



News from



The GLORIOUS SOCIETY OF THE WORMHOLE

September 2017

Hello Worms

For those who cannot hit the Wormhole repeater from the meeting area and north the Honeywell club invited us to use theirs. So in addition to monitoring our repeater we will also monitor the Honeywell club repeater on 443.050 + 103.5. Give us a call if you need information or directions.

Well August presented us with a few interesting things. We broke a high temperature record a week ago. It is never good to be breaking weather records. The section had a SET (Simulated Emergency Test) to test the ability of county EOCs to contact each other using simplex VHF and HF. The results were not particularly impressive so I will leave it there. It did prompt Hillsborough ARES/RACES has started a VHF simplex net to run on Wednesdays at 1930 on 146.30.

For those who have not heard, the MOSI (Museum Of Science and Technology) club had disbanded. MOSI has closed the upstairs area where the club display was located due to financial troubles. With no public display the club could not perform its charter. In the future MOSI will be closing the current building across from the University of South Florida and moving to a new facility in the downtown Tampa waterfront area. The MOSI club want un-invited to move. So, no current purpose and less in the future spelled the end of this amateur radio public demonstration. The only one I am aware of in Florida.

We had a TARCfest. Some muddy but most had a good time. TARC tested three people afterward. One passed both Tech and General, one upgraded to General and one upgrade to Extra. Always nice to have everyone pass.

Hillsborough ARES/RACES had a license class and fourteen of the sixteen students passed. Not too bad and both failures said they would study and try the test again.

Of course we had the eclipse. The total eclipse was only visible in the U.S.A. It was the first total eclipse visible only in the USA since the country was founded in 1776. It was nice of the sun and moon to pick us. 2024 and 2044 are the next total eclipses to visit the US mainland. There were several amateur radio propagation tests run before, during and after the eclipse. I have not seen any of the results yet. If you have an interest in seeing lots of pictures from all over the country go to the Space Weather website at <http://spaceweathergallery.com/index.php?title=sprite> . One interesting thing is a group released 11 balloons and took high altitude photos of the earth as the moons shadow passed over. Sort of reverse eclipse photos.

Some are located at

<https://www.facebook.com/spaceweatherdotcom/photos/pcb.1889246264659089/1889245234659192/?type=3&theater>

And finally a nasty hurricane visits Texas. I wish no one harm but am very glad it went there and not here.

The five day weather forecast is always wrong but you can figure on a 50% chance of rain, a low of mid to high 70s and a high of low to mid 90s.

Bring a folding chair if you have one.

APPLE URGED TO ENABLE EMERGENCY LOCATION TOOL

INFOPACKETS by John Lister on August, 16 2017

Apple stands accused of failing to enable a potentially life-saving iPhone technology. Advanced Mobile Location (AML), already used in Android handsets, lets emergency services staff know precisely where a caller is located.

The accusation comes from the European Emergency Number Association (EENA), which coordinates the European equivalent of 911 call technology. It already works with Google on AML, which is credited with saving multiple lives.

The idea of AML is that it doesn't require any special action on behalf of the user: there's no need to change settings or install dedicated apps. Instead it is automatically triggered whenever the user dials the relevant emergency number.

Once AML kicks in, the phone will automatically switch on WiFi and GPS, get a precise location and then send the location in a text message to emergency services. They can then use the phone number to match these details to the emergency call, helping response staff know exactly where to go.

The system can track a user down to a six meter radius and even locate an individual apartment in a tower block. That compares to simply using the details of the cell towers that relayed the call, which can be as imprecise as a search radius of nearly 10 miles.

According to EENA, some of the incidents that have already benefited from AML include: hikers who didn't know where they were located; a woman who hit her head while riding a horse, made an emergency call, but wasn't clear-headed enough to describe her location; a seven-year old child who found his father unconscious but didn't know his full address; and a suicidal caller who wouldn't give their location but AML revealed they were on train tracks. (Source: eena.org)

EENA says that so far Apple has not responded to its calls to discuss enabling the technology. It argues that were iOS to carry the feature as well as Android, then 96.8 percent of phone owners in Europe would be covered.

In the meantime, EENA is recommending that users install special apps that have a similar response. However, it insists that AML is the best solution as it covers people who have never thought about such a situation occurring.

According to EENA, the work involved in adding AML to iPhones would not be trivial, but "deploying AML is not an overly complicated task for an operating system provider." (Source: thenextweb.com)

ARRL FINALLY REALIZES STATUS QUO ISN'T GOING TO CUT IT

By Dan Romanchik, KB6NU

An item in the July 2017 ARRL board meeting caught my attention. It notes that a committee of staff members was tasked with identifying the challenges facing ARRL and possible solutions. The August 3, 2017 issue of the ARRL Letter ran the following report:

“ARRL Chief Executive Officer Tom Gallagher, NY2RF, presented the report of six Headquarters staffers who had been tasked with identifying the challenges facing ARRL and devising feasible solutions. Specifically, the committee addressed market research findings that have continued to reveal that only a small percentage of new hams join the League, and only about one-half of new hams actually get on the air.

“The committee began with the premise that ARRL must act in order to remain relevant going forward. It proposed instituting a Lifelong Learning Program to focus on developing a clear developmental path for all radio amateurs, from newcomers to established radio amateurs. The committee recommended the creation of new programs and services to increase the knowledge base of newcomers in order to get them active, as well as programs to keep experienced amateurs up to date with changing technology and practice.”

The board meeting minutes were a little more detailed:

“Mr. Roderick yielded the floor to CEO Gallagher who presented the report of a committee of staff members tasked with identifying the challenges facing ARRL and possible solutions. The members of the committee – Diane Petrilli, KB1RNF; Norm Fusaro, W3IZ; Becky Schoenfeld, W1BXY; Debra Jahnke, K1DAJ; Steve Ford, WB8IMY; and Sean Kutzko, KX9X, joined the meeting at 9:20 AM, to present this report. Their findings show the importance to ARRL of getting newly licensed hams actively on the air and

how that relates to continued growth of the organization. In order to achieve that goal, the committee proposed developing a lifelong learning department, which would address the needs of all amateurs with the focus being on developing a clear knowledge path for all amateurs. They proposed creating straightforward programs and services to enhance the knowledge base of new amateurs as well as to enhance their sense of community within the hobby.

“Another recommendation involved refocusing the priorities of the emergency preparedness department to address the current trends in public service.

“A third recommendation was to improve the value proposition of membership. The committee proposed doing a survey, which would include test material that is targeted to the interests of newer hams. The content would include a strong emphasis on serving communities, agencies, and partners; digital communications, and human interest. Projects would be simple. The survey would obtain information on new ham’s interests and needs in the hobby. The survey would also try to determine the delivery system that might best meet the newcomer’s desire for receiving this type information (print, digital, messaging, etc). The test material is proposed to be delivered to recipients in fall 2017.

“From the committee’s vantage point, **the status quo is no longer adequate: we need to have a vision of the future and convey it to our current membership** [*emphasis is mine...Dan*]. If we do not convey the need to change the paradigm, the ARRL’s relevancy will not move forward.”

The good thing here is that the ARRL finally realizes that there are some serious problems. I’ve written about these in the past. I’ve challenged the ARRL to set a membership goal of 25% of the licensed amateurs in the U.S (<http://www.kb6nu.com/arrl-membership-is-25-asking-too-much/>). I’ve also encouraged the ARRL to play a bigger part in emergency communications research (<http://www.kb6nu.com/go-big-go-early-go-fast-smart/>).

Unfortunately, it appears that the ARRL is approaching this issue in typical ARRL fashion. That is, working on these issues in their little cocoon in Newington and

then issuing these statements as if they expect everyone to just fall in line. I quote, “From the committee’s vantage point, the status quo is no longer adequate: we need to have a vision of the future and convey it to our current membership.” That approach is doomed to failure. Any “visioning” or strategic planning that doesn’t get the membership involved right from the start just isn’t going to work.

The ARRL HQ staff just doesn’t have the horsepower to pull this off properly. The staff is already pretty bare bones, and they still have to publish QST every month, keep Logbook of the World running, process thousands of license applications, etc., etc. The only way this is going to be a fruitful effort is if they get members—and lots of them—involved in this process.

If you agree with me, please let your director know. Contact your director and tell him that you want to be involved. The status quo of having the HQ staff not working with the membership “is no longer adequate.” That's how we got here in the first place.

Dan, KB6NU, is the author of the “No Nonsense” amateur radio license study guides and blogs about amateur radio at KB6NU.Com. You can email him at cwgeek@kb6nu.com.

* SOLAR AFFECTS AND DEFINITIONS PART 2*

Last article described The Sun, Solar Wind, Earth's Magnetic Field, Sunspots, Sunspot Numbers and Smoothed Sunspot Numbers. Is there more? Plenty, more than I can tell you. However, we can look at a few more items.

SOLAR FLUX. This is an interesting one. It can get quite involved, but knowing the basics will give you an idea of our propagation performance.

This measurement has been in use since the late 1940s. It can also be called Solar Radio Flux. The quiet Sun emits radio energy across a broad frequency spectrum, with a slowly varying intensity. Solar Flux is a measure of energy received per unit

time, per unit area, per unit frequency interval. There is a degree of correlation between solar flux values and sunspot numbers.

Energy measuring solar flux is in joules. Solar flux is measured daily at 2800 MHz (10.7 CM). This is a standard used for predictions. However the Sun emits more energy at higher frequencies up to 15.4 GHz. However, the daily 10.7 CM value is sent to WWV where it makes its propagation bulletins. This is more accurate a prediction than counting sunspots.

IONOSPHERE. This area is from 25 to 200 miles out. You can't live up there without protective gear.

The atmosphere is at such a low pressure that the gases break up into electrons and positively charged ions. The amount of charge is affected by the Sun's variety of radiations.

This in turn results in fairly distinct layers of ionization, each with different characteristics. These layers are parallel to the earth's surface and are regularly changing.

THE D LAYER. This lies between 37 to 57 miles out. This is a relatively low dense part of the atmosphere. The atoms at this altitude break up into ions by the Sun and recombine quickly. Therefore, ionization starts at sunrise, peaks at noon and disappears at sundown. Energy going through this section can be used up as heat. One of the reasons our longest wavelength bands, 160 and 80 meters are quiet during the day.

The D layer is ineffective in bending HF waves back to earth. Not good for long distance skip. This is one of the reasons frequencies up to 7 Mhz during daylight hours has a very short skip. Something to keep in mind when needing the short skip for emergency communications.

The ionosphere has other layers that will be presented in a future article.

73,
Ralph WD0EJA www.isotronantennas.com

* NEW MALWARE USES PC TO MAKE MONEY *

INFOPACKETS by John Lister on August, 23 2017

Hackers could use your computer to literally make money. That's thanks to an unusual malware attack that doesn't involve any files, making it harder to detect.

The "Coinminer malware" takes advantage of a Windows and browser bug nicknamed Eternal Blue. That's the same bug that was exploited in several high-profile ransomware attacks recently. While Microsoft has issued updates, it seems some users haven't installed the security patches.

One big problem with the Coinminer malware is that it works in the computer's memory, rather than as a file or program in its own right. This makes it much harder to find through computer scans that check through the files of a drive at scheduled intervals and look for ones which match a list of known rogue files. (Source: zdnet.com)

The other unusual element of Coinminer is how it is used. Unlike many malware examples, it's not about accessing data on the victim's machine or about acting as a weapon to attack other computers.

Instead, it installs and runs software for what's known as "cryptocurrency mining." Cryptocurrency, the best known example of which is Bitcoin, is a virtual currency that exists only online. It works by computers working together to create and maintain a record of every transaction made using the currency. This removes the need for banks and makes it hard, if not impossible, to 'steal' money.

The process of computers adding and verifying entries in the record is known as "mining." The workload is spread across all the computers, with users rewarded by being paid in units of the cryptocurrency. This is also how the 'money supply' grows at a controlled rate to reduce the risk of inflation.

Coinminer works by hijacking the resources of victim computers for this mining, with the criminals collecting the bonus currency units, which they can then sell online in exchange for real world cash. In other words, the malware is not only

using a computer's processing power - drastically affecting performance - but earning cash for the criminals. If left undetected, it will end up creating a larger energy bill as well.

For the average home user, the best response to Coinminer is to confirm that all Windows security updates have been installed and to run a scan of the computer for malware on a regular basis. (Source: bleepingcomputer.com)

CLUB MEETING

The next club meeting is September 2nd. We meet on the first Saturday every month at 11:00 Saturday morning at the Minnreg Building located at 6340 126th Ave N, Largo. Talk-in is on the Wormhole repeater system. For those coming to the meeting who cannot hit the repeater we will be monitoring 146.520 simplex, the national calling frequency. We will keep an eye peeled for you. We will take advantage of the cooking facilities with an after-the-meeting Social and Wormdog picnic.

CLUB NETS

Check in on the club net Thursdays at 1930. 442.625 + with a 146.2 tone or the 2M side at 146.850 – also with a tone of 146.2. We are always looking for volunteers to be the net control operator. Anyone interested, talk to one your club officers.

LOCAL NETS

MONDAY

1730 147.030 + Receiver sites and tone info <http://www.qsl.net/wd4scd/>

St Pete Yacht Club ARC St Petersburg

1830 147.060+ no tone St Pete ARC daily net St
Petersburg

1900 144.210 USB CARS, vertical polarization
Clearwater

1900 147.135 +146.2 Zephyrhills ARC
Zephyrhills

2000 147.165+ 136.5 Brandon ARS from
Brandon

2000 50.135 Pinellas ARK
Pinellas County

2030 NI4CE system EAGLE Net, NTS traffic net, NI4CE
system

2030 145.450 Pinellas ARK
Pinellas County

TUESDAY

1830 147.060 no tone St Pete ARC daily net from St
Petersburg

1900	50.200 USB Brandon ARS	6M net	
1900	28.450 Clearwater	WCF section net	
1900	NI4CE system system	WCF Section VHF ARES	NI4CE
1930	145.170 & 442.4 both pl 156.7	Pinellas ACS net	Clearwater
1930	444.900 +141.3	Sheriff's Tactical ARC	Tampa
2000	NI4CE system system	WCF Skywarn net	NI4CE
2000	147.105+ 146.2 Tampa	Tampa ARC net	from
2000	28.365 USB ARS	simplex	Brandon
2030	NI4CE system system	EAGLE Net, NTS traffic net	NI4CE
2100	28.465 USB	10/10 net	from Orlando
WEDNESDAY			
1930	146.30 simplex net from Tampa	Hillsborough ARES/RACES	
1830	147.060 no tone Petersburg	St Pete ARC daily net	from St
1930	52.020 simplex Petersburg	Suncoast 6'ers	from St
1930	NI4CE system system	WCF Section Digital Info Ne	NI4CE

2000 147.105 146.2 Tampa	Greater Tampa CERT net	from
2000 146.97- 146.2 Clearwater	Clearwater ARS	from
2030 NI4CE system system	EAGLE Net, NTS traffic net	NI4CE
2100 NI4CE system	Tampa Bay Traders Net	non-affiliated

THURSDAY

1800 146.52 simplex Tampa	Hillsborough ARES/RACES	North
1830 147.060 no tone Petersburg	St Pete ARC daily net	from St
1900 444.750 +146.2 Tampa	Fusion net	from
1930 146.850- & 442.625+ both pl 146.2 Petersburg	Wormhole	from St
1930 146.6385 -127.3 Lakeland	Lakeland ARC	from
1915 224.660- no tone Petersburg	St Pete ARC	from St
2030 NI4CE system system	EAGLE Net, NTS traffic net	NI4CE

FRIDAY

1830 147.060 no tone Petersburg	St Pete ARC daily net	from St
2030 NI4CE system system	EAGLE Net, NTS traffic net	NI4CE

SATURDAY

0830 3.911 (7.281 Alt.)+/- QRM WCF Section HF Net from
Pinellas County

1830 147.060 no tone St Pete ARC daily net from St
Petersburg

2030 NI4CE system EAGLE Net, NTS traffic net NI4CE
system

SUNDAY

1830 147.060 no tone St Pete ARC daily net from St
Petersburg

1930 NI4CE system WCF Section Net NI4CE
system

2000 147.550 simplex 550 Simplex Net
Pinellas County

2030 NI4CE system EAGLE Net, NTS traffic net NI4CE
system

2100 144.210 USB Clearwater ARS vertical
orientation

FOR SALE / WANTED

Anyone having something for sale or who might be looking for an item let me know. I will not print phone numbers or email addresses unless specifically told to since this newsletter might end up on the web. The exception is when I get the information off the web. If you are a member of the Wormhole then you have all the information you need on a club roster and if you are not a member .. why not? OK, if you are not a member you can contact me at the email address at the end of this newsletter, I will give you the information to contact the person involved.

FOR SALE, WWII Xceiver RT-68 & Power Supply with connecting cable, includes original manual all in very good condition, No idea of operating condition, trying to find a good home.

Free local pick up, St. Pete Beach Fl. Pictures here:

<https://forums.qrz.com/index.php?threads/wwii-xceiver-rt-68-local-pick-up.573447/> and here: <http://bunkerofdoom.com/mil/rt68/index.html> , contact Jack at w4grj@arrl.net

FOR SALE, Mosley TA-33M beam with the 40M add on kit. Antenna is on the ground and in good shape. There are several parts that need replacement. The 40M kit is new in box. Antenna is broken down into six or seven feet sections so easy to handle. Asking \$400, talk to me, Bill AG4QX at arrl dot net of see me at the meeting.

FOR SALE, 13 element, 14.5 ft 220 beam. Wormhole property, \$20, contact Bill AG4QX or any other officer. **Free to any Wormhole member or other club.** Pickup at Bill's house.

HAMFESTS

2017

- September 9** Lakeland, The Revolution Church of Lakeland, 7315 Kathleen Road, **Talk-In:** 146.685 - 127.3, **Contact:** Kevin Rought , N4KWR @ 863-393-4336 or N4KWR@arrl.net, <http://lakelandarc.org>
- September 23** Pasco County Hamfest, Gunn Highway Flea Market, 2317 Gunn Highway, Odessa, \$3, Talk-In on 145.350- 146.2, <https://groups.yahoo.com/neo/groups/sarcmail/info?yguid=243291920>
- October 13-14** Melbourne, Florida State Convention, Melbourne Auditorium, 625 E. Hibiscus Blvd., **Talk-In:** 146.85- 107.2, <http://www.pcars.org/>, no info on website yet.

- October 21** New Port Richey, Millennium Academy 10005 Ridge Road, Talk-In on 146.670, Contact: Chris Bloxsom , AA4CB @ 727-484-8099 or AA4CB@arrl.net, <http://gulfcoastarc.org>
- October 28** Palm Harbor, Upper Pinellas ARC, this is rumor, nothing on their website <http://w4afcuparc.wixsite.com/uparc>
- November 11** **SPARCFest, Pinellas Park, SPARCFest, FREE, Freedom Lake Park, 9990 46th St N, Southeast corner of US 19 and 49th Street, Talk-in on 147.060+ no tone. VE testing at 0900. For more information go to <http://www.sparc-club.org/sparcfest.html>**
- December 8-9** **Plant City, the 2017 Tampa Bay Hamfest is the West Central Florida Section Convention, Friday and Saturday, at the Expo Building in the Strawberry Festival grounds, for information contact Bill Williams AG4QX, chairman@fgcarc.org or go to <http://www.tampabayhamfest.org> or you can just ask me, Jim or Dee ;-)**
- February 9-11** **Orlando Hamcation, Central Florida Fairgrounds, 4603 West Colonial Drive, Tickets \$13 in advance, \$15 at door. Talkin 146.4760 - no PL or D-Star 146.850 -, all the information at www.hamcation.com or call 407-841-0874**
- February 24** **West Central Florida Section Technical Conference (3rd Annual TECHCON), Winter Haven, Polk County Emergency Operations Center 1890 Jim Keene Blvd. [Looking for presentations and displays.](#) Talk-In 146.985, 444.625, 443.900 or 444.950, P1 for all 127.3. For info see <http://www.arrlwcf.org/> or contact Darrell Davis KT4WX at kt4wx@arrl.net**
- May 26** **WormFest 2017, Pinellas Park, FREE, Freedom Lake Park, 9990 46th St N, southeast corner of US 19 and 49th Street, 33782. Park opens at sunrise, hamfest starts at 0800**

Talk-in on 442.625 + or 146.850 – both with a tone of 146.2.
For a map and directions see
<http://www.TheWormholeSociety.org> .

Mid January	Frogman swim in Tampa Bay. http://www.tampabayfrogman.com/
Last full weekend January	Winter Field Day, http://www.sparhams.org/index.php
Late January	Gasparilla celebration
March/April	MS Walks
March/April	Mass Casualty Exercises
Late April	Southeastern VHF Society Conference, http://www.svhfs.org
Late April	Walk For Babies (was March of Dimes)
Late April	Florida QSO Party
Mid-May	Annual Armed Forces Crossband Test
Early to Mid May	MS 150 bike ride http://bikeflc.nationalmssociety.org/site/TR?fr_id=28207&pg=entry
Mid-May	Florida Hurricane Exercise
Late May	Wormfest
Early June	Museum Ships on the Air
Fourth weekend in June	Field Day http://www.arrl.org/contests/announcements/fd/
July 3/4	Midnight Run in Largo http://www.kiwanismidnightrun.com/
August	International Lighthouse/Lightship Week https://illw.net/
October, 3 rd weekend	JOTA, Scout Jamboree-on-the-AIR
Early December	ALS bike ride in Walsingham Park
December, first full weekend	Ride & Run With The Stars in Fort DeSoto Park

December, Second full weekend

Tampa Bay Hamfest <http://www.fgcarc.org/>

YOUR WORMHOLE OFFICERS

Bill AG4QX is President and editor of this newsletter, Vice-President is Mike K4ZPE, Treasurer is Jim KD4MZL, Paul KA4IOX is the Secretary, Dee N4GD is the Repeater Trustee and Neil W4NHL and Mike K4ZPE are our club webmasters.

YOUR WORMHOLE REPEATERS

442.625 + PL 146.2

146.850 - PL 146.2

The Wormhole repeaters are both now dual mode Yaesu DR-1X. FM analog as always and now Yaesu Fusion, a C4FM/FM digital mode. The repeater crew updated the software on May 3, 2016.

The Wormhole website is at: <http://www.TheWormholeSociety.org>.

West Central Florida Section website: <http://www.arrlwcf.org/>.

The ARRL website is at: <http://www.arrl.org/>

This newsletter is written for The Glorious Society of the Wormhole, an ARRL affiliated amateur radio club located around the Seminole section of Pinellas County Florida. Anyone wishing to be added or removed from The Glorious Society of the Wormhole mailings please write to me at the address below and thy will be done.

73,

Bill Williams

AG4QX

ag4qx AT arrl DOT net