



# Linear Lines

Trident Amateur Radio Club (TARC) Newsletter  
June 2013

## TARC Net:

Every Tuesday, 147.27 MHz PL 123.0  
7:30 PM CW practice  
8:00 PM Net

## Upcoming Events:

- June 17 Regular Club Meeting
- June 19 VE Testing
- June 22-23 ARRL Field Day  
Goose Creek Municipal Center, Hwy 52,  
Contact: Steve Lamendola
- July 1 Board Meeting
- July 15 Club Meeting
- July 17 VE Testing
- July 21 Operating Day, next to the Dive  
on Redbank Rd. Contact: Joe KJ4BNC
- August 5 Board Meeting
- August 19 Club Meeting, Nomination of  
Officers, Contact: Joe KJ4BNC
- August 21 VE Testing
- August 25 Fox Hunt, Contact: Tom  
W4DAX
- September 2 Board Meeting
- September 16 Club Meeting, Election of  
Officers
- September 18 VE Testing
- October 7 Board Meeting
- October 16 VE Testing
- October 19 Jamboree On The Air (JOTA)
- October 21 Club Meeting
- October 26 TARC Family Picnic and  
Operating Day, Cooper River Partners  
Picnic Area, Contact: Bob McLeod

## Field Day – June 22-23



Field Day 2013 is June 22-23. It will be held at the Marguerite H. Brown Municipal Center, 519 N. Goose Creek Blvd.

which is also known as Highway 52. Setup will be conducted starting Saturday morning and operation will begin at 1800 UTC (1 PM) Saturday and running through 1800 UTC (1 PM) Sunday. Tear-down will be afterwards.

Bob will be handling lunch Saturday, Vaughn will be cooking hot dogs and hamburgers with pot luck Saturday evening, and Tom's planning to cook breakfast on Sunday morning!

### Volunteers Needed!

Steven Lamendola is looking for more volunteers to help with setup and operators. Contact Steve KE4THX by email or phone 336-740-4382.

## Financial Report

Starting Balance	\$984.84
Income	\$561.50
Expenses	\$551.79
Ending Balance	\$994.55

*(Note: Discrepancy from last month's report reflects some income that was not deposited into the bank account until this month.)*

Trident Amateur Radio Club (TARC) meets the third Monday of each month at the American Red Cross at 8085 Rivers Ave # F, North Charleston at 7:30pm.  
Website: [www.tridenthams.org](http://www.tridenthams.org)

## New Member

Robert Wilhite KV4LV joined TARC at our last meeting. Please join the club in welcoming him. He got his ticket in December 2012.

## From the President:

What a great month! First we participated in the MS walk in Mt Pleasant. Linda KJ4EVV did a great job. We had good weather and the organizers and the walkers really appreciated the communications we provided. They definitely want our assistance again next year. Then on May 11<sup>th</sup> we had our third Fox Hunt. I was hiding in Summerville at a friends house with a large backyard. The hunters had trouble again finding me once they got close. We really enjoyed the fine weather and the hot dogs and hamburgers. We realize we really need to build some attenuators or practice other methods of attenuation. Tommy, AA4TB has agreed to give a demonstration at Field Day on various techniques that can be used to locate the fox once a station gets close. Then on Saturday the 25<sup>th</sup> we enjoyed Operating Day at the Naval Weapons Station. Joe KJ4BNC had a great event. What a great day and what fun we had putting up the dipole and setting up the station. We had many students and staff from the Nuclear Power Training Command visit the site and several showed lots of interest in Ham Radio. We found the tuner we were using was not working so good and when we took off the cover we found a capacitor that was loose and not tuning correctly. The generator also developed some problems. Steve KE4THX is going to fix both problems. This is why Operating Day is important. We need to find and fix these problems before we set up for Field Day or need the equipment in a real emergency. At the end of this month Joe KJ4BNC, Bob WG4R and I finished up a Technician Class for instructor staff at the Naval Nuclear Power Training school. We now have 9 new licensed hams! We will be starting new classes for students at the school in July. Of course everyone is getting excited about the upcoming Field Day at the end of this month.

Don't miss this annual event. The club website [www.tridenthams.org](http://www.tridenthams.org) has all the information about Field Day. Remember ham radio is a contact sport, make one soon.

## TARC Facebook Page

The Trident Amateur Radio Club now has a Facebook page. If you use Facebook, please go to the page and Like it! Thanks to Tom W4DAX for setting it up.

## Texting Application

The Trident Amateur Radio Club has a new way for you to keep advised of events happening with the club. If you have a text capable phone you can text **MEMBRS** to **843-325-2827**. You should receive a message to enter your first and last name. Just enter your First name and call. I will periodically send out reminders of the club meetings and other activities. If you have any questions contact Tom W4DAX.

## How Long Does an Antenna Last?

*Submitted by Bob NG4R*

How long does an antenna last? This is valuable information for new and old hams.

Well, generally it depends on hours spent listening. The antenna converts electro-magnetic energy into electrical energy, which is basically electrons moving into your radio. There are only so many electrons in each inch of copper wire, so when they've been sent downstream into your radio, the wire will become "ionized" and deteriorate and probably fall down. This explains why, when you come home one day, your antenna is on the ground. What happens to all those electrons, you ask. Well, they migrate into your radio and accumulate. In older tube radios, there was a "grid leak" resistor circuit which allowed the electrons to fall on the ground. Now you can't see them, but they're there. As more pile up, they slide into your back yard.

Tube radios, because of the "grid leak" last a lot longer than solid state radios, which stop working when enough electrons have piled up inside to short it out. Now those electrons in your back yard want to get back into the copper wire, so they "pull" the antenna down to be reunited with it. Since the antenna is high, and they're on the ground, this attraction is not strong, but on a windy day, the electrons get lifted from the ground towards the antenna, pulling it down again. The wind often brings in

free electrons from your neighbor's homes (from TVs, etc.), so there may be a lot of these things around. If too many electrons get lifted up all at once, they overload the antenna, causing a heat mark, or worse getting back into the radio. Now this is why your antenna usually falls down on windy days.

At least, that's how I understand it.

You can extend the life of your antenna by disconnecting it from your radio when you're not listening. But overall, 500 to 1000 hours spent listening will do in a long wire antenna.

If you've read this far, perhaps I should admit that this is only a JOKE!!!

## New Hams from Technician Class

Jeffery Divis	KK4RNC	Technician
Nicolas Jackson	KK4RND	Technician
Dan O'Brien	KK4RNE	Technician
Craig Opie	KK4RNF	Technician
Jonathan Rogers	KK4RNG	Technician
Karl Sault	KK4RNH	General
Mark Wess	KK4RNI	Technician
Sam Kuhr	KF5VWH	Technician
John Pavolko	KD2EEZ	General

Congratulations to all the new hams, and thanks to instructors Tom Lufkin W4DAX, Joe Chapman KJ4BNC, and Bob McLeod NG4R.

## Club attire

We have invited a lady who does embroidery to the next club meeting to show off some hats, shirts and other materials with the club logo. We think it will be much easier for her to take individual orders and not involve a club member. Come out and see what items she has available for purchase.

## Technician Class Questions

1. What do the FCC rules mean when an amateur frequency band is said to be available on a secondary basis?

(T1B08)

- A. Secondary users of a frequency have equal rights to operate
- B. Secondary users are not allowed on amateur bands
- C. Amateurs may not cause harmful interference to primary users**
- D. Amateurs are only allowed to use the frequency at night.

2. When is an amateur station required to transmit its assigned call sign?

((T1F03)

- A. At least once during each transmission.
- B. At the beginning of each contact and every 10 minutes thereafter.
- C. At least every 10 minutes during and at the end of a contact.**
- D. At least every 15 minutes during and at the end of a contact.

## Want to see something in Linear Lines?

If there's something you want to see in Linear Lines, please send it to Linda KJ4EVV before the second Monday of the month. Linear Lines tends to be created sometime in the second week of the month as time allows.