



Linear Lines

Trident Amateur Radio Club (TARC) Newsletter

Dec 2014 – Jan 2015

TARC Nets:

Every Tuesday, 147.27 MHz PL 123.0

- 7:30 PM CW practice
- 8:00 PM Net

Upcoming Events:

- Jan 5 Board meeting (all welcome)
Jan 8,13,15,20:
Technician class at MAKELAB
Jan 14 Dinner gathering
Contact: David AE4ZR
Jan 17 Charleston Marathon
Jan 19 Member meeting
Jan 21 License exam session
Contact: www.veofsc.com
Jan 24 Operating Day!

Feb 7 Charleston Hamfest
Contact: Bryce K4LXF
Feb 17 Hunley Special Event
Contact: Tom W4DAX

From the Oval Office

December has come and gone, and we have yet another year in the books for Trident Amateur Radio Club. We have had a great year, with many accomplishments, we had increase in Membership too. We held several Licensing classes producing many new licensed hams, we even had the First lady Barbara get her Technician License KM4FRD. We held several Operating days, participated in SPAR Winter Field Day & the ARRL Field Day Events, we had a couple of successful Near Space Balloon launches, and many other accomplishments and successes to numerous to list here.

Starting in 2015 so far we have plans for a **Special event station** on February 17, 2015 for The 151st anniversary of the sinking of the USS Housatonic by the **H L Hunley** February 17 1864. We also have an **Operating Day** in March, and we are looking forward to our **Spring Picnic/Fox Hunt**. Great things ahead for TARC.

I would like to thank the Board members and the membership for a wonderful successful year and I look forward to another great year full of Fun and exciting times.

Happy New Year to everyone!

73 Steve KE4THX

From The Treasurer

We have had a very good year for the club. Our financial health is doing well. We have had lots of club activities, well attended meetings and in general, lots of interest in the club. Our radio giveaway continues to do well, but before that goes stale, we are considering other items to give away.

December Birthdays!

- John Bullock KK4KBQ
- Ron Davis K4TCP
- Chris Mantooth KV4TQ
- John Thornsberry KI4HXB

January Birthdays!

- Larry Betz KI4VPS
- James Brown KK4GYF
- Joe Chapman KJ4BNC
- Mike Graham KK4YKV
- Connie Mah NR4CB
- Bob McLeod NG4R
- Robert Meyer AI4SK

Happy Birthday, all!

There is interest in giving away a kit to build and possibly a subscription to QST. As usual, come to the board meeting and give your input if you have an idea about what to giveaway. A few guidelines, the item should be under around 40 dollars and ham radio related.

Our next meeting in the new year will be on January 19th with the board meeting held Monday night the 5th. See you there!

73 Bob NG4R TARC Treasurer

“Titanium Nanotubes” For The Win!

Does your phone battery frequently die in the middle of the day, like mine does? Is that Tesla you've been eyeing just too expensive? A new technology could change both. A Chinese scientist has developed a lithium ion battery that charges in a few minutes instead of hours, and has a life expectancy of 20 years instead of 3. Standard lithium ion batteries use a graphite anode (negative end) and a metal oxide cathode (positive end), along with an additive that helps facilitate electron exchange. The new design replaces the anode with a gel made of *nanotubes* of titanium dioxide, also eliminating the need for the additive. This makes more room within the battery, increasing the amount of energy it can store. Most importantly, because it is an adaptation of the existing battery technology, it is easy to modify existing manufacturing processes. And electric car manufacturers could significantly lower their prices if they didn't have to factor in replacing the batteries every few years. The first new batteries could be on the market as early as 2016--when maybe my phone battery will finally stop dying every time I turn on location services.

Tom Lufkin, W4DAX

TARC to Host Special Event Station

On Feb 17 2015 Trident Amateur Radio Club plans to operate a special event station - **N4H** - to celebrate the 151st anniversary of the attack on the USS Housatonic off Sullivan's Island by the **H.L. Hunley** – the first sinking of an enemy ship in battle by a submarine. A QSL certificate will be sent upon receipt of a self addressed envelope and \$1 to defray costs of printing and handling. Frequencies and times will be published soon.

Here's a link to the *Post and Courier* article covering the last event:

<http://www.postandcourier.com/article/20140206/PC16/140209532>

Technician Class at MAKELAB

The Trident Amateur Radio Club will hold a Technician Class on January 8th, 13th, 15th and 20th with the test on the 21st. The Classes will start at 5:30 PM at the Makelab Charleston building at

3955 Christopher St,
North Charleston, SC 29405

The cost of the class will be \$30 for the text book from ARRL. If you have a book there is no cost for the class. The licensing exam will be given on the 21st at the Goose Creek Masonic Lodge at

145 St James Ave,
Goose Creek, SC 29445.

It is encouraged that you preregister for the exam at veofsc.com.

For information and to sign up please call Tom W4DAX at 843.608.4780 or wa4dax@hotmail.com

Want to see something in Linear Lines?

If there's something you want to see in Linear Lines, please send it to LinearLines@TridentHams.org by the second Monday of the month.

TARC Dinner Jan 14

David and Velma Merritts will host January's TARC Dinner at *Italy* in Summerville on Wednesday the 14th. The restaurant is located on Main St . next to the railroad tracks.

Good food, good conversation – what could be better!

Please RSVP to David at 4davidmerritts@gmail.com.

Beam Up a Spanner!

It is the first time hardware has been "emailed" to space.

NASA was responding to a request by ISS commander Barry Wilmore for a ratcheting socket wrench. Previously, if astronauts requested a specific item they could have waited months for it to be flown up on one of the regular supply flights.

Mike Chen, founder of Made In Space, the company behind the 3-D printer, said: "We had overheard ISS Commander Barry Wilmore mention over the radio that he needed one, so we designed one in CAD and sent it up to him faster than a rocket ever could have."

Mr Wilmore installed the printer on the ISS on 17 November. On 25 November he used the machine to fabricate its first object, a replacement part for the printer.

Nasa says the capability will help astronauts be more self-reliant on future long duration space missions.

Mike Chen added: "The socket wrench we just manufactured is the first object we designed on the ground and sent digitally to space, on the fly.

"It also marks the end of our first experiment—a sequence of 21 prints that together make up the first tools and objects ever manufactured off the surface of the Earth."

The other 21 objects were designed before the 3D printer was shipped to the space station in September on a SpaceX Dragon supply flight.

SMSgt William Leslie Corbin, KK4GCH (SK)

SMSgt William Leslie Corbin, KK4GCH 82, of Mount Pleasant, South Carolina, husband of Nelda Carolena McGee Corbin passed away on Wednesday, Dec 17, 2014.

Charles Marshall Johnston, KG4ECU (SK)

Charles Marshall Johnston, KG4ECU, 31, of Charleston, South Carolina, passed away Sunday, December 21, 2014

Excerpted from ARRL Section Manager's Report:

Tom Lufkin, W4DAX, has asked me to pass along information on the H L Hunley special event operation, N4H, which will occur on 17 February 2015. This marks the 151st anniversary of the sinking of the U.S.S. Housatonic by the submarine H. L. Hunley in Charleston SC, the first successful sinking of a warship by a submarine.

The Trident Amateur Radio Club will be operating a special event station, N4H, on February 17th from the site of the launch at Breeches Inlet, on Sullivans Island, SC. Proposed frequencies are 7.262 14.262, 28.562 MHz. To request a certificate send contact information to PO Box 60732 N Charleston, SC 29419 A certificate will be sent upon receipt of a self-addressed envelope and one dollar (\$1) cash. Complete information is available at www.tridenthams.org/hunley.htm

We have two hamfests coming up in the next few weeks. The first is the Greenwood Hamfest, which will take place this Saturday, 10 January 2015 at Piedmont Technical College's James Medford Family Event Center, 620 North Emerald Road Greenwood, SC 29646. For more details, visit: <http://w4gwd.org>

Second is the Charleston Hamfest, which will be held 7 February 2015 at the Armory Park Community Center (32.885 N - 79.993 W) 5000 Lackawanna Blvd., North Charleston, SC 29405. For more details, visit <http://www.wa4usn.org>

List of interesting web sites

(Also check out our Builder links in the last Oct/Nov issue!)

General Amateur Radio Information

ARRL <http://www.arrl.org/>

DX ZONE <http://www.dxzone.com/>

Ham radio. Com <http://www.ham-radio.com/>

Ham Gate <http://larc.hamgate.net/hamradio.htm>

Ham Universe <http://www.hamuniverse.com/repeater.html>

general and mobile info <http://k0bg.com/>

QRZ.com <http://www.qrz.com/>

test prep at qrz.com <http://qrz.com/hamtest/>

QRZ Now.. <http://qrznow.com/>

QTH.com <http://swap.qth.com/>

REPEATERS

new user guide <http://www.hamuniverse.com/repeater.html>

ELECRAFT <http://www.elecrafft.com/>

WIKI http://www.amateur-radio-wiki.net/index.php?title=Main_Page

Software By W1HKJ & Associates

HFLINK is an international resource for HF communications.

<http://hfink.com/olivia/> olivia info

List od NETs in general

<http://ac6v.com/nets.htm#PORT>

AC6V.com this web site has a large number of other entries which are interesting

<http://ac6v.com>

W9PE's FREE HAM CRAM COURSE free tech class and cw trainer

<http://www.w9pe.us/>

QRP When less is more... <http://www.mtechnologies.com/pubs/qrp.htm>

K3WWP QRP and CW site

http://home.windstream.net/johnshan/contest_ss_tips.html

Milestone Technologies <http://www.mtechnologies.com/>

Entry level kits, tools, parts and equip & CW stuff

All in One Software control of your radio, digital modes, logging and more..

<http://www.ham-radio-deluxe.com/>

DIGITAL MODES

FLDIGI <http://www.w1hkj.com/>

Digital Voice <http://freedv.org/tiki-index.php>

http://hfradio.org.uk/html/digital_modes.html

<http://www.nonstopsystems.com/radio/radio-sounds.html>

<http://www.nonstopsystems.com/radio/radio-sounds.html>

<http://www.oliviamode.com/index.htm>

KITs

digital interface

[http://www.dxengineering.com/parts/ums-sci-6?](http://www.dxengineering.com/parts/ums-sci-6?seid=dxese1&gclid=Cj0KEQiAwPCjBRDZp9LWno3p7rEBEiQAGj3KJj4pTcbCWSkDtCIFqnSA3jt72luax5tUmIiW4H5Y91kaAr8n8P8HAQ)

[seid=dxese1&gclid=Cj0KEQiAwPCjBRDZp9LWno3p7rEBEiQAGj3KJj4pTcbCWSkDtCIFqnSA3jt72luax5tUmIiW4H5Y91kaAr8n8P8HAQ](http://www.dxengineering.com/parts/ums-sci-6?seid=dxese1&gclid=Cj0KEQiAwPCjBRDZp9LWno3p7rEBEiQAGj3KJj4pTcbCWSkDtCIFqnSA3jt72luax5tUmIiW4H5Y91kaAr8n8P8HAQ)

Google <https://www.google.com/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#tbm=shop&q=ham+radio+kits+to+build>

Ramsey kits <http://www.ramseyelectronics.com/b/6290131011>

ebay..

http://www.ebay.com/sch/i.html?_nkw=hf%20transceiver

[%20kit&clk_rvr_id=741023048294&adpos=1o3&MT_ID=69&crp=32362490268_2416792&device=c&geo_id=10232&keyword=hf+transceiver+kit&crdt=0](http://www.ebay.com/sch/i.html?_nkw=hf%20transceiver%20kit&clk_rvr_id=741023048294&adpos=1o3&MT_ID=69&crp=32362490268_2416792&device=c&geo_id=10232&keyword=hf+transceiver+kit&crdt=0)

TARC Board Meeting Minutes

05 Jan, 2015

1908- Steve opened the meeting with a round of Happy Birthday to Bob!

Pres. Steve-

Vice Pres. Joe- Nothing

Tres. Bob- Noted receiving moneys from David. \$2k+

Sec. David- Gave Bob \$40 in cash and a \$20 uncashed check found in box of TARC stuff Vaughn gave him @ turnover of Secretary position. Steve is thinking insurance is good through March 2015

Media Reports

Linear Lines, Robert- Robert will need someone to take over doing the Linear Lines. Dec/Jan will be collecting input with email sending out tonight and will put it together this weekend. Need input on/by this Friday

Old Business

Bylaws- Steve noted Tom was absent, looking for update.

New Business

- Steve wants to change up Club meeting to be quick business synopsis then do lectures & possibly several group lectures running at one time.

-Bob likes this idea and added thinks like his Treasurers report could go up on web page to save Membership meeting time.

-Dave liked the web idea.

-Joe asked if we could put the agenda together prior to Board meeting for members to review allowing them to act on it during the Board meeting.

-Bob thinking we should go away from giving away HT's and maybe go with something like a AARL handbook/training manuals, kits... Steve thought maybe have several items and let raffle winner pick what they want. Bryce has access to manuals and can make them available to TARC for the this as a prize. David suggested HT accessories. Ron liked kits.

Bob's Email Article- "Turbo Charge your local club" that was attached to Meeting agenda. Joe suggested we need to make a decision as the board if this is to be used so meeting doesn't become bogged down in back & forth. Bob liked this and restated that input would be at the board meetings not membership meeting. Steve asked and everyone present agreed with this path.

-Bob said ARRL is there to help us promote Ham Radio. Have done things like prized for tailgate events & Keep ham alive during slow times like war time, WWII. Ken asked about this, Joe talked a little about ham usage during wartime and Steve thought it would be good for a meeting lecture. Ken volunteered to do it "Ham during WWII" talk. Ken has some CW keys from that era that he could be shown. Will table the "when" till next board meeting.

-Bob mentioned Bronson Missouri ORB Con that had a kit building night. It will be 10th/11th April 2015. QRP is another lecture topic & possible kit build.

-Joe asked if we wanted to do Digital, Bob said it's a big part of the fun for DXing with low power, nominal antennas needed. Joe said Digital has multiple sides; making the Tech side work, OLIVIA is becoming chat mode but hard to find as it isn't on any set freq. Robert said it could be done in phase over several meetings. Joe said could do initial 15 min presentation followed by build group breakouts after the formal meeting. We are getting enough people at the membership meetings now that we can start doing break-out groups for people to join what they find interesting.

-Steve mentioned Skip Teller K6HTY could come in for FL Digi talk. APRS, Satellites would also be good topics. Survey members @ meetings, emails.. Steve asked that Everyone should bring ideas to next meeting.

-Steve suggested, club could pick a contest then the group could work that contest. Ron thought this would be a good experience... Joe thought it would build confidence for members. Dave mentioned Winter Field Day meeting weekend of 24th is the same day as our Operating Day... unconfirmed location at the Makers Group location on Rivers Ave. but we can think about other places. Joe likes the Red Cross building. St. James storage unit was a location Steve is working contacts with. Steve also suggested maybe a school would let us do an event on their site. Dave said maybe Ladson fairgrounds but we haven't been back because of paperwork nightmare. Ron mentioned the Foxhunt location Tommy used in Hanahan.. Joe suggested firehouses. Joe has a in at Old Fort house.

-David was asked to get CARS Hamfest info in email from 07th Feb (1st Sat in Feb)... get details from CARS website.

Field Day- Steve has paperwork all set and will plan on location being in Goose Creek town hall on 52. Ron mentioned having Mayor doing proclamation again.

Tailgate- Ron said last year it was April at Masonic Lodge everyone like the location. Bob said we needed more publicity. Saturday works better. Shooting for 25th April 2015, but Ron will double check it's a good date. Robert suggested ARRL will help with maybe some giveaways. Joe said we had to submit to ARRL this month. Tom has a contact that for Masonic Lodge... Joe thought we may want to line up with the lodges breakfast day for our Tailgate date.

Hunley Event- Tom was checking with Ed Pagent, Joe was told Ed couldn't find the cards. Joe suggested we do new cards, Bob confirmed we do the cards with Hunley on it. Dave suggested we do a print on demand. Steve wanted to be conscious of lead times. Steve asked Ron to work on the card design with Hunley line drawing worked into the design. Steve wants to workout the start/end times at the Breech Inlet and when will we keep working it from off site stations. Ron asked about news coverage. Joe thought Rob Fowler News2 may be a good contact. Joe and Steve are working on prepping the trailer & will have indoor operating capabilities for the Hunley event. Joe mentioned Mil Surplus aluminum 50' maste.

Closing Statements

Dave- 14th is dinner meeting, only has 7 RSVPs. TARC is support of VE test session. Tony, Robert/Ann Johnson are dropping out and Dave will be taking it over in Feb 2015. This will take up most of his time. He will need volunteers from the Extra License holder in the club. They need to register & help. Joe also mentioned Extras can help with Tech testing.

Ken- Looking forward to putting together a presentation re: Ham & WWII

David- Working on a Riverdogs game day membership drive event. Asked if anyone had any contacts inside the Riverdogs organization. None where know of.

Steve- None

Joe- Doing list of Websites that could be added to TARC website.

Robert- Does web service have email addresses, suggested setting up Linear Lines address

Bob- Only paid one web name bill but

Ron- Thought Survey Monkey would be good to blast out to members. Everyone liked the idea. Bob thanked Ron for his good input and willingness to get involved. Robert suggested fine tuning survey before sending out to club and Ron thought doing test on. Ron introduces Andrew KB9WHV who is an Extra class license.

Bryce- Is on the CARS Hamfest committee and offered a free table TARC at the event.

2050 Steve motioned to adjourn & Ken seconded it.