for cruisers. Out on the ocean, you are subject to the vagaries of nature, and family and friends worry even more about how you are and where you are.

Amateur Radio offers a link that is vital to your safety on the ocean as well as a link to assure those left behind that you are safe and sound. There are numerous Maritime Nets on SSB (voice), which track cruising amateurs. They provide a safety net in an emergency. The Nets require daily check-in with latitude/longitude/course/speed/wind/seas/cloud cover/barometer reading. The Pacific Maritime Net on 14.313 has a 'Radio Float Plan' provided to me by Fred (KH6UY), one of the Net Controllers in Hawaii. In an emergency, they are a link that could save your life.

On the social side, the Maritime Nets provide telephone links, and some message relay to those back home. It saves you the costly links by commercial radiotelephone services, which many cruisers cannot afford. It gives you a meeting ground with other cruisers.

Amateur Radio works best for a cruiser if you take time to get a General or Advanced Class license. That means you don't have to wait till you get your Mexican other reciprocal license to be able to use the HF bands that work best for cruising vessels (20m, 30m and 40m)

#### **"I HAVE MY HAM TICKET; WHY SHOULD I USE PACTOR or AMTOR?"**

When I first met my husband, he was a truck driver, transporting 5th wheel campers all over the U.S.A. He knew I loved calling computer BBS's by phone, so he showed me a ham radio mode called "Packet". It's another form of electronic mail. You write messages on your computer and send them to another computer for friends to read. It's a wonderfully rapid way to send personal messages.

When Allan (KC5LT) went to work, driving from Southern California to states all over the U.S.A., I would have no way to keep in touch with him. A professional driver can't stop to call and chit-chat with his loved ones. Long distance phone charges fast become prohibitive. So, I got my amateur radio license, to keep in touch by voice and Packet.

Then I started driving with him, and found it was lots of fun to use Packet to send mail to all our friends back home. We entertained them with our adventures over the road. I could send an NTS message to my folks from time to time, telling them we were fine, and where we were.

We found that Packet didn't work well on the HF frequencies, so we started working Amtor and later changed to Pactor. It was amazing to get mail to California within 2-3 hours from Florida, instead of the 2-3 days Packet took. Unlike Packet, which allows multiple connects, Pactor connects are one-on-one. If someone is 'on frequency' you either wait, or move to another frequency. The MBO's (Mailboxes) are friendly and easy to use. They have help files, and bulletins giving you the "Digital Mail Box Lists" all over the world. Some Mailboxes specialize in NTS (National Traffic Service) messages; some specialize in sending personal messages.

One thing all digital modes have in common is the fact that, in poor band conditions, or mobile links, you can hold a digital radio link longer and easier at greater distances than you can retain a voice link. When the human ear can no longer hear the spoken word, the TNC (modem for the radio) continues to hear and decode the typed word accurately.

When we bought our boat, we found that cruisers who tried to work Packet lost touch when they got out of reach of the coastal VHF stations. The HF Packet BBS's would not allow 'users' to call and leave messages, but the Amtor MBO's (Aplink/Winlink) are very 'user friendly'. We realized Pactor offered the digital link for cruisers that HF Packet did not provide, so we worked at spreading our knowledge of Pactor to others in the cruising community as well as to the land-bound.

A friend introduced us to Bert (N6ID) and Wilda (KA6IVB). Two weeks before they left San Diego on their trek down the Mexican coast, and subsequently across to French Polynesia and New Zealand, we met Bert aboard our boat and gave him his first and only 15 minute lesson on how to work Pactor, Amtor and the MBO's. He tried VHF Packet in Mexico. His messages rarely arrived in the U.S. One night we linked on Amtor and arranged for him to send his mail to us at our Aplink MBO. The rest of Bert's learning curve came from the usual 'trial and error'. From that moment on, his mail has never gotten lost, and he continues to send regularly what we lovingly call 'epistles of Bert' to family.

When we receive Bert's messages, we save them to a computer file. We call Bert's sister in San Diego and read it to her. We send copies to other hams who have agreed to get them to other family and friends. Wilda's sister in Denver is called by either Sterling (KB0JBT) or Carl (WH6ANH). The most popular files on W6TJ BBS in Riverside where Bert and Wilda used to live, are Bert's messages uploaded by Carl (KC7XM). A 'would-be cruiser' gets his from Bud (N0IA) in Las Vegas. Bert's brother Walt is called by Earl (WX4J) in Florida. When we cruise to join Bert, Carl (KC7XM) will probably do the relaying I now do. Dozens of family and friends enjoy the excitement and trials of Bert and Wilda as they cruise with their children, Olin, the renowned fisherman, and Elaine, the horsewoman, now sailor.

This fun side includes my sending Wilda a group of basic recipes when she needed to make bisquick and sour cream, or the 'birthday card' I created at grandma's request for Elaine's recent birthday (which got to her ON TIME!) Then there was the time Bert put mail in our computer direct as we sailed to Catalina. I was at the helm and Allan slept through it. Only the radio and TNC were on. My cue to the link was when the autopilot started sailing in circles, till I turned it off. Other times, we've had live Chats ( QSO's) from our mobile truck station to him as he cruised to French Polynesia. Live QSO's at long distance are very exciting.

Then there's the serious side. When Bert found a bolt floating in the bilge, he sent us an urgent detailed description of it. We talked to someone who knew engines, and sent the reply, 'look at the shaft coupling'. Another time his water-maker didn't seem to work. We found a friend with the solution and linked with Bert to send it, plus a diagram of how to set the switches on it.

Bert has sent us messages from other hams who do not have the digital capability, as well as non-hams. These we relayed to families who rarely hear from their cruisers.

When band conditions got worse, we didn't lose the link. Live chats, typing from our keyboard to his don't work right now, but the mail still comes regularly through the ever friendly MBO's. He sends his mail at VK2AGE.NSW.AUS.OC, and we usually read it within 2-3 days at W7DCR.OR.USA.NA. No post office in the world can get his mail back home faster. He still uses the Post Office. Periodically he tells us the next 'mail drop' for the Yacht Guinevere in Transit, and we tell family and friends, so they can forward his mail and packages, early enough to reach these destinations before or soon after his arrival.

We find there are radio operators on commercial vessels who run Winlink MBO's, and relay messages as well as making available bulletins on weather reports they receive. Links to commercial ships can be an added safeguard as well as fun.

The cruising hams who have tried Pactor are excited and enthusiastic about this efficient mode of message transfer. Chip (KA1EXF) and Les (N7YYM) on Tamarack track the Vessel they buddy-boated from Oregon to Northern California with, and sent them updated port entry data when they found it to ease their friends' initial

entry to Hilo, Hawaii. Bert is sending us information on reef locations, and other vital data on the South Pacific areas they have traveled. I arranged for another cruiser already berthed in New Zealand to keep a look-out for

Bert and Wilda, and help them with anything they might need to know for easier entry to New Zealand. We have a new friend in Western Australia whom we will visit when we cruise.

### **BEYOND AMTOR, WHAT'S NEXT?**

The newest digital modes include Pactor 1 & 2 and Clover. Clover is used by the MBO's for mail transfer. Winlink is an Amlink BBS that works under Windows and can answer calls in Amtor, Pactor 1 & 2 and Clover modes. Pactor is a cross between Packet and Amtor. It holds weak links almost as well as Amtor in poor band conditions, and adds the capability of sending graphics and uploading computer files. It is faster than Amtor. In 1997, the newest mode, Pactor 2 is well established on many Winlink MBO's.

Many hams excitedly work Pactor for keyboard to keyboard chats. There are lots of people to talk to and to exchange mail with.

We have learned now how to send messages from Pactor to other mail services. We have received mail from hams only on Internet, CompuServe, AOL, Juno, etc. Through a gateway, we can send mail to family and friends who are using other services. I've even sent messages to my son on Fido-Net. The possibilities are endless.

### **WE'RE INTERESTED; NOW WHAT DO WE NEED TO HAVE AND DO?**

To work Amtor you need the following:

- a ham radio license, general class or higher
- a computer with a radio communications program
- a TNC (like the modem you use on telephone BBS's)
- an HF radio, with its antenna

Take time to learn how to connect all your equipment and how to install your communications program and work Amtor before you start to cruise. A month or two is better than waiting till the last days before you leave. A year is even better. I have worked Packet over two years, and Amtor over a year. Much of what we need to know for cruising to the South Pacific, we learned from relaying messages for Bert and Wilda.

Look for an article written by Bert which gives different information you'll find very helpful. Ask yourself some questions:

- Do I want added safeguards as I cruise?
- Are there family / friends who want to keep in touch with me?
- Who do I know who's a ham? a CompuServe user? on Internet? or on other e-mail service?
- Do I like to share the excitement of my travels with others?
- Do I want another way to ask for help when I can't get through on the marine radio channels?
- Do I want low-cost, fast message relay to loved ones?

The answer to all these questions is: Use Amtor/Amlink -or- Pactor/Winlink. Join the growing family of those using digital communications via radio.

If you want help, sent mail to KK5PN @ KC5LT .#SOCA.CA.USA.NA or Nedra@Worldnet.att.net or find a local ham who knows Pactor. You'll find it a life-saver and joy as have Nedra and Allan aboard S/V Blythe Spirit, Bert and Wilda on S/V Guinevere, and Chip and Les aboard S/V Tamarack.

### **Addendum**

When Bert's mom in Bishop, CA never got any of the short NTS mail I sent her. Her busy children forgot to call and tell her Bert's news. I sent a request to a personal ham friend in Fresno requesting help in finding a ham in Bishop. Phil, N6QCA, in Bakersfield sent me an offer to help, and now he sends Bert's mom all his mail, plus my mail, since I have phoned her Bert's messages and she's 'adopted' me.

Also, another ham, Bob, N4CTC, in Denver saw some of my mail to friends there and offered to personally relay my mail to my cousin in his city. He's an ex-cruiser who lives on land now .. the best kind of person to have relay mail for a cruiser. He's -=dedicated=- to helping cruisers. He's been there - done that - and knows the need.

Now I have created my own mail relay network, in addition to Bert's , which I continue to maintain as I cruise Mexico in 1994. My mail relay includes sending my children mail via Internet Gateways. The only problem, however, is most gateways -="refuse"- to relay mail from my non-ham children via internet - =back to me=- .. a breakdown I have finally overcome. Maybe they will get their no-code licenses so they can keep in touch more easily.

Meanwhile, the bottom line is: Work Pactor !!! And learn it months before you cruise.

Go to Blythe Spirit Home Page

Packet/Pactor mail: KK5PN@KC5LT.#SOCA.CA.USA.NOAM

<http://www.geocities.com/TheTropics/Shores/2552/index.html>

<http://www.geocities.com/MotorCity/Downs/8551/index.html>

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**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.

**1997 Mason-Dixon Computer & Hamfest**

The CCARC in conjunction with the Penn-Mar ARC has sponsored the Mason-Dixon Computer & Hamfest for the past seven years. The hamfest features electronic gear of all types and vast amounts of computer related products. Tables are available indoors with plenty of outside tailgating spaces available. Amateur Radio license examinations will be given the day of the hamfest, but requires pre-registration. Again this year we will offer FREE radio checks by commercial technicians. Great affordable food will again be served by the MIDWAY FIRE CO. Talk-in will be on the CCARC repeater (145.410 Mhz.).

**The hamfest will be held on October 26, 1997 at the Carroll County Agricultural Center in Westminster, Maryland.**

**6:00am – Vendor and Tailgate Setup  
8:00am – General Admission**



**November Birthdays**

- |    |        |                 |
|----|--------|-----------------|
| 1  | W3ABC  | Hugh Turnbull   |
| 2  | KA8YPY | Dan Blasberg    |
| 3  | WI3N   | Jim Cross       |
| 4  | KI7AO  | Bill Bowden     |
| 6  | N3TQE  | Sandy McWherter |
| 12 | WB3IGX | Pat Reaver      |
| 13 | WB4ARC | Dan Clark       |
| 17 | N3TZH  | Tim McShane     |
| 27 | KB8YPG | Tim Sloan       |

first year: 1916, last year: 1968

**Did we miss anyone?**

October 1997						
Su	Mo	Tu	We	Th	Fr	Sa
			<u>1</u>	2	3	<u>4</u>
<u>5</u>	<u>6</u>	7	<u>8</u>	9	10	<u>11</u>
<u>12</u>	<u>13</u>	14	<u>15</u>	<u>16</u>	17	<u>18</u>
<u>19</u>	<u>20</u>	21	<u>22</u>	<u>23</u>	24	<u>25</u>
26	<u>27</u>	28	<u>29</u>	<u>30</u>	31	

November 1997						
Su	Mo	Tu	We	Th	Fr	Sa
						1
2	<u>3</u>	4	<u>5</u>	<u>6</u>	7	8
9	<u>10</u>	11	<u>12</u>	<u>13</u>	14	<u>15</u>
<u>16</u>	<u>17</u>	18	19	<u>20</u>	21	<u>22</u>
<u>23</u>	<u>24</u>	25	<u>26</u>	27	28	29
30						

December 1997						
Su	Mo	Tu	We	Th	Fr	Sa
	1	2	<u>3</u>	4	5	<u>6</u>
<u>7</u>	8	9	<u>10</u>	11	12	<u>13</u>
14	15	16	<u>17</u>	18	19	20
21	22	23	<u>24</u>	25	26	<u>27</u>
28	29	30	<u>31</u>			

## Upcoming Activities and Events

### October

16	Thu	6:30-8pm	OASIS Program Starts (6 weeks)	Eisenhower MS
18	Sat	9:00am	Laurel VE Test Session	384 Main Street
18	Sat	Noon-4	Club Shack Open House & JOTA	WB3HUP/ATR
22	Wed	7:30pm	LARC Monthly Meeting @ Historic Electronics Museum	NEAR BWI
25	Sat	9-12	Copper J-Pole Build Project	WB3HUP/ATR
25	Sat	around 1	Antenna Party for John Riehl (NV3C)	8277 Londonderry Ct
29	Wed	8:30pm	LARC Net	147.225+

### November

5	Wed	8:30pm	LARC Net	147.225+
12	Wed	7:00pm	LARC Social Meeting	Tubby's Restaurant
12	Wed	8:00pm	FAR Meeting	Alexandria, VA
15	Sat	9:00am	Laurel VE Test Session	384 Main Street
15-16	Sat-Sun		November Sweepstakes	WB3HUP/ATR
19	Wed	8:30pm	LARC Net	147.225+
24	Mon	7:00pm	Laurel VE Test Session (last Nov/Tech class)	384 Main Street
26	Wed	8:30pm	LARC Net (NO MEETING THIS MONTH)	147.225+

### December

3	Wed	8:30pm	LARC Net	147.225+
6	Sat		Laurel XMAS Tree Lighting	
7	Sun	4:00pm	LARC Annual Banquet	Timbuktu
10	Wed	7:00pm	LARC Social Meeting	Tubby's Restaurant
10	Wed	8:00pm	FAR Meeting	Takoma Park, MD
17	Wed	8:30pm	LARC Net	147.225+
24	Wed	8:30pm	LARC Net - maybe (NO MEETING THIS MONTH)	147.225+
27	Sat		DCRRC 10/20 Mile Run	Beltsville/Greenbelt
31	Wed	8:30pm	LARC Net	147.225+

NO VE Test Session in December

## Some Upcoming Hamfests and Conferences

### October 26 - Mason-Dixon, Westminster, MD

Carroll County ARC and Penn-Mar RC, George Johns, N3JKY, PO Box 763, Hanover, PA 17331, 717-633-6641  
E-mail: [gjohns@sun-link.com](mailto:gjohns@sun-link.com), <http://www.qis.net/~k3pzn>

### January 25, 1998 - 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)

