

# The Reflector September 2011

Hi Folks,

Gosh! Is it already September? Seems like I just got up from the computer after finishing the last newsletter.

August was a busy, but fulfilling month for us. The meeting was well attended and the service from the Plaza this time out was great. I was actually finished with my meal by 6:45 and had nothing to do for 45 minutes.

I was also further surprised when I received an email from them making sure of the date for the next meeting. Was it something I said?? Either way, we seem to be back on track with the “before-meeting” meal.

The major event of this month was the Upgrade Classes, and this time out, we also had a class for people wanting to upgrade to Extra. As it turned out, the Extra class was the largest of the three.

Our previous list of Instructors included Lowell, Thomas, Zach, and me. I mentioned the need for an Extra class at one of the “Ragchew Breakfast” meetings (wonderful things those meetings!) and Terry said, “OK, I’ll teach it,” and we were off to the races.

Lowell and Thomas had revamped their class due to the General Question Pool change, and I also made changes to the material Zach and I use for the Techs. Terry had to come up with his curriculum quickly, and did a good job, as I heard nothing but praise for what he did.

Two Saturdays isn’t enough time to get all that info into the discussions, so we try to hit the high points, and suggest methods of study we used when we were upgrading.

*Simply put, if you don’t study at home, you probably won’t pass.*

Most of those “high points” are the tougher questions needing some mathematical skill, or questions regarding the schematics that are now present in the curriculum of all three classes. Funny how pretty much everyone is scared of the schematics...

The real aim is to get the students comfortable enough to take a test without panicking when they sit down with a test in front of them...did we succeed?

The final results show three new Techs, **Abbie Leverett, KK4DZA, Brian Doering, KK4DZB,** and **Lynn Terry, KK4DXB.** There was one new General, **Ashley Leverett, KJ4SWF.** The new Extra class graduates were **Jeff Hearn, KK4APP, Mary Saunders, KI4JOO,** and **Jackson Leverett, KJ4NFB.**

Yes, I believe we hit the mark dead center!



Particularly gratifying was to see 8-year-old Abbie pass her Tech Test, which ties a record for youngest Ham with us. Now, all five of the Leveretts are licensed.

Jackson, at age 11, is the youngest Extra we've licensed so far. Everyone was smiling when we finished grading his test. Great job Jackson!

We are also adding Jeff and Mary to the VE team, along with Lynn's husband John, KA1LQE, and Gene, W4AYK, who was with us all day on the second Saturday. That brings our Team up to 38 active VEs...talk about a "win-win" situation!!

Everyone participating was happy over the results and several said, "Let's do this again next week!" We really appreciate John, KE4RWR, arranging for us to have the first class accommodations to hold these classes. If you've never seen the set-up, you should drop by when we do this again.

Thanks also to Dana, Bill, Dawn, and Walt, for making sure we had plenty of refreshments and lunch for the group. All in all, it was a great outing for us!

On October 1<sup>st</sup>, we have the statewide Simulated Emergency Test, and that venture this year includes ARES members in 5 states, Georgia, Alabama, North Florida, South Carolina, and Tennessee, with a possibility that North Carolina may also play a part, if they are clear of the work they've done following Hurricane Irene.

As we have a test session at 10am on September 17<sup>th</sup> at the EOC, we'll be following it with a SET Planning Session at 1pm to get everyone straight on what we want to

accomplish. If you're interested in attending and you're not an ARES member, you're still welcome to come and see what all the "fuss" is about.

The whole point of the SET is to let you test your capabilities to operate during an emergency. We'll be set up at the EOC and several hospitals in the area, and the more people we have involved the easier it is on all of us. The SET will run from 9am to around 1pm, and again, that's on October 1<sup>st</sup>.

So, that's enough of me for the moment. Please make plans to join us at the Plaza on September 10<sup>th</sup> for the monthly meeting. NOTW will be presenting a program on station grounding, plus we need to talk about some of the events for October.

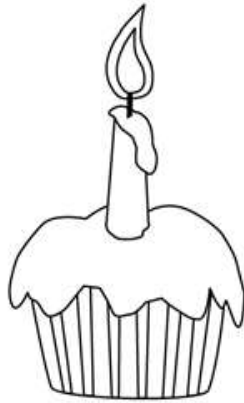
Plan to arrive at 6pm if you want to order supper, and the meeting will follow at 7:30pm.

I hope to see YOU and your Family there!!

73,

*Mike*

\*\*\*\*\*



## HAPPY BIRTHDAY

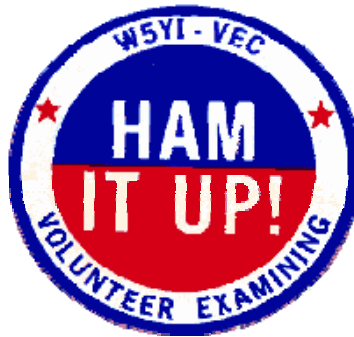
**The following TARC Radio Family Members have September Birthdays:**

- Amy Swicord – Sept. 4<sup>th</sup>**
- Mo Wright – Sept. 6<sup>th</sup>**
- Pat Wittenborn – Sept. 7<sup>th</sup>**
- Thomas James – Sept. 11<sup>th</sup>**
- Roy Alligood – Sept. 20<sup>th</sup>**

**Tommy James – Sept. 22<sup>nd</sup>**  
**Walt Hendricks – Sept 30<sup>th</sup>**

Don't see your birthday? Let us know at [w4ucj@arrl.net](mailto:w4ucj@arrl.net)

\*\*\*\*\*



### *Test Session Results*

The TARC VE Team had two sessions in August, following the class sessions. Those people getting new licenses or upgrades were:

**Abbie Leverett – new Technician - KK4DZA**  
**Lynn Terry – new Technician - KK4DXB**  
**Brian Doering – new Technician - KK4DZB**  
**Ashley Leverett – new General - KJ4SWF**  
**Mary Starnes-Saunders – new Extra – KI4JOO**  
**Jackson Leverett – new Extra – KJ4NFB**  
**Jeff Hearn – new Extra – KK4APP**

Congratulations to all these folks!! Also thanks to the following VEs who took part in the test sessions: **AI4CW, N4KGT, W4TBJ, KJ4NGB, KW4EF, N4KXL, KJ4UKR, NY4D, N0TW, and KE4FGF.**

The next test session will be September 17<sup>th</sup>, 10 am, at the Thomas County EOC located at 1202 Remington Avenue in Thomasville.

In addition to these new licenses, the VE Team added four new members: **John Terry, KA1LQE, Mary Starnes Saunders, KI4JOO, Jeff Hearn, KK4APP, and Gene Clark, W4AYK.** Many thanks to these four for joining us!

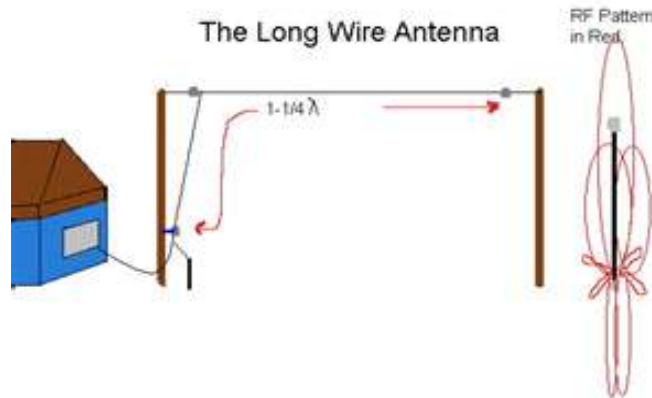
de KE4FGF

\*\*\*\*\*

## ***NØ Tenna Wizard***

### LONGWIRE ANTENNA

Here is an easy to construct antenna. It consists of a single wire, erected as high in the air as you can manage, and supported by at least two objects. As related later on in this article, the length of the antenna is important. So, if you get anything at all from this article, it should be that antenna length is important because of resonance and what happens to 1/2 wavelength long antennas.



You will need to use a tuner with this antenna, as it will present different impedances on different bands. You should also note that all the tuner will do is to cancel out the inductive or capacitive reactance of the antenna - it will do nothing to the resistive portion of the antenna impedance. Thus, you may not be able to get a perfect 1:1 SWR even when you are using a tuner with this antenna.

If you put up a random length of wire, it may not load properly on all bands. This is because if the antenna length is close to 1/2 wavelength on the band you are trying to get it to load on - the SWR will be very high. And, that applies on all 1/2 wavelength harmonics as well.

So, rather than publish longwire antenna lengths that do not work, here are some lengths that should work for all amateur bands. The lengths are in feet: 29, 35.5, 41, 71, 84, 107, 119, 148, 203, 347, 407, and 423.

Now, in order to calculate the antenna's length, you must include all of the wire used in its construction, including the piece that brings RF into the shack.

I can relate to this article because we installed a big loop antenna at the Jefferson County FL EOC and could not understand why it would not load up on 75 meters? Well, an antenna analyzer showed us the impedance of the antenna on 75 meters was about 2 ohms and the tuner in the radio as well as an external tuner just could not match an impedance that low. The loop antenna was an even 2 wavelengths long on 75 meters. We later learned that if the antenna had been 1 or 3 wavelengths long (odd wavelengths), it would have worked.

**73 & CU On The Air!**  
**Terry, N0TW**

\*\*\*\*\*

**Thomasville Amateur Radio Club**  
**Minutes**  
**August 8, 2011**

Meeting started at 7:30 p.m.

**1. Welcome and Announcements: Mike, KE4FGF**

**Test Session**

There will be a chance to take tests twice this month, after the Upgrade classes that will be held on the 20<sup>th</sup> and 27<sup>th</sup>.

**Midmonth Breakfast**

There will be no midmonth breakfast this month due to the classes.

**Rag-chew Breakfast -8:30 a.m.**

The Friday Breakfast sessions at Seminole Wind continue to be well attended. There are usually around 17 to 20 in attendance.

**Classes**

TARC will have upgrade classes held on August 20<sup>th</sup> and 27<sup>th</sup>. In addition to Tech, and General, we will add an Extra Class for those wanting this upgrade..

### **Advanced Skywarn**

There will be a class on August 23<sup>rd</sup> at 7 p.m. John has arranged for us to have the large classroom at Archbold for those who have slow Internet connections.

### **September Meeting**

Remember that the September meeting will be held one week late due to Labor Day.

## **2. Minutes and Treasurer's Report:**

The minutes were in the Newsletter and Club Treasurer, Bobby, N4KXL, gave a report on our current finances. Both the Minutes and Treasurer's report were accepted as presented.

## **3. Old Business:**

### **Field Day**

Mike commended everyone on doing an excellent job at Field Day, with special thanks to our Station Captains. The final score for the event was 580 points over last year's score. Mike also mentioned the large part the kids played in making the event a success.

## **4. New Business:**

### **147.195 Repeater**

The repeater is getting a lot of use, and has a large footprint signal-wise. Randy, KE4QPS asked how many club repeaters were available now, and Mike gave a quick report on each one.

### **Fly-In**

The Fly-In is October the 8<sup>th</sup>. Mike is checking with the Airport officials about our participation.

### **Spaghetti 100**

The Spaghetti 100 will be held on October 15<sup>th</sup>. TARC is responsible for the area starting at the first rest stop through Boston.

### **Boston Mini Marathon**

The Boston Mini marathon will be held on October 29<sup>th</sup>. The race starts at 8am, and runs through approximately noon.

### **Cook Book**

Dana requested more recipes for the club cookbook she and Theresa are working on. She also requested stories about the club's past to add more interest to the book.

As there was no further business, the meeting adjourned at 8:20pm, with 35 members present.

*Next Regular Club Meeting will be held on October 1<sup>st</sup> at the Plaza Restaurant.*

Respectfully Submitted by  
Dana Swicord, KJ4GWB  
Club Secretary

\*\*\*\*\*

***N0TW and WN4AMO Take Top Honors!***



**Paul Hemby, WN4AMO and Terry Webb, N0TW** were on the island of St. Croix from Aug. 4 to Aug. 9 to operate during the 10-10 International Summer QSO Party. Their base of operations was Radio Reef, a cabin equipped with plenty of antennas, towers, and radios.

Operating as **KP2M**, their score took first place in the Club Category, and also Second Place Overall.

Congratulations to Paul and Terry on this “Excellent Adventure!”

\*\*\*\*\*



### Advanced Skywarn Spotter Class a Success!

A group of TARC members got together at the Archbold Classroom on August 23<sup>rd</sup>, for a training session on Advanced Weather Spotting. John arranged the classroom for any members who don't have an Internet connection with enough speed to handle the graphics.

Following a pizza supper, 17 people settled down for the 2-hour class, presented by **Kelly Godsey**, from the Tallahassee National Weather Service Office. The class was very informative, and everyone who has taken the test so far has passed with no problems.

**Megan Kornegay, KG4QCT**, actually took the test on her I-phone and passed before leaving the class!

Our ARES Managers watch for training classes of this sort and will continue to make them available to the group. If you happen across a Webinar class that you think would benefit the group, let us know and we'll make the arrangements.

Thanks again to John and Archbold Hospital for making the Meeting room available for this event.

\*\*\*\*\*



## Weather Center

As we near the peak of the 2011 hurricane season, the tropical storm engine is running full speed and churning out storm after storm. It certainly appears that we are on

track to meet the above average season forecast and possibly exceed the total number of predicted storms this year.

We all should be familiar with the terms tropical cyclone, tropical depression, tropical storm and hurricane. But often storms are referred to as extratropical, subtropical or even post-tropical. What defines all the different storm types and can they all produce hurricanes? Lets look at the definition of each of these so we can better understand their use by the National Hurricane Center.

A **Tropical cyclone** is defined as a warm core cyclone over tropical or subtropical waters with organized deep convection and a closed surface wind circulation with a well-defined center.

A **Tropical depression** is a tropical cyclone with maximum sustained surface winds of 33 knots (38 mph) or less.

A **Tropical storm** is a tropical cyclone with maximum sustained surface winds between 34 knots (39 mph) and 63 knots (73 mph).

A **Hurricane** is a tropical cyclone with maximum sustained surface winds of 64 knots (74mph) or more. A **Major Hurricane** has maximum sustained winds of 111 mph or greater.

All of the above are warm core storms that are fed by the heat energy of the ocean, which is transferred up through the storm to the cooler atmosphere above. Moving over cold water, high wind shear aloft and dry air can all serve to slow the transfer of heat and the result is the storm weakens.

An **Extratropical cyclone** is a storm of any intensity where the primary source of energy is baroclinic meaning it results from temperature contrast between hot and cold air masses commonly referred to as fronts. Extratropical systems are always connected to a frontal system. Tropical systems that merge with a cold front transition from a tropical to an extratropical storm.

A **Subtropical cyclone** is a non frontal low pressure that exhibits characteristics of both tropical cyclones and extratropical cyclones. One key feature of subtropical systems is the fact that their high winds and often their deepest convection is located well away from the center of the storm. Tropical storm *Lee* exhibited some of those characteristics before it became extratropical after merging with a cold front and began moving to the northeast.

A **Post-tropical cyclone** is a former tropical cyclone. Any cyclone that no longer exhibits the characteristics defined as tropical can be referred to as post-tropical. As of 2011 the National Hurricane Center will refer to all storms that have transitioned beyond tropical storm status as post-tropical.

Hopefully this will help us all to better understand the discussions offered by the National Hurricane Center or our own National Weather Service Forecast office when these terms are used. Stay prepared, as we are only half way through the 2011 hurricane season!

73,  
Stewart  
KJ4GOJ  
DEC NWS Tallahassee, FL  
Southwest Georgia District ARES

\*\*\*\*\*

## **Archbold Hospital Exercise planned**

Hello all,  
I hope we are all doing well. I would like to invite you to an initial planning session for a full-scale exercise that the Archbold organization as a whole will be having on Oct 27<sup>th</sup>.

We will be handling a weather event such as straight-line winds or a tornado that hits each of the four counties we serve. We will be looking at testing the hospital surge capacities and our own Emergency Operations Centers.

We would like for this to involve EMS, EMA, Public Health, Schools, Public Works, LEO, and Red Cross. This first meeting is just to look at goals and what you all think we need to plan for and test.

Sue Clifton is helping me with this daunting task and is making it a HEESP compliant drill. Please join us for this across the region planning.

This first planning session will take place at 9am on Sep 15<sup>th</sup>. The meeting will take place in the Cafeteria Meeting room. If anyone is interested in a conference call during this let me know that also.

Thanks for all you do and I look forward to hearing from each of you.

Charles Winchester  
Emergency Management  
[cwinchester@archbold.org](mailto:cwinchester@archbold.org)

\*\*\*\*\*

## **The W4UCJ Repeater System**

At the last meeting, a question arose as to how many club repeaters were now available to the Hams in the Thomasville area.

I'm happy to report that after a long period, the "W4UCJ Repeater System" is finally all operational at the same time. That means you currently have 5 "W4UCJ" repeaters, four 2-meter machines and one 440 machine, at your beck and call.

I thought you might be interested in the machines themselves and their locations, so here they are:



**The 147.06 Machine was located at the Thomas County EOC a few years ago.**

**147.06 Machine (+ offset, no PL)** – Located at the FEMA office on south Pinetree Blvd. This is a Yaesu repeater with a top mounted vertical antenna at around 250'. This site has emergency power. This was TARC's original repeater.

**147.24 Machine (+ offset, PL 141.3)** – Located in Boston at the WTUF site. This is also a Yaesu repeater and was the original 147.195 machine. This has a side mount Sinclair repeater antenna at around 150'. Though the site doesn't have emergency power, we are hopeful that the new owners, a tower holding company, might add one

**147.195 Machine (+ offset, PL 141.3)** – Located in Metcalf on the WCTV tower. Both the GE Master II commercial machine and its twin antennas are on the 1000' platform. This site is emergency powered.

**146.865 Machine (- offset, PL 141.3)** – Located at the Thomas County EOC. This is a Hamtronics machine with an X-50 Diamond vertical at 80'. The system also has several

remote links that could be deployed to help with coverage. This site is emergency powered.

**442.00 Machine (+ offset, PL 141.3)** - Located at the Thomas County EOC. This Hamtronics machine shares the X-50 antenna with the 2-meter machine, and both machines can be linked together in emergencies. The site has emergency power.

In addition to the club repeaters, we also have 5 other machines with ties to the club.

**KJ4PYB - 145.08 (+ 1.4 Mhz offset), 440.65 (+5MHz. offset) and 1248.75 MHz.** Though TARC doesn't own them, these three D-Star repeaters are located at Archbold, and are open for our use. TARC is the designated "GAARES watchdog" over the system. This site has emergency power.

Let's also not forget that **Nirmal, KE4URL**, has made the Reno machine on **145.17 MHz. (- offset, 141.3 tone)** available for club purposes for years, and that has certainly been appreciated.

**Eric, W4DXX** has also indicated we have the use of his **443.00 Repeater (+ offset, 100.0 tone)**, also located in Reno, any time it is needed.

I don't have to tell you that having access to 9 repeaters in an area the size of Thomasville is unusual. I think we are all proud of how our repeater system has come together!

de KE4FGF

\*\*\*\*\*



**Mark, Amy, and Rachel are on the move again.**

I'm sure most of you know that Mark Swicord left his job in South Carolina to look for something closer to home. The fact that he was missing a lot of Rachel's "firsts" was wearing on him, and he simply wanted to be there as she grows up.

We'd all hoped he'd find something local, but unfortunately, that hasn't proven to be the case. So, once again, he, Amy and Rachel will be moving, and this time to Tennessee.

Mark has accepted the position of Emergency Department Director at Stonecrest Medical Center in Smyrna. Amy reports the area looks pretty nice, but it's been raining and cold from the effects of Tropical Storm Lee since they arrived.

Mark reports that the hospital Ham Station is two doors down from his office with an HF rig, and single VHF and dual band VHF/UHF radios. He's attended his first ARES meeting and the local club, the Stones River ARC. They're already enlisting him for a club event, the "Old Timer's Festival."

Their new mailing address is 2841 Waywood Drive, Murfreesboro, TN 37128. Their email addresses are unchanged.

Though it all sounds good, we'll miss them from our group and we'll hope for visits when time allows. To Mark, Amy, and Rachel, our love and prayers go with you on this new venture.

**We miss YOU!**  
**Your Radio Family**