



# The Ellwood Echo

Volume 13 - Issue 1

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ELLWOOD CITY AMATEUR RADIO ASSOCIATION, INC.

## Welcome in 2009!

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“A happy New Year! Grant that I  
May bring no tear to any eye  
When this New Year in time shall end  
Let it be said I've played the friend,  
Have lived and loved and labored  
here, And made of it a happy year”.

~Edgar Guest

WE WISH ALL OF YOU  
THE BEST IN THE COMING  
YEAR !

Next Test Session to be held

3rd Sunday of January, 2009

Anyone wanting to take a test or classes, please contact Don Cripe, KE3MM, and he can direct you to the proper people.



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### HEALTH & WELFARE

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- Bob O'Conner - Health Concerns
- Scherry Brewer - Still Going to Wound Care Center
- Marian Oliastro - continuing laser work on eyes
- Bill Continelli - Undergoing therapy

## THE EDITOR'S DESK

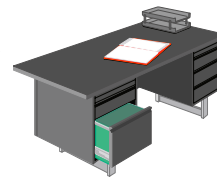
Each year at this time we look back over the last twelve months and try to determine if we've accomplished what we wanted to or where we could have done better.

With each year comes some good things that we are grateful for as well as some hard things we've had to

deal with. 2008 has been no different. There have been some triumphs — there have been challenges and difficult times. What is important is how we handle each one. We can either let it defeat us, or we can pick up the pieces and take each new day as it comes determined to make it the best it can be.

2009 is a blank book today, and we have no idea yet what it will hold for us. It is up to us to try to make each day as it comes the best that it can be. Here's hoping that with God's help it will be a good year.

Marian



## MEETING NOTES

.Again there was no meeting held not enough people. We are going to need to have a meeting to nominate a new treasure and then have An election so try and come out and voice your comments. This is your club so please be o part of it.

Next meeting  
is on January  
4 at the  
Wellness  
Center

## ARRL - JOIN OR RENEW THROUGH US

This is a great time to think about joining or renewing your membership with the ARRL. If you are already a member, you can renew your membership through the club, even though we no longer get rebates for renewals. If you are not a member of the ARRL currently, but are considering it, please join through us. We get a \$15 rebate for all new members who join

through the club, and \$2 rebate for renewals has been reinstated. we'd like to pass the savings on to you. If you are interested, please contact our Membership Committee in care of Toni Swager, KB3BXP. You can call at 724-336-2409, or email her at ecara@qsl.net. As an ARRL affiliated Special Service Club, we encourage all of our members to consider

joining We are Special Service club affiliated with the ARRL, and we are very proud of that, but we need to keep at least half of our membership as members of the ARRL. So please help us keep up our good standing!

# Web Page News

Hi,  
I just saw the ELLWOOD CITY AMATEUR RADIO ASSOCIATION on the arrl.org web site and I noticed that you offer help for newcomers. I just created a set of free online exam practice tests that I hope hams will find useful.

Within the practice tests, online study resources, (Wikipedia, NASA, ARRL, etc...), are provided for many of the questions. The list of resources available for each question is constantly growing because users can add their own favorite links to the study materials. Users can also track their test scores over time and see which subelements are giving them the

most trouble. You can see all the practice tests at:

<http://copaseticflow.blogspot.com/>

Please let me know if you find it handy, or if you think of any ways to make it better. Also, if you think it's useful, please feel free to add a link to the practice exams at your site. Thanks!

73 de KD0FNR Hamilton Carter

PS The tests were mentioned recently on kb6nu.com at:

<http://kb6nu.com/new-online-test/>

you can also see comments about the practice exams on the QRZ forums:  
<http://forums.qrz.com/showthread.php?t=180904>



I spent some time recently rewriting the Silent Key page on the website. It was getting much too long to remain on just one page. The new dedication page lists our silent keys by the year they passed away. Clicking on any name will take you to a page dedicated to that person. I hope it will make it easier to navigate.

See ya online!



## RECIPE OF THE MONTH

### Quick Chicken Parmesan

- 4 tablespoons grated parmesan cheese,divided
- 3 tablespoons Italian-seasoned dry bread crumbs
- 2 teaspoons Dijon mustard
- 4 boneless skinless chicken breast halves
- 2 tablespoons olive oil
- 2 cups purchased musroom spaghetti sauce

ture to coat lightly.  
Heat oil in nonstick skillet over med. Heat until hot. Cook chicken 8 to 10 min.  
Meanwhile, heat spaghetti sauce in microwave until hot. Serve sauce over chicken; top with remaining 2 tablespoons cheese.  
4 Servings

Combine 2 tablespoons of cheese and bread crumbs in shallow dish. Spread mustard over top of chicken; dip mustard-coated side I bread crumb mix-

## FCC CALLS ON AMATEUR RADIO SERVICE FOR ASSISTANCE WITH DIGITAL TV

### FCC CALLS ON AMATEUR RADIO SERVICE FOR ASSISTANCE WITH DIGITAL TV CONVERSION

Earlier this month, the ARRL received a request from the FCC asking that ARRL members provide technical educational assistance to their communities concerning the FCC-mandated digital television (DTV) conversion scheduled for February 17, 2009 <<http://www.dtv.gov/>>.

According to ARRL Media and Public Relations Manager Allen Pitts, WIAGP, Amateur Radio clubs across the country are being asked to develop and implement plans to provide information throughout January and February about the DTV conversion in their areas. The FCC is leaving it up to the clubs to decide how to do this, as local groups understand the communities in ways that the FCC does not. Each community is a little different, Pitts said, so plans carried out by the clubs will vary from community to community. Interested groups should contact their ARRL Section Manager.

Pitts stressed that hams should not make "house calls," sell any equipment or do actual installations; the request is only to distribute technical information and FCC materials. He commented: "As we all know, some folks just never get the message until too late. Materials for

presentations, education and many other activities are available online <<http://www.dtv.gov/outreach.html>>. Beginning early Jan will contact Section Managers and leaders of interested clubs and, where possible, arrange to meet to share even more information, audio, visual and printed materials, as well as training aids, with the clubs involved this effort. We know the time is short, but your aid in this now will be appreciated."

In early January, Pitts said that the FCC will ask Section Managers for the names and contact information of the volunteering groups. The FCC staff will then make contact with the groups, learn their plans and provide them with the media, brochures or other materials groups may need in this effort. FCC regional staff members may even come and visit with larger groups to aid in implementation of the group's plans.

"I really appreciate the willingness of the ARRL to actively participate in helping Americans with the transition to DTV and your helpful suggestions," said George Dillon, FCC Deputy Bureau Chief for Field Operations. "The DTV transition will be an historic moment in the evolution of TV. Broadcast television stations can offer viewers improved picture and sound quality and new programming choices. All-digital broadcasting also will allow us to significantly

improve public safety communications and will usher in a new era of advanced wireless services such as the widespread deployment of wireless broadband. Our goal is to engage the amateur community on a cooperative basis to help with the DTV outreach and to educate consumers."

Dillon continued that local Amateur Radio offering technical advice to consumers via telephone to those consumers who may encounter difficulty with the installation and setting up of their converter box. "Any assistance...will greatly help in the efforts of the FCC to ensure a smooth transition to DTV on February 17, 2009."

Pitts advises interested groups to keep in mind that they are to provide technical educational help only: "At no time should the hams enter someone else's home or install equipment. They should not broker or sell conversion boxes in any way. Clubs can provide such things as a call-in telephone number for technical help, make presentations at meetings, do demonstrations at malls or give talks to other groups -- whatever works in their community."

# January 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				<i>1</i> <i>New Year's</i> <i>Day</i>	<i>2</i>	<i>3</i>
<i>4</i> <i>ECARA</i> <i>MEETING</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>
<i>11</i> <i>Timmy</i> <i>Klingensmith</i>	<i>12</i>	<i>13</i>	<i>14</i>	<i>15</i>	<i>16</i>	<i>17</i>
<i>18</i> <i>VE Test</i> <i>Session</i>	<i>19</i> <i>Martin Lu-</i> <i>ther King Jr</i> <i>Day</i>	<i>20</i> <i>Bruce &amp;</i> <i>Jeanne</i> <i>Watson</i>	<i>21</i>	<i>22</i>	<i>23</i>	<i>24</i>
<i>25</i>	<i>26</i>	<i>27</i>	<i>28</i>	<i>29</i> <i>Dennis</i> <i>Neese</i>	<i>30</i> <i>Ed Bathgate</i>	<i>31</i> <i>Toni Swager</i>

## A Giant Breach In Earth's Magnetic Field

**Dec. 16, 2008:** NASA's five THEMIS spacecraft have discovered a breach in Earth's magnetic field ten times larger than anything previously thought to exist. Solar wind can flow in through the opening to "load up" the magnetosphere for powerful geomagnetic storms. But the breach itself is not the biggest surprise. Researchers are even more amazed at the strange and unexpected way it forms, overturning long-held ideas of space physics.

"At first I didn't believe it," says THEMIS project scientist David Sibeck of the Goddard Space Flight Center. "This finding fundamentally alters our understanding of the solar wind-magnetosphere interaction."

The magnetosphere is a bubble of magnetism that surrounds Earth and protects us from solar wind. Exploring the bubble is a key goal of the THEMIS mission, launched in February 2007. The big discovery came on June 3, 2007, when the five probes serendipitously flew through the breach just as it was opening. Onboard sensors recorded a torrent of solar wind particles streaming into the magnetosphere, signaling an event of unexpected size and importance.

"The opening was huge—four times wider than Earth itself," says Wenhui Li, a space physicist at the University of New Hampshire who has been analyzing the data. Li's colleague Jimmy Raeder, also of New Hampshire, says " $10^{27}$  particles per second were flowing into the magnetosphere—that's a 1 followed by 27 zeros. This kind of influx is an order of magnitude greater than what we thought was possible."

The event began with little warning when a gentle gust of solar wind delivered a bundle of magnetic fields from the Sun to Earth. Like an octopus wrapping its tentacles around a big clam, solar magnetic fields draped themselves around the magnetosphere and cracked it open. The cracking was accomplished by means of a process called "magnetic reconnection." High above Earth's poles, solar and terrestrial magnetic fields linked up (reconnected) to form conduits for solar wind. Conduits over the Arctic and Antarctic quickly expanded; within minutes they overlapped over Earth's equator to create the biggest magnetic breach ever recorded by Earth-orbiting spacecraft.

The size of the breach took researchers by surprise. "We've seen things like this before," says Raeder, "but never on such a large scale. The entire day-side of the magnetosphere was open to the solar wind."

The circumstances were even more surprising. Space physicists have long believed that holes in Earth's magnetosphere open only in response to solar magnetic fields that point south. The great breach of June 2007, however, opened in response to a solar magnetic field that pointed north. "To the lay person, this may sound like a quibble, but to a space physicist, it is almost seismic," says Sibeck. "When I tell my colleagues, most react with skepticism, as if I'm trying to convince them that the sun rises in the west."

Here is why they can't believe their ears: The solar wind presses against Earth's magnetosphere almost directly above the equator where our planet's magnetic field points north. Suppose a bundle of solar magnetism comes along, and it points north, too. The two fields should reinforce one another, strengthening Earth's magnetic defenses and slamming the door shut on the solar wind. In the language of space physics, a north-pointing solar magnetic field is called a "northern IMF" and it is synonymous with *shields up!*

"So, you can imagine our surprise when a northern IMF came along and shields went *down* instead,"

*(Continued on page 7)*

*(Continued from page 6)*

says Sibeck. "This completely overturns our understanding of things."

Northern IMF events don't actually trigger geomagnetic storms, notes Raeder, but they do set the stage for storms by loading the magnetosphere with plasma. A loaded magnetosphere is primed for auroras, power outages, and other disturbances that can result when, say, a CME (coronal mass ejection) hits. The years ahead could be especially lively. Raeder explains: "We're entering Solar Cycle 24. For reasons not fully understood, CMEs in even-numbered solar cycles (like 24) tend to hit Earth with a leading edge that is magnetized north. Such a CME should open a breach and load the magnetosphere with plasma just before the storm gets underway. It's the perfect sequence for a really big event."

Sibeck agrees. "This could result in stronger geomagnetic storms than we have seen in many years."

*A video version of this story may be found here. For more information about the THEMIS mission, visit <http://nasa.gov/themis>*

**What happened to conventional wisdom?** Researchers at the University of New Hampshire are using computer models to unravel the basic physics of the great breach. They're finding that reconnection at the poles is key. Conventional wisdom held that equatorial reconnection was more important, which is why the giant breaches were not anticipated until THEMIS flew through one.

THEMIS, short for Time History of Events and Macroscale Interactions during Substorms, is the fifth medium-class mission under NASA's Explorer Program. The program, managed by The Explorers Program Office at Goddard Space Flight Center, Greenbelt, Md., provides frequent flight opportunities for world-class space investigations in Heliophysics and Astrophysics. The University of California, Berkeley's Space Sciences Laboratory managed the project development and is currently operating the THEMIS mission. Swales Aerospace, Beltsville, Md., built the THEMIS satellites.

Author: Dr. Tony Phillips | Credit: Science@NASA

## Fw: News for ARECC Field Instructors and Examiners

### **Welcome China Chaney to Education Services Staff**

First I'd like to introduce a new staff member to you. China Chaney has joined us as a part-time addition to our staff. China also works in our VEC department and is very familiar with the procedures related to conducting VEC exam sessions. In her shared role with Education Services, she will be processing the field sessions of the ARECC program as well as assisting Kim Mancuso with general administrative support of the Continuing Education Program.

### **Change in ARECC Field Exam Fee**

If you are an ARRL VE you are probably already aware that the ARRL VEC exam fee will be increased to \$15 effective January 1, 2009. (Click here to read that announcement.) The same fee increase will apply to ARECC Field Exams effective January 1, 2009.

As with licensing exams, after January 1, field examiners will be entitled to retain up to \$7 of this fee per student to offset out-of-pocket expenses, such as cost of pencils, postage, gas for examiners, etc., expenses related to the conduct of exam sessions. The same rules apply as for ARRL VECs: as long as the expense is warranted and has been prudently incurred, and the expense is specifically related to exam administration, then the fee can be retained. ARRL reserves the right to request receipts documenting expenses being reimbursed by retention of exam fees. Fees from exam sessions are not to be used to offset the cost of offering class instruction.

Revised ARECC Field Examination Instructions and a revised Activity Sheet for reporting fees collected are posted to our Field Examiner support page at: <http://www.arrl.org/cep/fieldexams/> Please read the revised ARECC Field Examination Instructions as we have made a few additional clarifications and modifications.

On that page you'll find a link to download and print the new Activity Sheet to submit with any field exam session documentation for exams that occur after January 1, 2009.

As always, remember to register your exam sessions with us and to request exam materials at least two weeks in advance of the scheduled exam session.

Best Wishes for a Happy Holiday Season!

Debra, Kim and China

Debra Johnson, K1DMJ Education Services Manager ARRL, the National Association for Amateur Radio

## THE DOCTOR IS IN" THE ARRL LETTER

This week, ARRL Letter readers are in luck! The ARRL's very own Doctor, author of the popular QST column "The Doctor Is IN," answers a question from his mailbag:

Dave Wright, KB9MNM, of Montgomery, Illinois, asks: I would like to try CW using my PC. I have an all mode 2 meter radio with VOX (voice operated transmit switching) How would I wire this up to the sound card of a computer? Can I use the same configuration for low power radio projects, such as the Tuna-Tin 2 transmitter or the SoftRock receiver, or will I need a special interface device?

The Doctor Answers -- The radio-to-sound card interconnect requires two audio connections: A pair out of the radio (speaker or line out) to the sound card mic (or line in), and a pair from the sound card speaker or line out to the radio mic in, (or line in if it has one).

In both cases, the line level connections are preferred (if they are available) because they don't change in level every time you adjust your volume control. If you get tired of listening to the data tones, you can turn down your speaker volume and still have enough signal from your line out to drive the sound card.

In addition, you need to have a way of switching the radio from receive to transmit. That can be using the VOX (but be careful of strange computer voices (You've Got Mail!) that can also go out over the air. In the absence of VOX, you could even use a manual switch on your push to talk (PTT) line, but that would get cumbersome.

A sound card interface provides transformer isolation on the mic line, to help avoid hum pickup. Most importantly, it picks up the transmit command from the PC serial port and switches the radio PTT line for you, so you don't need to use the radio VOX function. Some allow you to switch between mic and sound card, and also provide a separate gain control, so you don't have to change everything every time you go back to voice mode.

So you can start out with the simple connections, but if you use it a lot, you will likely want an interface eventually. All of the above applies to your 2 meter set, as well as most HF radios.

The tuna tin I'm thinking of is just a CW transmitter and thus doesn't do sounds at all, so you're kind of stuck. — The soft rock is a receiver, so you can use a single cable from the receiver audio output to your sound card input and monitor what's going on while you have a chance to get used to the software choices. I recommend starting there, in any case.

Do you have a question or a problem? Send your questions via e-mail <doctor@arrl.org> or to "The Doctor," ARRL,

## WHAT'S COMING UP?

**January 4th - ECARA Meeting at the Wellness Center.**

**RED HOT**

FAMILY RESTAURANT  
Hot Dogs & Family Dining

6th Street & Factory Ave.  
Ellwood City, PA

Phone 724-752-9717



### VISIT OUR WEB SITE !!

Stop by and visit the ECARA online! Keep in touch with fellow members on the Members' Page or browse through the Photo Album. Visitors are WELCOME!

<http://www.qsl.net/ecara>

Please stop in and sign our Guest Book!

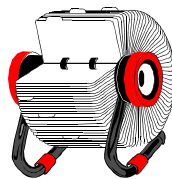
Web site created and maintained by Marian Oliastro, W3MHO  
for the ECARA  
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“Cheers to a new year and another chance for us to get it right”.

~Oprah Winfrey

## Member email addresses

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## THE TRUMPET OF CONSCIENCE

Dorothy Thompson:

Courage, it would seem, is nothing less than the power to overcome danger, misfortune, fear, injustice, while continuing to affirm inwardly that life with all its sorrows is good; that everything is meaningful even if in a sense beyond our understanding; and that there is always tomorrow.

John Quincy Adams:

Patience and perseverance have a magical effect before which difficulties disappear and obstacles vanish.

Martin Luther King, jr.:

If you lose hope, somehow you lose the vitality that keeps life moving, you lose that courage to be, that quality that helps you go on in spite of it all. And so today I still have a dream.

### The Trumpet of Conscience

During the past year we have had so many things occur that have changed the face of this club. Only those of us who are still trying to hold on will need the courage to continue. This is a new year with many challenges to face. As Martin Luther King Jr. said "I have a dream." Let us also work toward a dream. A dream of joining together and drawing closer for a common good and goal. None of us know what lies ahead. Friendship and courage are necessary to survive. Joining together to plan for the future is most important. Joining together for strength is important. Joining together for courage and strength is important. Please come to the meeting for comfort, strength, courage, and fellowship.

Linda OConner

## A NEW SERVICE FROM GOOGLE 1-800-466-4411

Leave it up to **Google** to come up with something like this!!!

Here's a number worth putting in your cell phone and your home phone speed dial: 1-800-goog411. This is an awesome service from Google, and it's free -- great when you are on the road. Don't waste your money on information calls and don't waste your time manually dialing the number. I am driving along in my car and I need to call the golf course but I don't know the number. (Read my example below and watch the short video before you try this.) I hit the speed dial for information that I have programmed in (800-goog411). The voice at the other end says, "City & State." I say, "Garland, Texas." He says, "Business, Name or Type of Service." I say, "Firewheel Golf Course." He says, "Connecting" and Firewheel answers the phone. How great is that? This is nationwide and Google provides the service absolutely free! Click on the link below and watch the short clip for a quick demonstration. <http://www.google.com/goog411>

I went to the website and it is legitimate. I couldn't tell, however, if it is just for business numbers or whether you can use it for personal numbers as well. If you go to the website, check out other services they offer such as mapping and directions sent directly to your phone.

Thanks to Pete Biondo, N3VRR, for the information.

## Newsletter and Club Information

The "Ellwood Echo" is published monthly. It is the voice of the Ellwood City Amateur Radio Association, Inc. of Ellwood City, PA. Information contained in this newsletter (unless copyrighted) may be reprinted with credit given to the author and the ECARA. Contributions to the newsletter must be submitted by the 15th of the month prior to publication. Material submitted will be used at the discretion of the editor. Letters for the "FEEDBACK!" column, please mark ATTN: FEEDBACK on the envelope. Views and opinions that are a part of articles or letters in the newsletter are not necessarily those of the ECARA.

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News Letter  
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ECARA  
PO Box 25  
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ecara@qsl.net

The ECARA meets monthly at the Tree of Life Wellness Center in Ewing Park. The meetings are on the first Sunday of each month from 7:00 to 8:00 pm. Visitors are welcome. E-Board meetings are currently combined with the regular meeting unless a special meeting is called.

..

**E. C. A. R. A. OFFICERS**

President	Keith Wright—KB3DAW	724 944 2725
1st Vice President	Jim Klingensmith — N3ZJM	724 752 3367
2nd Vice President	Carol Klingensmith—N3ZLF	724 752 3367
Secretary	Linda O'Conner—KB3IQP	724 752 9087
Treasurer	Janey Brewer — N3KTZ	724 843 0740

**TRUSTEES**

Station Trustee:  
Butch McGee — K3YO  
Trustee:  
Elmer Brewer — W3ELB  
Carol Klingensmith — N3ZLF

**Ellwood City Amateur Radio Association, Inc.  
Membership Application**

	<b>1st qtr</b>	<b>2nd qtr</b>	<b>3rd qtr</b>	<b>4th qtr</b>
___ FULL	\$20	\$15	\$10	\$5
___ FAMILY	4	3	2	1
___ ASSOCIATE	\$15	\$11.25	\$7.50	\$3.75
___ JUNIOR (to age 21)	Free	Free	Free	Free
___ SENIOR (65 and over)	\$10	\$ 7.50	\$5.00	\$2.50

DATE \_\_\_/\_\_\_/\_\_\_ NAME \_\_\_\_\_ CALLSIGN \_\_\_\_\_ CLASS \_\_\_\_\_  
 ADDRESS \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_ COUNTY \_\_\_\_\_  
 PHONE \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ EMAIL \_\_\_\_\_ ARRL Y ( ) N ( )  
 BIRTHDAY \_\_\_/\_\_\_/\_\_\_ ANNIVERSARY \_\_\_/\_\_\_/\_\_\_ SPOUSE'S NAME \_\_\_\_\_

Do you wish to receive the newsletter each month by \_\_\_ E-mail \_\_\_ Regular Mail

Is this application for a \_\_\_ New Member \_\_\_ Renewal

DUES PAID: \$ \_\_\_\_\_ METHOD OF PAYMENT: \_\_\_ Cash \_\_\_ Check # \_\_\_\_\_

**PLEASE MAIL TO:**

**ECARA Membership Committee  
% Toni Swager  
189 Frederick MHP  
New Galilee, PA 16141**

**ELLWOOD CITY AMATEUR  
RADIO ASSOCIATION, INC.**

**Contact Us!**

PO Box 25  
Ellwood City, PA 16117

Phone: 724-752-3367  
Email: [ecara@qsl.net](mailto:ecara@qsl.net)

**N3EC**

**Repeater**

145.170 MHz

100 Hz PL



**MISSION STATEMENT**

The Ellwood City Amateur Radio Assoc., Inc. was founded in August of 1997 to provide an Amateur Radio presence in the Ellwood City area, It is our desire to serve our community where we can and to teach young people, or anyone who is interested, the benefits and advantages of becoming a "ham radio" operator. We are a Special Services Club affiliated with the American Radio Relay League (ARRL). Many of our members belong to Amateur Radio Emergency Service (ARES) and Skywarn, helping the National Weather Service. It is more than just a hobby!

**The ELLWOOD ECHO  
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**"SERVICE THROUGH COMMUNICATION".**