November 2009



Zero Beat

http://www.hcra.org

From the Shack...

Donations Wanted for the Annual Auction - you call, we Thanks Jim for your haul!

The Annual Auction is just around the corner. Are you Change in publication ready? Ready for fun, bargains and hot dogs! Yes, we have it all of the monthly minand it's free for both buyers and sellers. Call friend and come utes. on down!

One thing we depend on every year is donations of noticed we started items to the club for sale at the auction. These gifts spice up publishing the minutes the auction, create good bargains for the buyers and help the of the board of directors meetings in Zero Beat once again. For takes is you!

Call me at 413-237-4666 and I'll take it from there thanks!

ARRL 10 Meter Contest - the perfect club event!

The ARRL 10 Meter Contest is December 12th and 13th this year. Once again we will be entering our scores as a club, do you think we can do better than last year? In 2008 we had eleven logs with a total score of 38,378 points from almost 500 QSO's in 136 sections. The biggest thing is the fun everyone had in this 'low impact' contest. Let's see how many members we can get on the air this year. Once again we will be offering some nice HCRA wallpaper for individual member achievements. New this year Mike, NOHI will be back in town and is opening his station to guest ops. Haven't tried an HF contest yet, here's your chance. Watch the web site and the mailing list for more details as we get closer to December 12th.

Members Only - Book Sale!

K1JAW is making a special effort to save you money on ARRL books. He is working on a 'bulk buy' that will allow our members a 20% discount on ARRL books. Watch your email for the offer. If there's something you would like for your book shelf (the new 2010 Handbook looks cool) fill out the form and get it to the PO Box with your check before November 15th.

efforts.

You may have



club treasury at the same time. As always, the more, the bet- the last year we have been only publishing them to our web site. ter! Do you have (or do you know of someone who has) a surplus This month the minutes of the October meeting will be missing. of 'stuff' that would make a good auction donation but just don't Why? For some time we have been publishing the minutes prior want to put the effort into getting it there? Not a problem, call to acceptance by the board, and then approving the minutes at us and we will come and pick it up. Everyone benefits, you have the next board meeting. A policy that really puts the 'cart befun at the auction without any work, the buyers have more fore the horse'. Starting in November the minutes will be pubchoices and HCRA gets some help as well. Pretty cool, and all it lished after board approval. This means the October minutes will be published in the December issue and the pattern will continue going forward.

Holiday Party is just around the corner!

Are you ready for a party? This year's Holiday Party will be held on December 4th at Alexander's Restaurant, just down the street from the church. Elsewhere in this issue is an invitation for you and your quests. I won't go into the detail (the invitation has that) but as a regular patron of the establishment I can vouch you will enjoy a scrumptious meal to go along with your holiday cheer.

Special thanks this year to Jim, NN1Y for stepping up coordinating this year's party. Besides Jim's efforts we need your help as well. Crucial to all events such as this is determining how many folks will be attending so the restaurant can prepare the proper amount of food. Please make an effort to get your information and check to the PO Box in time so we can insure everyone will have a great time at the party.

New this year will be a super door prize. One lucky guest will go home with a \$100 Gift Certificate to HRO. Won't that look nice under the tree?

'73...and see you at the Auction!

Grand Raffle Prize

Yaesu VX-150R

w/battery & charger



Hovember 6th !!!

Turn your old 'stuff' into gash!

- Set-up at 6:00 PM
- Auction starts at 7:00 PM
- Win a Yaesu VX-150R HT
- Hot dogs, soda, coffee & donuts!
- Lots of bargains!



Contact Jim, KK1W, for details - 413-245-3228 or kk1w@arrl.net

Auction held at:

Feeding Hills Congregational Church 21 North Westfield Street Feeding Hills, MA 01030

Just North of the Pride station at the intersection of routes 57 and 187

AUCTION RULES:

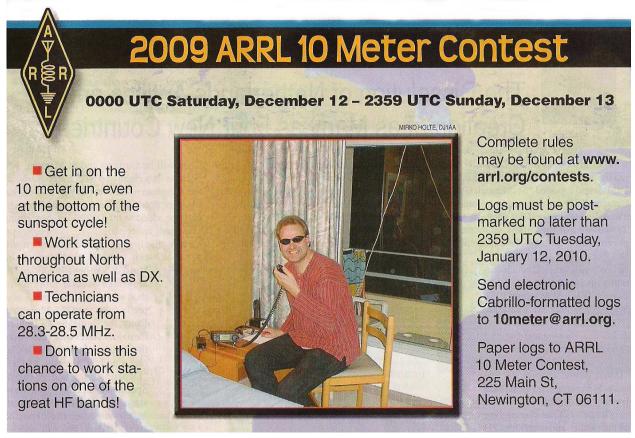
Amateur radio or computer related items only.

Mark all items with name/call and minimum acceptable bid.

Items without minimum will sell at any price! 10% of selling price goes to the HCRA. Maximum fee - \$25.00 per item.

If it doesn't sell - you bring it home!

HCRA Enters Club Competition again in 2009



From November 2009 QST-pp 87

Are YOU ready for some HCRA Club Competition?

In 2008 eleven of us made 478 contacts across the country, and that was without a single sunspot!

Do you think we can do better in 2009? I'm sure we can and the quickest, easiest way will be to have a few more members participating. Wouldn't it be great to have 15 or 20 HCRA members submitting their score this year? The ARRL 10M contest is a lot of fun and offers a very relaxing contest experience. Perfect for a noob!

We may even get a sunspot or two, you never know!

Once again HCRA will be offering beautiful certificates for a few lucky members, perfect for hanging on the shack wall.

HCRA Holiday Party

oin your friends for a relaxing evening at Alexander's Restaurant this holiday season. Located just down the street from our regular meeting hall and on our usual meeting night you can enjoy the company of your best friends along with some holiday cheer.

The meal will be served 'buffet style' with a choice of three delicious entrée's. Pick just one or try them all! Included are all the "fixin's" and of course dessert. The party will be in a private room with a full bar and soda.

New this year will be a \$100 HRO Gift Certificate for one lucky guest.

When

December 4th

Cocktails at 6:00 PM — Dinner at 7:00 PM

Where

Alexander's Restaurant 60 North Westfield Street Feeding Hills, MA 01030

Menu

Fresh Garden Salad w/dressing Seasonal vegetable and fresh baked rolls Roasted Red Potato

Entrée choices

Roast Stuffed Loin of Pork
Chicken Français
Ziti & Meatballs
Cake w/coffee or tea

Cost

\$25/person

Please mail number of attendees and your check to: HCRA, P.O. Box 562, Agawam, MA 01001

This event is a major effort to provide a fantastic Holiday Party for our club. Please help make this a success by registering early so we can ensure everyone has a great time.

Reservations MUST be received by November 27th!

Good Food – Good Friends – Great Time – the HCRA Holiday Party

Give Your Generator Some Space

By Dan Romanchik, KB6NU

The National Institute of Standards and Technology (NIST), portable generator operating outside of a one-story house, the same folks that bring you WWV, publish a monthly using both a test structure and two different computer mod-10/6/09 issue of NIST Tech Beat that will be of interest to and a computational fluid dynamics model. radio amateurs:

bon monoxide—a single generator can produce a hundred house and tested under different weather conditions. times more of the colorless, odorless gas than a modern car's exhaust. New research from the National Institute of Standards and Technology (NIST) shows that to prevent potentially dangerous levels of carbon monoxide, users may need to keep generators farther from the house than previously believed—perhaps as much as 25 feet.

Up to half of the incidents of non-fatal carbon monoxide (CO) poisoning reported in the 2004 and 2005 hurricane seasons involved generators run within 7 feet of the home, according to the U.S. Centers for Disease Control and Prevention (CDC).

Carbon monoxide can enter a house through a number of airflow paths, such as a door or window left open to accommodate the extension cord that brings power from the generator into the house. While some guidance recommends 10 feet from open windows as a safe operating distance, NIST researcher Steven Emmerich says the "safe" operating distance depends on the house, the weather conditions and the unit. A generator's carbon monoxide output is usually higher than an automobile's, he says, because most generators do not have the sophisticated emission controls that cars do.

"People need to be aware that generators are potentially deadly and they need to educate themselves on proper use," Emmerich says. With funding from CDC, NIST researchers are gathering reliable data to support future CDC guidance.

newsletter called NIST Tech Beat. Here's an item rom the els—the NIST-developed CONTAM indoor air quality model

The simulations included factors that could be controlled by To subdue the steaming heat of hurricanes or to thaw out humans, such as generator location, exhaust direction and during a blizzard, gasoline-powered, portable generators are a window-opening size, and environmental factors such as lifeline during weather emergencies when homes are cut off wind, temperature and house dimensions. In the simulawithout electricity. But these generators emit poisonous car- tions the generator was placed at various distances from the

> "We found that for the house modeled in this study," researcher Leon Wang says, "a generator position 15 feet away from open windows was not far enough to prevent carbon monoxide entry into the house."

> Winds perpendicular to the open window resulted in more carbon monoxide entry than winds at an angle, and lower wind speeds generally allowed more carbon monoxide in the house. "Slow, stagnant wind seems to be the worst case because it leads to the carbon monoxide lingering by the windows," Wang explains. Researchers determined that placing the generator outside of the airflow recirculation regions near the open windows reduced carbon monoxide entry.

> In the next phase of the study NIST will model a two-story house that researchers believe will interact with the wind differently. NIST researchers also have worked with the Consumer Product Safety Commission on related work. (See: "NIST to Study Hazards of Portable Gasoline-Powered Generators," NIST Tech Beat, March 5, 2008.)

> The generator study can be downloaded at http:// fire.nist.gov/bfrlpubs/build09/PDF/b09009.pdf.

> * L. Wang and S.J. Emmerich. Modeling the Effects of Outdoor Gasoline Powered Generator Use on Indoor Carbon Monoxide Exposures. (NIST Technical Note 1637,) 2009.

NIST building researchers simulated multiple scenarios of a

Hints & Kinks: Altoids Times Two

Sam Green, WOPCE, of St Louis, Missouri, has a different take on those ubiquitous Altoids tins:

Many of us mount compact circuits in cases that previously contained mint candies. My friend Matt, W0XEU, suggested packaging more complex circuits in multiple Altoids tins by mounting them back to back, a simple yet elegant idea.

I built this circuit in a "double-wide" arrangement because I needed somewhere to put the



A view of both tins open. Notice the copper tape shielding on the right-hand tin.

batteries. This offered the added advantage of providing a means to filter bench power during development and testing so I wouldn't leak ambient RF signals into the main compartment with its very sensitive circuitry. I simply drill a hole near each corner to screw the boxes together. If you are careful with the placement of the holes you can even turn the arrangement around later to reverse the way the covers open. Otherwise, plan ahead. I feed power between compartments via a threaded coaxial feed-through EMI (electromagnetic travel.

interference) <u>filter</u>, with additional bypass capacitors for this very sensitive application. The threaded filter

serves in place of one of the screws that hold the cases together. I use conductive adhesive-backed <u>copper tape</u> as a gasket to minimize leakage into the shielded compartment that

contains the sensitive circuitry.

You can extend this method to additional compartments where you might want many stages of gain and you need to isolate and control the coupling between them. This is a very simple and effective way to prototype more complex circuits before you have to worry about customizing the packaging. Matt and I hope you will find this method useful. -- 73, Sam Green, W0PCE, 10951 Pem Road, St Louis, MO 63146,

w0pce@arrl.net

+ Did You Know? The Wouff Hong

Every amateur should know and tremble at the history and origins of this fearsome instrument for the punishment of amateurs who cultivate bad operating habits and who nourish and culstincts on the air. The Wouff Hong was indiscovered -- by "The Old Man" himself, just ting back on the air after World War I. The Old out to be Hiram Percy Maxim, W1AW, co-

Thanks to Ed, KB1NWH and QST/ARRL for this puzzle



The Wouff Hong - a "fearsome instrument for the punishment of amateurs who cultivate bad operating habits."



The finished device, all closed up and ready for travel.

A look at the interior of the shielded side with the copper tape along the edge and inside to eliminate RF interference. All photos by Sam Green, W0PCE.

ture their meaner invented -- or at any rate, as amateurs were get-Man (who later turned founder and first Presi-

dent of ARRL) first heard the Wouff Hong described amid the howls and garble of interference as he tuned across a band filled with signals that exemplified all the rotten operating practices then available to amateurs (considering the state of the art as they knew it). As The Old Man heard it, the Wouff Hong was being used on some hapless offender so effectively that he investigated. After further effort, "T.O.M." was able to locate and identify a Wouff Hong. The Old Man never prescribed the exact manner in which the Wouff Hong was to be used, but amateurs need only a little imagination to surmise how painful punishments were inflicted on those who stoop to liddish behavior on the air. The Original Wouff Hong is on display at ARRL Headquarters. Find out more about this dreaded instrument of torture here.

Ham Humor, Part 2

Sprays Across W5-land Remembered place in

Š F3 compared with A1, Small rigs

Deleted entity island. HPM call sign, once

with Abu

w

쌦

w

딿

8

W

ఠ

×

d

×

М

N

ø

前

H

Ŋ

ŧ

6

υ'n

00

w

ö

⇉

Ź

ü

Ė

A4 denizen

J6 name

19. 9/11 year

SSOLDE Frequent author in 60.

F9 wine

24. W1 to CN dir An H follower

I-land good UTC predecessor

æ

8

Ħ

3

ä

മ്പ

g

æ

S

g

ģ

Ø

8

g

Y.

S

S,

ų

83

4

Ġ

g

ų,

Ю

Ø

#

ŝ

ħ

쌣

å

4

ħ

t

Thyristor type

News

Answers will be available in the Zero Beat section of www.hcra.org

 Famous W4 suffix detector Detect after the

B Cyber attacker, with

described What 20 across' articles

44. Alpha male suffix?

45. Former F coin

46. CW, to FCC

Adobe product

Dir. for HL from W2

W5 ARRL sect.

Sinister look

55. OSCAR, for one

Ham equipment dealer

accompanies a QSL with an SAE Sometimes

Frequent place for ham

Opposite of paleo-	
00	

Elmer, in a way

67. VOA part Diamond or Comet

mounting place Equatorial prefix

Opposite of 65 across example 70. 720 and 753, for Amplifier, slangily

Down

Roll call misser

Before mike

4X month

The brainy bunch

8. Trig ratio

BV city

Shop partner, on a net

It's everything, often Takes place at Hara

Collins sets

Scratches, as to a wire

Flora and fauna

16. JK predecessors Storage, for short

Sloper orientation

What we did before

wav, mp3, etc.

 Ant. performance Ham bane

Yagi yawer

KB2GSD network

39. Weep

Skywave reflector

41. EME path

Suffix with persist

Driver's license datum

example Maker of 11 across, for

48. Some like it hot

49. Per se

Arm art 52. Interlaces

Iceland ID

Locales 58. Go bad

Loads from lodes

TI last name

2 we forget

Desktop feature

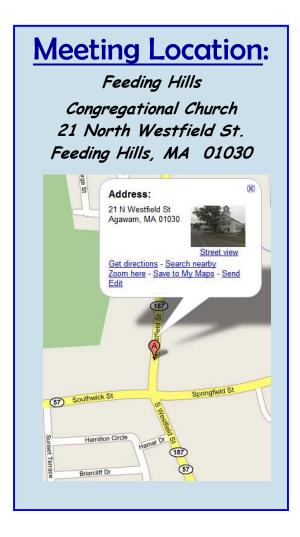
Thanks to Ed, KB1NWH and QST/ARRL for this puzzle

Temmessee transceivers

XE sauce

Accustom (to)

 \sim



Next Meeting:

Friday Night November 6th

Setup: 6pm

Starts: 7pm

Annual Auction



The Hampden County Radio Association P.O Box 562
Agawam, MA 01001

Zero Beat Contributions: Anything of interest is welcome. This is YOUR

Newsletter. It's not interesting without

YOUR ARTICLE SUBMISSIONS.

Please submit your ideas, articles and more to wb1dby@comcast.net.

Thank you,

Larry, WB1DBY, Zero Beat Editor