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# TERAC NEWSLETTER

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Board Member	Chuck Barrows K7BVT <a href="mailto:barrows4967@msn.com">barrows4967@msn.com</a>	244-4967

**TERAC Christmas  
Dinner Sat.12-20-  
08** 6:00 pm start happy hour

Still time to get your reservations to Ken.  
Give him a call soon so we have the info  
to help plan the event

## FROM THE DESK OF THE PRESIDENT

### TERAC Dinner Meeting:

- **Time:** Dec 20th, 2008, 6:00PM  
7:00PM Dinner
- **Place:** Ernesto's Italian Restaurant  
8544 SW Apple Way  
Portland, OR
- **Talk-In:** 443.65 MHz Simplex

### Board Meeting:

These meetings are now almost always e-mail. Normally they commence on the listed date for the board meeting.

**We have a great Travelog  
about high seas  
cruising! See details  
elsewhere in this issue.**

No actual meeting this month

\* This just in...Roger has broken his ankle!  
(ed.)

Mr. Bass did a wonderful job of giving us an insight into the world of The Merchant Marines. Dick, thanks for the great presentation!

Time to renew your TERAC membership. Anyone signing up now would be a Member for 2009 as well. See next months newsletter for an updated "who's a member" list.

**Gene has some great programs being hatched.**

**W7ADV**

## **Upcoming Hamfairs and Events**

14 February 2009

### **Rickreall Hamfair**

Salem Repeater Association  
Polk County Fairgrounds  
Rickreall, Oregon  
Talk-In: 146.86(-) (PL 186.2)  
Don Bruschi, K7UN  
PO Box 5130  
Salem, OR 97304-0130  
Phone: 503-371-8070  
[k7un@arrl.net](mailto:k7un@arrl.net)  
<http://www.w7sra.com>

7 March 2009

### **Mike & Key Electronics Show**

Mike and Key ARC  
Western Washington Fairgrounds  
Pavilion Exhibition Hall  
Puyallup, Washington  
Michael Dinkelman N7WA  
22222 148th Avenue SE  
Kent, WA 98042  
253-631-3756  
[mwdink@eskimo.com](mailto:mwdink@eskimo.com)  
[www.mikeandkey.org/flea.htm](http://www.mikeandkey.org/flea.htm)

5 - 7 June 2009

### **SEA-PAC Hamfair**

NW DIV. ARRL CONVENTION  
Seaside Convention Center  
Seaside Oregon  
[www.seapac.org](http://www.seapac.org)

## **Future TERAC Programs**

We have programs for the January and February TERAC meetings. In January,

Mr. Dick Pugh of the Cascadia Meteorite Laboratory (associated with PSU) will give a talk on Meteorites: Rocks From Space. Dick has been involved with numerous astronomical, geological, and other scientific entities, mainly in the Pacific Northwest, but also with the Smithsonian, etc. Currently he is in on the PSU staff as the person who gives the lectures, and as he puts it, "I tell people that the rock they have isn't a meteorite." In addition to a 40 minute PowerPoint presentation there will be a Q & A time, and an exhibit of about \$15K worth of real meteorites for us to examine.

The Cascadia Meteorite Lab is a new organization and they are anxious to spread the word to as many people as possible, so invite your interested friends for a good turnout.

At the February 12 meeting we have scheduled Rick Campbell KK7B with a tentative topic of Analog Modulation Experiments. He has a working receiver and transmitter using a different mod/demod scheme, which I believe he will demonstrate. (I always thought analog was analog and that's that, but apparently not.) This should be interesting! As February approaches I expect to get more info to pass on.

Gene Single K7IUN

## **Let's Get on the Maker Bandwagon**

By Dan Romanchik, KB6NU

About a week ago, I got an e-mail from a ham down in Texas who had attended the Maker Faire ([makerfaire.com](http://makerfaire.com)).

"Makers" are people who love to tinker and make things. They even have their own magazine, Make ([www.makezine.com](http://www.makezine.com)).

He was amazed at the lack of any amateur radio content. He wrote, "The Maker Faire was unbelievable. Incredible stuff. Pedal powered carnival rides, robots, computer drive routers, kits. Outside of a table with a Vectronics kit, and a license manual, and a QRP book, the only radio stuff was from a pirate radio group."

I'm kind of amazed at this as well. It just goes to show how disconnected amateur radio is getting from the mainstream. These are exactly the kind of people we want to get interested in amateur radio, yet there was no one there representing us.

Ham radio needs to be at these events and get plugged into the "maker community." The Faire has not yet released attendance figures for this particular Faire, but more than 65,000 people attended the Faire held in May 2008. Dayton, with its attendance of about 20,000, looks anemic by comparison.

I blogged about this back in May (<http://kb6nu.com/why-cant-dayton-be-more-like-the-maker-faire/>). One of the things I suggested then is moving Dayton to some place like Austin.

Seriously, if you were a new, young ham, where would you rather go, Dayton, OH or Austin, TX? Let's be real here.

And can there be a worse place for an event than Hara Arena? The parking lot, where they hold the flea market looks like a mine field, and it usually rains, making the flea market a wet, unpleasant

experience. Is it any wonder that fewer and fewer vendors choose to haul stuff out there?

Some of us older hams might fondly reminisce about the bargain we found while traipsing around wearing a trash-bag poncho, but a story like that is not going to resonate with new hams.

Please don't get me wrong. I don't mean to badmouth the Dayton Amateur Radio Association or the Hamvention. I actually think that they do a great job, all things considered. I'm just pointing out that if ham radio wants to again be part of the mainstream, we have to get with the program.

Unfortunately, that program probably won't be at the Hara Arena.

Ham radio has got to figure out how to latch onto the Maker phenomenon. At the very least, the ARRL should have a booth at the next one, and in addition to all the books and t-shirts, they need to come up with some kind of demo or display to attract makers into ham radio. I don't know what exactly, but I'm willing to start talking about it.

This phenomenon might also be a boon for clubs who hold hamfests. Just as the computer craze turned ham swaps into ham and computer swaps in the 80s, perhaps ham clubs could turn their hamfests into a combination hamfest and Maker Faire in their communities.

As I said earlier, Makers are exactly the kind of people we want in ham radio. Let's go out and get them.

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When Dan's not pontificating about ham radio, you'll find him working CW on 40m, teaching ham classes, or running for the ARRL Board of Directors. Read more by going to

## Dana's life in Puerto Rico...

I continue to reside in a 2nd floor rental about 3 miles as the crow flies, 5 miles by road, from the observatory, and have few regrets. This is in Hatillo County, the "dairy capital of Puerto Rico", and my commute to work is largely through beautiful, hilly grazing land. Between home and work there are exactly zero stop signs or traffic signals; the trip takes a rather uniform 13.5 minutes each way, the rare exception being when I get delayed for a minute or two at a cattle crossing. The hilly terrain protects me from the worst of any hurricane winds that might pass by. I guess the worst aspect of living here is the unreliable utilities, principally water. There's no cable TV where I live, and ADSL is the only option for "high speed" internet. The service is reputed to be so unreliable that I've not even bothered- I do all my internet stuff from work.

But the climate pretty much makes it all up. Admittedly we've been having quite a cold snap for the last week or so- yesterday I measured a low temp of (gasp!) 61F at my house. But this is rather unusual even for this time of year. And by late morning I was enjoying myself swimming in the Atlantic Ocean, an activity which is comfortable all year 'round. The nearest beaches are about 30 minutes each way from home, and I usually combine beach trips with grocery shopping.

Gasoline prices peaked up at about \$1.02 per liter, but are now mostly down to about 40 cents per liter (Dec 7), and are apparently still decreasing a bit. There are 3.785 liters per gallon. Gas prices

here always end in '.7', by law, instead of the state-side's '.9'.

I can see just a bit of the observatory's platform from my bedroom window, and when the radar is running I can get strong signals that have been scattered out of the beam by the platform. I have sometimes entertained myself by analyzing these signals with a setup comprising an ICOM R8500 (serving as down-converter), an SDR-14 (14-bit software-defined radio), and software that I have written.

Working at the observatory is interesting, with both good points and bad points. The good comprises a lot of variety, a chance to get outside quite a bit, and the fun of working "upstairs" on the world's greatest high-tech jungle gym. Another of my great pleasures has been giving tours of the technical facilities to various visiting scientists etc.

What's frustrating, however, is a lack of organized, up-to-date documentation. Also far too much critical information is carried around solely in peoples' heads. One can, with difficulty, find schematics (but usually out-of-date) for just about anything, but rarely any of that all-important theory of operation or overview information. Adding to this are such things as ancient rotting cables that are usually labeled cryptically, if at all.

I'm currently "responsible" for the observatory's atomic clock (hydrogen maser)-based timing system, helping direct and perform general maintenance of electronics systems, and some original design work. My current "design project" is an expansion of the downstairs IF/LO system to support spectroscopy at instantaneous

bandwidths of up to 2 GHz. We acquire a lot of data, with some setups storing in excess of 1 TB per hour (not a typo- I really do mean TB!).

I'm sort of on call for electronics emergencies, which includes problems with the cryogenics systems. I don't have to stay home or even carry an active cell phone or pager, but I'm expected to help out at any odd hour "when they can catch me". Yesterday, within minutes of arriving home from the beach, I got a call from the telescope operator for which I needed to rush in

and spend about an hour and a half dealing with two separate emergencies, one requiring replacing a power supply with a spare. The other trouble necessitated a trip to the platform to shut down a misbehaving LNA refrigerator which was quietly stewing in its own juices following a power interruption a couple of hours beforehand. But I've been fairly lucky- only two or three special trips to the observatory have been asked of me in the almost two years I've been here, plus a similar number of consultations by telephone.  
73, Dana K8YUM

**See Dana's Virtual Tour and Ride to the Telescope Focal Point here: (Copy and Paste into your Browser) <http://www.youtube.com/watch?v=8Wb9soC47l0>**



Jobs listings for the Radio Telescope!

[http://www.naic.edu/general\\_int/jobspost/Electronics\\_telescope2008.pdf](http://www.naic.edu/general_int/jobspost/Electronics_telescope2008.pdf)

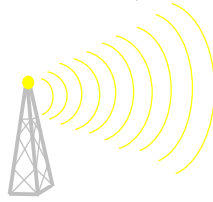
Here is the updated (as of 9-3-08) "Who's a 2008 member" list. \* denotes life member.

Richard Ballard W7AND		Chuck Barrows	K7BVT	Dennis Berkheiser	K9HSX
Mike Boer	KD7EFL	Steve Brandt	N7VS	Margaret Byrd	W7FVF
Philip Crosby		Ronald Forman-Kinder K7VMN		Tom Hill	WA3RMX
John Horn	AC7WS	Bob Jenkins	W7BKN	Deane Kidd	W7TYR
Dee Lynch	K7JRB	Roger McCoy	W7ADV	Bernie Miller	WA7MCR
Gordon Moyle		Glenn Pelikan	K7GWP	Dick Pooley	W7HUY *
Ken Rosenzweig WA7BGF		Robert Rullman	W1SNR	Thomas Rousseau	K7PJT
Gene Single K7IUN*		Blaine Smith	W7JHJ	Richard Stack	K7TKK
Rich Turner K7TKX		Ralph Ulrich	K7UVK*		

\* = Life Member

# Application

TERAC, Inc.



Please complete and return with payment to:  
TERAC, Inc., PO Box 5761, Aloha, Or 97006-0761

Name:		Call:	
Address:			
City:		State:	Zip:
Home Phone: Unlisted: <input type="checkbox"/>		Work Phone:	
E-mail Address:			
License Class:	ARRL Member: Yes <input type="checkbox"/> No <input type="checkbox"/>	Emergency Service: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Membership Class:			
<input type="checkbox"/> Full	(currently licensed)	\$14	
<input type="checkbox"/> Associate	(not licensed)	\$14	

TERAC Calendar			
Month	Board Mtg.	Club Mtg.	Club Meeting Notes
December		20-Dec	Dinner Mtg. at Ernesto's
January	29-Dec	8-Jan	
February	2-Feb	12-Feb	
March	2-Mar	12-Mar	
April	30-Mar	9-Apr	
May	4-May	14-May	
June	No Meeting	No Meeting	Sea-Pac Hamfair
July	No Meeting	No Meeting	
August	No Meeting	No Meeting	
September	31-Aug	10-Sep	
October	28-Sep	8-Oct	
November	2-Novt	12-Nov	Elections

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**TERAC**

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**STAMP**

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