



AARC COVER

Bulletin of Austin Amateur Radio Clubs
Austin Amateur Radio Club
Austin Amateur Television Club
Austin Repeater Organization

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Issue 10-2007

McMaster Researcher Verifies New Type of Radio Wave

Forwarded By Stuart Rohre, K5KVH

Hamilton, Ontario - September 24, 2007

McMaster research engineer Professor Natalia Nikolova, and her husband Robert Zimmerman, have verified the existence of a new type of radio wave called the Vector Potential Wave. This wave was first predicted in 1880 by British mathematician James Clerk Maxwell, but had never been directly detected until this summer here on McMaster campus in the Communications Research Lab. Dr. Nikolova comments, "One of the most enigmatic predictions of Maxwell was his concept of the magnetic vector potential. Until recently, most engineers believed it was only a mathematical concept with no physical reality. Now, more than 125 years later, we have realized a magnetic vector potential detector which allows measuring the wave at any distance from a microwave antenna".

Nikolova and her husband have been working on this development nearly 2 years. Zimmerman feels that the new discovery will ultimately lead to radio and television transmissions which do not require energy. On a more fundamental level, he added, "Maxwell was correct all along".

The novelty of the discovery is that while the transmission requires very little energy, the reception of the wave requires that an active battery operated receiver be used. This is distinct from usual AM radio

(Continued on page 3)

Periodic Events

Sun	7:30 p.m.	Travis ARES net	147.36 MHz + (131.8)
Sun	8:00 p.m.	Travis ARES Packet	145.73 MHz -
Sun	8:00 p.m.	Williamson ARES net	146.64 MHz - (162.2)
Sun	9:00 p.m.	ARO Swapnet	146.94 MHz -
Sun	(After Swapnet)	Newsline	146.94 MHz -
Tues.	7:30 p.m.	Hays ARES net **NEW FREQ!**	444.150 + (114.8)***
Tues.	8:00 p.m.	Bastrop ARES Net	443.750 + (114.8)
Wed	11:30 a.m.	Ham Social Luncheon, Jim's	146.94 MHz -
Thu	9:00 p.m.	2m SSB Net	144.250 (USB)
Thu	11:30 a.m.	Lunch, Waterloo Ice House	444.1 MHz+
Fri	8:00 p.m.	6m SSB Net	50.230(texasvhf.org/)
Sat	7:00 - 8:30a.m.	Breakfast @ Waterloo Ice House	444.1 MHz +
Sat	9:00 a.m.	Chapter 67 QCWA QSO Net.	3.920 MHz LSB
Daily	6:30 p.m.	Central Texas Traffic Net	147.14MHz+

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Ham Radio Volunteer Exam Results

The following are the results of the ARRL VE Test Session held on September 8th, 2007 in the Hancock Building of the LCRA General Office Complex:

Technician Class Licenses Processed

Jacob K. Baird, KE5QLP (10 years old)

Harold T. Egor, KI4ZIE

Leah D. Yturri, KE5QLQ

Extra Class License Processed

Dennis J. Rehm, AE5EK

Examiners Participating in this Test Session

Tony Davee, KM5JH

Larry Gunter, WB5BEK

Joe Makeever, W5HS

Tom Nevue, W2MN

Joe Thiel, N5SMN

Next Two ARRL VE Test Sessions

October 13th - LCRA Hancock Bldg. Board Conference Room

November 3rd - LCRA Hancock Bldg. Board Conference Room

TNX ES 73 DE W5HS

Joe

NOTE:The Austin Amateur Radio Club ARRL VEC amateur radio examinations will no longer be held in the LCRA Colorado Room. The location for the remainder of the monthly tests in 2007 will be held at the following location:

LCRA General Office Complex
Hancock Building, First Floor Main Entrance, Board Conference Room
3700 Lake Austin Boulevard
Austin, TX 78703

Go along Lake Austin Boulevard to the low-lying limestone main entrance wall to the General Office Complex driveway on the east side of the road. It will show "3700" and "LCRA" on it. Go up the driveway to the Visitors' parking spaces (both on the south side and the north side of the driveway. Find a parking spot, then go up the main entrance walkway to the north. Signs along the walkway will direct you to the Hancock Building. Go up the stairs and into the front entrance of the Hancock Building. You will be directed to the test room location from someone near the front entrance.

TNX ES 73 DE W5HS

Joe Makeever

9-15-2007

The South Austin W5YI VE team heartily congratulates all of the following people who earned new or upgraded amateur radio licenses at our September 15th session:

Extra Class – Jose I. Rubio, KE5LFU

General Class – none

Technician Class (all new) – Gabrielle M. Burns Richard A. Garriott Richard Gonzales, Jr.

Anthony C. Wain

Our administering volunteer examiners were:

Hugh Brown, NT5O

Jim Greenwood, AB5EK

John Fisher, K5JHF

Tony Lyon, KJ5XF

Lloyd Goehring, Jr., N5TO

Jimmy Mercer, N5WDH

Our next two amateur radio exam sessions will start at 2 PM on October 20, 2007

and November 17, 2007 in room 204 of Moody Hall on the campus of

St. Edward's University.

For additional information regarding our amateur radio examination sessions, please contact Jim, AB5EK at (512) 327-6184 or by e-mail to hamradioexams@hotmail.com or visit our web page at <http://texashams.org/w5yi-austin/>

Austin Amateur Radio Club, Inc., PO BOX 4739, AUSTIN TX 78765-4739, Web site: <http://www.austinhams.org>

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Please contact a club officer, attend a meeting, or mail us to join the organization.

The Austin Amateur Radio Club, Inc. (AARC) has annual membership dues of \$20.00 per person or \$30.00 per family. AARC maintains the following repeaters:

FREQUENCY	AUTOPATCH	USE
146.780	Yes	General
146.880	Yes	General
146.940	No	Most popular, WX, Swapnet & Newslite
224.800	No	
444.100	No	

Persons using the repeaters are asked to join the club to help support these valuable resources. To use the autopatch, announce your call sign, press * and dial the phone number then release the PTT. When finished, press # to hang up the phone. Dial 911 (no * needed) for emergency services.

AARCOVER Information

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Viewpoints expressed in the AARCOVER do not necessarily reflect those of any club, or of its members, directors, or officers.

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Members and other readers are encouraged to submit material for publication. Call Mitch London, if mailed submissions are

required. Electronic files are encouraged! Submissions may be edited for publication. **Deadline is the 20th of the month.**

Material may be used in a later issue. Unless otherwise noted, permission is granted to reprint AARCOVER articles, provided you credit the author and the AARCOVER.

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For Changes in your ADDRESS, PHONE NUMBER or CALL SIGN:

See Jerry Jackson, N5UJ (512) 832-5663 jerry@gaj.com

Jerry handles all changes for AARCOVER mailing labels & membership information .

(Continued from page 1) New Type of Radio Wave

transmissions, where much energy is radiated by the transmitter, and the receiver can be a 'crystal set' with no battery.

The detector developed by the research team is a plasma device looking like a fluorescent tube which displays super-conducting properties for radio signals. Nikolova is quick to add, "The device is at room temperature but acts like a superconductor, as predicted by Fritz London in 1930".

Nikolova and Zimmerman plan on submitting their results this week to the research journal THE PHYSICAL REVIEW of the American Physical Society. ■

ARES, TODAY'S EMCOMM

By Roger Wines, W5WIA

We consider ourselves as hobbyists, and that's what we are. BUT the entire nation has relied on our abilities to pull us through in tough times, those times when disaster strikes.

Our position and requirements today are considerably different from what most of us have known them to be in the past. As printed (in part) in the September 2007 QST:

"Today, citizens, including professional emergency personnel, are all connected with cell phones, text messaging and so on. Amateur Radio Emergency communications no longer means only 'Please copy number one, routine', or trotting about behind an official with a hand-held transceiver on your belt.

Where We Come In

Then what is our role? In extraordinary disasters, the scale and intensity of the disaster quickly overwhelm local Amateur Radio resources. Local amateurs may be disaster victims themselves who are unable to volunteer for some time after the disaster occurs. Amateur Radio infrastructure becomes inoperative because of severe storm damage.

Meanwhile, a window of usefulness has opened for Amateur Radio--the tie between the onset of the disaster and the restoration of conventional communications. Are we fully prepared to mobilize large numbers of qualified communicators during these extraordinary disasters? This becomes problematic when national-level relief agencies ask the ARRL to dispatch hundreds of amateurs to deployment centers for communications assistance."

"Both the timeliness and technical sophistication of non-amateur disaster communications technology are increasing. We must be better organized, more capable and on the scene as quickly as possible after our help is requested."

"For starters, formal training requirements are increasing. All emergency responders, including volunteers, are subject to Federal Emergency Management Agency training requirements. This makes recruitment of volunteer ops more difficult. It also turns off experienced ops who consider the training to be irrelevant. Nevertheless, increased training requirements are here to stay and we all need to keep up with them."

"We also bring other skills to the table. During Katrina, Amateur Radio operators functioned as electricians, computer technicians, truck drivers, mechanics and broadcast engineers. We are highly competent and technical experts in many fields. At the scene of a major disaster, much of our value is that we are all 'MacGyvers'."

This is only part of the article. I recommend you read the entire article (Sept 2007 pg 38) and be enlightened.

This is the direction we have to take the ARES group if we are to continue to be a viable Response Team.

Response Team meetings are the 2nd Tuesday of the month in the Hancock Building at LCRA on Lake Austin Blvd., starting at 18:30.

Roger Wines, W5WIA - T.C.ARES E.C.

TO: The members of The Austin Amateur Radio Club, Inc.

FROM: Don Dudley (AC5YK) - President

Dear Members,

We again find ourselves at the beginning of the club officer election cycle. During our October 2, 2007 meeting we will nominate candidates for club officers for calendar year 2008. These officer positions will be voted on during the November 6, 2007 meeting and will take office on January 1, 2008. Please consider running for office yourself.

The officer positions being elected are:

President

Vice-President

Secretary

Treasurer

The club needs many volunteers and serving as a club officer is certainly a way to help out. You may also volunteer for one or more of our many committees. Please consider helping your club.

Thanks,

Don

AARC Club Minutes

AARC Meeting Minutes: September 4, 2007

Meeting called to order: 7:02pm by President Don Dudley, AC5YK.

Visitors: Bob, WB2FHR.

New Members: Jonathon Felger, K5MJX; Dennis Rehm.

"Housekeeping" announcements were made.

Minutes: last meetings minutes approved as written in the AARCOVER.

OFFICER REPORTS:

President: Talked more in-depth about the D-Star Repeater system and future capabilities.

Treasurer: club is low on fund; dues are due January 1.

Editor: AARCOVER should be up each month by the 25th; putting old AARCOVERs onto the website; will email newsletter to Jeff Schmidt, N5MNV, who will put it into the Swapnet newsletter.

Tech Committee: Stuart Rohre, K5KVH reported: at Red Cross, rotor and mast need to be lowered, tower needs paint or galvanizing, guy posts need replanting, along with other misc. work that needs to be done.

ARES: Roger Wines, W5WIA reported: Joe Canfield, N5HPC, will hold a ham class for hospital personnel sometime in September; there will be a Tech Class at the CTECC (EOC) on Oct. 24; Roger is looking at holding several ham classes in 2008 and has several volunteer instructors already. The students will register by buying the textbook for \$20 and get \$15 back if they return it clean at the end of the course. A Simulated Emergency Test (SET) event will be held on Oct. 13 & 14.

The upcoming Presentations were discussed as shown in the slide show.

Old Business: Radio Roundup Committee recapped the events and raffle for anyone new. The sequence of acquisitions for the D-Star Repeaters should be the 1.2GHz first, the 2M second, and the 440MHz third.

New Business: Watch for the new www.W5KA.org website for club members only.

Ham of the Month: Lee Cooper, W5LHC.

Slides and discussion of upcoming events: all listed in the AARC Swapnet newsletter or at www.austinhams.org.

Announcements: Jay Hoffman, KA5OST, stated the ARES pagers are only for ARES members who are actually active in ARES; also, ARES is pushing to be able to better contact all ARES members during an emergency.

Meeting Adjourned: 8:05pm

Presentation: Joe Fischer, K5EJL presented "HF Mobile Operations." Discussion included installing radios and antennas in your car as well as when renting a vehicle.

AA, R, N C BB ??? What's in a Battery Name?

By John Whitton, KU2U

Forwarded By Rick Herndon, K5FNI

In reply to the question on the Tandy/Radio Shack Model 100 laptop discussion group:

What does a standard such as "AA" stand for anyhow? Isn't it just the physical form factor?

John Whitton, KU2U, says...

Ok..., took a few minutes to look into this issue. Apparently both the IEC and ANSI issue a common standard for battery designations and sizes. The problem, to the extent that there might be a problem, is that manufacturers are not under any particular obligation to adhere to those standards. That is probably just as well..., I don't know that we would want to establish a bureaucracy of Battery Police..., let the marketplace pick the winners and losers. BTW..., an 'AA' is actually a 'R6', a 'D' is a 'R20', a 'C' is a 'R14'..., & etc.

See:

<http://www.bbma.co.uk/batterysizes.htm>

The Wikipedia site has a succinct description of the situation:

http://en.wikipedia.org/wiki/List_of_battery_sizes

Curious about my own experience, I pulled out one each of the various NiMH AA's that I have around, as well as one NiCad, and one alkaline. Measurements are as follows, and my apologies to those of you that are not accustomed to English metrics, but I have no metric calipers at hand.

<u>Manuf.</u>	<u>Cap.</u>	<u>Dia.</u>	<u>Length</u>
Sanyo	1700	0.550	1.958
Power2000	2500	0.556	1.987
Malibu NiCd	600	0.549	1.961
Alkaline	?	0.545	1.980
MAHA	2000	0.563	1.970

Well..., I'm surprised. Apparently my assertions about some AA's being longer is wrong. I'm not sure why I subjectively reached that conclusion. The greatest deviation (dia. or length) seems to be about 0.020". Now if one were stacking, say 3 batteries, that *could* become significant in an end-to-end holder..., but I have no applications that stack more than 2 deep. I suspect that I merely noticed a difference in the snugness in the charger when I went from the Sanyos to the Power2000, in addition to the below problem.

There is no doubt that the MAHA's cause a problem in an Icom handy talkie that I have. I use an auxiliary battery case that holds 6 AA's aligned side-by-side, like a package of hot dogs. The MAHA's actually are a slight friction fit into the case compared to regular alkalines. In fact, because of the larger diameter, if the radio gets bumped, the batteries will actually compress the spring contacts and be held out of contact by the case friction. It took me a while to figure out what was happening...."Dang it! I *just* charged these batteries!"

John, KU2U, Asheville NC

Over the WWWaves...

A variety of interesting websites submitted by our readers.

Emtech has a nice little video demonstrating how to heat-strip enamel wire with a 700F soldering iron at: http://emtech.steadynet.com/rm/tinning_200_1.ram

-Stuart, K5KVH

Fun following design trail of a good project.

<http://www.ladyada.net/make/mintyboost/process.html>

Rick Herndon, K5FNI

**Only 250 Tickets
to be Sold!**

ICOM-7000 HF Mobile Radio Raffle



The Austin Amateur Radio Club is having a fundraiser event this year! We are raffling off a brand new ICOM 7000 Mobile HF Radio! This is the latest offering from ICOM. We will be selling ONLY 250 tickets in all! The drawing will be held at the AARC Radio Round Up Swapfest banquet in Austin, Texas on December 7th. Winner need not be present to win!

For More Details Visit...

www.austinhams.org

Update! Over 100 Tickets already Sold!!! Get Yours Soon!

Oregon Scientific Weather Radios Recalled!

Forwarded By Rick Herndon, K5FNI

WASHINGTON, D.C. - The U.S. Consumer Product Safety Commission, in cooperation with the firm named below, today announced a voluntary recall of the following consumer product. Consumers should stop using recalled products immediately unless otherwise instructed.

Name of Product: Oregon Scientific Weather Radios

Units: About 66,000

Manufacturer: Oregon Scientific Inc., of Tualatin, Ore.

Hazard: The radios could fail to receive National Weather Service alert signals in certain areas of the country. In the event of severe weather, this failure could put a consumer's life and property at risk.

Description: This recall involves the following Weather Radios and Weather Stations:

NAME: MODEL

All Hazards Portable Weather Alert Radio: WR103NX

Portable Public Alert Radio: WR108

Public Alert Weather Station: WRB308

John Deere Public Alert Weather Station: WRB308J

No other models are included in this recall.

Sold at: Retail stores nationwide, including some electronics and sporting goods stores, online retailers and in catalogs from December 2005 through June 2007 for between \$30 and \$150. Manufactured in: China

Remedy: Consumers should not rely on the recalled weather radios to receive emergency information. Consumers should contact Oregon Scientific for instructions on returning the radio to receive a free replacement.

Consumer Contact: For additional information, contact Oregon Scientific at (800) 203-4921 between 8 a.m. and 5 p.m. PT Monday through Friday or visit the firm's Web site at www2.oregonscientific.com

AARC Meeting Info.

ARL Labs

10000 Burnet Rd. North of 183

Officers Meeting 6:00 PM

Jack in the Box across the street from ARL Labs. Come by and eat dinner first if you like and listen in.

Regular Business Meeting 7:00 PM

October 2nd - Intro to WMD Identification

2007 Upcoming Amateur Exams

ARRL VEC- October 13th & November 3rd 9a.m. at LCRA Complex 3700 Lake Austin Blvd. ***See page 2 for location change. Contact Joe Makeever, W5HS (345-0800) or Joe Thiel, N5SMN (832-0450) for info. \$14 fee.

W5YI VEC- October 20th & November 17th 2p.m. in room 204, Moody Hall, St. Edwards University. Contact Jim Greenwood, AB5EK@arrl.net, (327-6184)

<http://texasparadise.com/w5yi-austin> for more info.

2007 Calendar of Events

Oct 6 Temple Amateur Radio Club HamEXPO

Bell County Expo Center 301 W Loop 121 Belton, TX
Talk-In: 146.820 (PL 123.0) Mike LeFan WA5EQQ 254-773-3590 mlef@vmm.com www.beltonhamexpo.org

Oct 13 The Ham Association of Paris Red River Valley Fairgrounds. Paris, TX Talk-In: 147.040+ (PL 100) www.paristexasradio.com/hamfest/

Oct 27 Brenham Swapmeet 7AM-Noon Washington County Fairgrounds www.alpha1.net/~w5aum

Nov 10 South Texas Amateur Radio Club Coastal

Bend Hamfest (Ninth Annual) Hilltop Community Center 11423 Leopard Street- Corpus Christi, Texas
Talk-In: 146.82 -600 (PL 107.2)

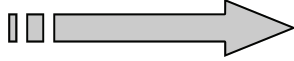
Oct.	Nov.	Austin Meetings/Happenings
2	6	AARC Meeting ARL Auditorium** 7:00 p.m.
13	10	Austin QRP, Alvin's Sandwich Shop 11:00 a.m.
9	13	ARES Training -LCRA Hancock Bldg 6:30 p.m.
9	13	High Speed Multimedia SIG Red Cross 7:00 p.m.
16	20	ATV Club Mtg. Mangia Pizza 6:30 p.m.
20	17	QCWA Denny's on Burnet Rd. 2:00 p.m.
22	26	Travis Co. REACT Denny's on Burnet 7:00 p.m.
23	27	Travis County A.R.E.S., ARL Aud. 7:00 p.m.
24	28	Packet Set-up Lab @ Red Cross* 7:00 p.m.

*Red Cross Located at 2218 Pershing Dr. Austin

**AARC Business Meeting is at ARL Labs 10000 Burnet Rd.

Visitors are welcome whether they are licensed hams or not. Other meetings or activities are listed under the headings for Calendar.

JOIN



Return Service Requested
October 2007
Austin, TX 78765-4739
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Austin Amateur Radio Club
AARCOVER