News from

THE GLORIOUS SOCIETY OF
THE WORMHOLE

August 2017

Hello Worms

Fifty percent chance of rain, sounds like a great day for the meeting. Actually if the weather forecast for Saturday is as bad as the one for Monday, Tuesday and Wednesday then it will probably snow.

The FCC has made some changes in the Part 95 service. This service includes low power communications including the personal radio service; CB, FRS and GMRS radio services. The rules changes are too long to print here so if you have an interest click here to get a FCC document describing all the changes https://apps.fcc.gov/edocs_public/attachmatch/DOC-344617A1.pdf. The ARRL article on this change is located at http://www.arrl.org/news/fcc-personal-radio-service-revisions-will-affect-gmrs-frs-cb-other-part-95-devices

Bring your folding chair if you have one.

* HOW TO COPY CW IN YOUR HEAD*

By Dan Romanchik, KB6NU

The second most common question that I get about CW is, "How do I learn to copy in my head?" When I get this question, I give, what to some, is a very unsatisfying answer.

One day, I just went cold turkey. I put down the pencil and paper and never copied letter-by-letter ever again.

Carlo Consoli, IK0YGJ, author of ***Zen and the Art of Radiotelegraphy*** (http://www.qsl.net/ik0ygj/enu/ZART_r20101008m.pdf), says that what operators need to do is to program themselves to copy in their heads. He counsels operators to practice relaxation and visualization exercises. Visualize yourself as a high-speed operator, and maybe one day you will be one.

This approach seems to have worked for Consoli. He is a member of the Very High Speed Club (VHSC), First Class Operator's Club (FOC), and has been clocked at copying over 70 wpm. I'm not sure that this is really going to work for everyone, though.

Another approach is touted by Carl, N7AGK. On his website, Carl writes, "I have created a program to assist you in learning to copy Morse code in your head. Everything you need will be contained on a single USB flashdrive that I will provide to you. In the program there are audio Morse code presentations followed by a visual display. The visual display shows the information in large print and upper case letters. The visual display verifies that you have received the Morse code correctly." Carl's program costs $20 and is available from n7agk.com.

Zeb, HB9FXW, has created a free web application called Seiuchy (http://www.kb6nu.com/let-walrus-help-copy-head/) to help people learn head copying. Seiuchy, which Zeb says is Japanese for walrus, simulates on-air contacts. The trick to using this app is that instead of copying exactly whats sent, you only copy the most important bit of information. The idea is that if you train yourself to do this, then you can concentrate on what's important rather than getting bogged down in copying what's not important.

A different take on head copy was sent in by one of my blog readers, Bill, W3MSH. He wrote, "I was a CW op for many years and discovered something fascinating. I first began to hear "dots and dashes", then letters, words, sentences and at 35+ wpm, thoughts in my head."

I think Bill may have hit the nail on the head with this comment. I like the idea that copying code in your head is more akin to generating thoughts than it is to copying individual characters or words. Everybody talks about how getting faster is about moving from copying individual characters to copying words to copying entire sentences. I've never thought of it that way, although I was at a loss as to how to describe how I do it. I

think the idea that when copying in your head, the code creates thoughts directly is a beautiful way to put it.

Isn't that what's happening when you talk to someone? When someone talks to me, I don't consciously parse the sentences and then analyze them to see what was just said. It's more of an unconscious process. The sounds being uttered are creating ideas in my head.

Shouldn't we approach head copy in the same way? Instead of thinking about head copy as the process of writing down the characters on an internal blackboard to be read later, it should be about translating the sound of the Morse Code directly into concepts. The sounds "dah di dit…dah dah dah….dah dah dit," should conjure up the image of a poodle or a pitbull, not the letters "D O G."

How that translates into a program or a method for learning to copy the code in one's head is another matter. It might be worth thinking about, though.

Dan Romanchik, KB6NU, is the author of *The CW Geek's Guide to Having Fun with Morse Code* and the *No Nonsense* series of amateur radio study guides. When he's not head copying on 30m, he blogs about amateur radio at KB6NU.Com

JUDGE SAYS FACEBOOK CAN TRACK YOU

theguardian Tuesday 4 July 2017

A judge has dismissed a lawsuit accusing Facebook of tracking users' web browsing activity even after they logged out of the social networking site. The plaintiffs alleged that Facebook used the "like" buttons found on other websites to track which sites they visited, meaning that the Menlo Park, California-headquartered company could build up detailed records of their browsing history. The plaintiffs argued that this violated federal and state privacy and wiretapping laws.

US district judge Edward Davila in San Jose, California, dismissed the case because he said that the plaintiffs failed to show that they had a reasonable expectation of privacy or

suffered any realistic economic harm or loss. Davila said that plaintiffs could have taken steps to keep their browsing histories private, for example by using the [Digital Advertising Alliance's opt-out tool](#) or using "incognito mode", and failed to show that Facebook illegally "intercepted" or eavesdropped on their communications.

"Facebook's intrusion could have easily been blocked, but plaintiffs chose not to do so," said Davila, who dismissed an earlier version of the five-year-old case in October 2015.

Clicking on the Facebook "like" button on a third party website – for example, theguardian.com – allows people to share pieces of content to Facebook without having to copy and paste the link into a status update on the social network.

When a user visits a page with an embedded "like" button, the web browser sends information to both Facebook and the server where the page is located. "The fact that a user's web browser automatically sends the same information to both parties does not establish that one party intercepted the user's communication with the other," said Davila.

The plaintiffs cannot bring privacy and wiretapping claims again, Davila said, but can pursue a breach of contract claim again.

Australian internet security blogger Nik Cubrilovic first discovered that Facebook was apparently tracking users' web browsing after they logged off [in 2011](#). Responding to Cubrilovic, Facebook engineer Gregg Stefancik confirmed that Facebook has cookies that persist after log-out as a safety measure (to prevent others from trying to access the account) but that the company does not use the cookies to track users or sell personal information to third parties.

However, in 2014 Facebook started using web browsing data for delivering targeted "interest-based" advertising – which explains why you see ads for products you have already been looking at online appear in your Facebook feed.

To address privacy concerns, Facebook introduced a way for users to opt out of this type of advertising targeting from within [user settings](#). "We are pleased with the court's ruling," said a Facebook spokeswoman

* FCC WILL ASK THE "FELONY QUESTION" *

The ARRL Letter July 20, 2017

A revised FCC Form 605 -- *Quick-Form Application for Authorization in the Ship, Aircraft, Amateur, Restricted and Commercial Operator, and General Mobile Radio Services* -- going into effect in September will ask all applicants to indicate if they have been convicted of or pled guilty to a felony. The Communications Act obliges the Commission to ask "the felony question," as it did on the old Form 610 and still does on other applications. This action will correct its omission on Form 605, which has existed for years. Applicants' responses and explanations will be used to determine eligibility to be a Commission licensee. The FCC told ARRL that it's still deciding whether to issue a public notice on the change.

"The Commission is revising the basic qualifications section of the form to include a question regarding whether an application has been convicted of a felony In any state or federal court," the Office of the FCC Secretary explained in a May filing with the Office of Management and Budget (OMB), which must okay the revision. "Applicants answering YES must provide an explanation regarding the conviction. This item enables the FCC to determine whether an applicant is eligible under sections 310(d) and 308(b) of the Communications Act of 1934, as amended, to hold or have ownership interest in a station license."

The revision also will apply to NCVEC Form 605, the *unofficial* Amateur Radio-specific version of the application that is completed and filed at volunteer examiner coordinator (VEC) examination sessions. VECs will have to start using the revised form on September 7. Responding to VECs' questions, the FCC offered some guidance, with a particular focus on NCVEC Form 605.

ED: For the who story go to http://www.arrl.org/news/revised-fcc-form-605-will-ask-applicants-the-felony-question

* SOLAR AFFECTS AND DEFINITIONS PART 1 *

By Ralph WD0EJA

The subject is a career in itself. However, terms are expressed about radio propagation that may not be clear as to what it is.

This article will look at basic principals of this science.

THE SUN. The Sun affects everything on earth. It not only gives light so you can read an article, but produces ultraviolet, X-ray,
gamma ray and other radiations that hit earth. Every day, solar nuclear reactions are turning hydrogen into helium, releasing a
tremendous amount of energy. If the sun's energy was measured in watts, it creates 60 mega-watts per square meter.

SOLAR WIND. The Sun is constantly ejecting material from its surface in all directions into space, this is the "solar wind".
Under quiet conditions this wind blows around 200 miles per second. Or, 675,000 miles per hour. Taking away about two million tons of solar material each second. Is it about to shrivel up? Hardly, it would take many billions of years for that to happen.

It sounds like we can be burned to a crisp at any time. However, the solar wind becomes quite dissipated as it moves out from the Sun. Despite the low density of the wind, it still has an affect on the Earth, especially its magnetic field.

EARTH'S MAGNETIC FIELD. If nothing affected it, the field would probably look like a bar magnet, predictable North and South poles. The solar wind alters the shape of the Earth's magnetic field. Compressing it on the side facing the Sun and elongating it on the other side. Much like a tail of a comet. The solar wind is responsible for the shape of a comet also.

SUNSPOTS. The Sun is mostly observed as a brilliant fiery ball. However, it has been observed (they probably went blind) that there were darker spots on the surface. There are written records of observation over 2,000 years ago.

The Sun is always in a state of change. The change is daily, Sunspots can be observed traveling in clusters across the Sun from east to west. This is due to the rotation of the Sun. It completes a rotation on about 27.5 days. This is from our perspective.

SUNSPOT NUMBERS. The count varies, but there is a rough pattern. Approximately 11 years pass from one peak in numbers to the next. The more sunspots the more it affects radio propagation.

SMOOTHED SUNSPOT NUMBERS (SSN). This is an average sunspot count over a years time. This average helps to know the trend of the Sunspot activity. This way it helps to know what is coming up. Each smoothed number is an average of 13 months.

There is more, much more and I hope to follow it up in the next article.

73,
Ralph WD0EJA   www.isotronantennas.com

* KASPERSKY LAB WORKING WITH FSB (KGB) *

Bloomberg Businessweek By Jordan Robertson and Michael Riley

Russian cybersecurity company Kaspersky Lab boasts 400 million users worldwide. As many as 200 million may not know it. The huge reach of Kaspersky's technology is partly the result of licensing agreements that allow customers to quietly embed the software in everything from firewalls to sensitive telecommunications equipment—none of which carry the Kaspersky name.

That success is starting to worry U.S. national security officials concerned about the company's links to the Russian government. In early May six U.S. intelligence and law enforcement agency chiefs were asked in an open Senate hearing whether they'd let their networks use Kaspersky software, often found on Best Buy shelves. The answer was a unanimous and resounding no. The question, from Florida Republican Marco Rubio, came out of nowhere, often a sign a senator is trying to indirectly draw attention to something learned in classified briefings.

Eugene Kaspersky took to Reddit to respond. Claims about Kaspersky Lab's ties to the Kremlin are "unfounded conspiracy theories" and "total BS," the company's boisterous, barrel-chested chief executive officer wrote. While the U.S. government hasn't disclosed any evidence of the ties, internal company emails obtained by ***Bloomberg Businessweek*** show that Kaspersky Lab has maintained a much closer working relationship with Russia's main intelligence agency, the FSB, than it has publicly admitted. It has developed security technology at the spy agency's behest and worked on joint projects the CEO knew would be embarrassing if made public.

Most major cybersecurity companies maintain close ties to home governments, but the emails are at odds with Kaspersky Lab's carefully controlled image of being free from Moscow's influence. Kaspersky's work with Russian intelligence could scare off business in Western Europe and the U.S., where Russian cyber operations have grown increasingly aggressive, including attempts to influence elections. Western Europe and the U.S. accounted for $374 million of the company's $633 million in sales in 2016, according to researcher International Data Corp.

"When statements are taken out of context, anything can be manipulated to serve an agenda," the company said in a statement. "Kaspersky Lab has always acknowledged that it provides appropriate products and services to governments around the world to protect those organizations from cyberthreats, but it does not have any unethical ties or affiliations with any government, including Russia."

Antivirus companies are especially delicate because the products they make have access to every file on the computers they protect. The software also regularly communicates with the maker to receive updates, which security experts say could theoretically provide access to sensitive users such as government agencies, banks, and internet companies. Adding to the U.S. government's jitters, Kaspersky recently has developed products designed to help run critical infrastructure such as power grids.

The previously unreported emails, from October 2009, are from a thread between Eugene Kaspersky and senior staff. In Russian, Kaspersky outlines a project undertaken in secret a year earlier "per a big request on the Lubyanka side," a reference to the FSB offices. Kaspersky Lab confirmed the emails are authentic.

The software that the CEO was referring to had the stated purpose of protecting clients, including the Russian government, from distributed denial-of-service (DDoS) attacks, but its scope went further. Kaspersky Lab would also cooperate with internet hosting companies to locate bad actors and block their attacks, while assisting with "active countermeasures," a capability so sensitive that Kaspersky advised his staff to keep it secret.

"The project includes both technology to protect against attacks (filters) as well as interaction with the hosters ('spreading' of sacrifice) and active countermeasures (about which, we keep quiet) and so on," Kaspersky wrote in one of the emails.

"Active countermeasures" is a term of art among security professionals, often referring to hacking the hackers, or shutting down their computers with malware or other tricks. In this case, Kaspersky may have been referring to something even more rare in the security world. A person familiar with the company's anti-DDoS system says it's made up of two parts. The first consists of traditional defensive techniques, including rerouting malicious traffic to servers that can harmlessly absorb it. The second part is more unusual: Kaspersky provides the FSB with real-time intelligence on the hackers' location and sends experts to accompany the FSB and Russian police when they conduct raids. That's what Kaspersky was referring to in the emails, says the person familiar with the system. They weren't just hacking the hackers; they were banging down the doors.

The project lead was Kaspersky Lab's chief legal officer, Igor Chekunov, a former policeman and KGB officer. Chekunov is the point man for technical support to the FSB and other Russian agencies, say three people familiar with his role, and that includes gathering identifying data from customers' computers. One Kaspersky Lab employee who used to ride along with Russian agents on raids was Ruslan Stoyanov, whose technology underpinned the company's anti-DDoS efforts, says the person familiar with the program. Stoyanov previously worked in the Interior Ministry's cybercrime unit. In December he and a senior FSB cyber investigator were arrested on treason charges, adding a bizarre twist to the company's relationship to the government. Kaspersky Lab has said the case involved allegations of wrongdoing before Stoyanov worked for the company. Stoyanov couldn't be reached for comment.

In the emails, Kaspersky said the aim of the project for the FSB was to turn the anti-DDoS technology into a mass-market product for businesses. "In the future the project may become one of the items on the list of services that we provide to corporate customers," he wrote. Kaspersky now sells its DDoS protection service to large companies, installing sensors directly inside customers' networks. The company's website contains a large red notice that it's not available in the U.S. or Canada.

The U.S. government hasn't identified any evidence connecting Kaspersky Lab to Russia's spy agencies, even as it continues to turn up the heat. In June, FBI agents visited a number of the company's U.S. employees at their homes, asking to whom they reported and how much guidance they received from Kaspersky's Moscow headquarters. And a bill was introduced in Congress that would ban the U.S. military from using any Kaspersky

products, with one senator calling ties between the company and the Kremlin "very alarming." Russia's communications minister promptly threatened sanctions if the measure passed.

Indeed, many in Russia see the anti-Kaspersky campaign as politics with a dash of protectionism. "This is quite useless to find any real evidence, any real cases where Kaspersky Lab would violate their privacy policies and transfer some data from U.S. customers, from U.S. enterprise clients, to Russian intelligence or FSB," says Oleg Demidov, a consultant for researcher PIR Center in Moscow who studies Russian cyberattacks. "There are no such cases. At least, they are not publicly discussed."

There's another possibility, given Kaspersky Lab's success at embedding its products in sensitive locations. Last year, Eugene Kaspersky announced the launch of the company's secure operating system, KasperskyOS, designed to run systems that control electrical grids, factories, pipelines, and other critical infrastructure. The U.S. Defense Intelligence Agency reportedly circulated a warning that the product could let Russian government hackers disable those systems, a claim Kaspersky denied.

Fourteen years in development, Kaspersky Lab's secure OS is designed to be easily adaptable for the internet of things, everything from web-connected cameras to cars. That could be a great business model for the Russian company. U.S. national security officials seem determined to make sure it isn't. —*With Carol Matlack*

* HAM RESEARCHER TO INVESTIGATE EFFECTS OF SOLAR ECLIPSE *

By Dan Romanchik, KB6NU

August 21 is a once-in-a-lifetime opportunity for many in the U.S. to see a total eclipse. It's also an opportunity for a team of Virginia Tech researchers to study the effects of the eclipse onchanges in the upper atmosphere that have an impact onHF propagation and the

global positioning system (GPS). Backed by research funding from NASA and the National Science foundation, the team is headed by Dr. Greg Earle, W4GDE.

The Virginia Tech team plans to gather data from a variety of sources, including radar systems, transceivers, satellites, ham radio, and GPS receivers, in order to analyze the effects of the solar eclipse on the conductive region of the atmosphere.

"Whether military radar, or consumer GPS signals, the eclipse is going to have effects on the medium that we would like to understand better, so that we can either mitigate them or use them to our advantage," said Earle.

Here are a couple of links to news stories on the research team and the experiments:

- [Virginia Tech team prepares for special project during total solar eclipse](#)
- [Virginia Tech expert to study August solar eclipse effects on radar, ham radio,GPS](#)

Let's party!
In conjunction with the eclipse, the HamSCI and the ARRL are sponsoring the [Solar Eclipse QSO Party](#). (SEQP). According to an article in the August 2017 issue of ***QST***, the goal of the SEQP is to "flood the airwaves with contacts, all measured by the automated receiver networks of the Reverse Beacon Network, PSKReporter, and WSPRNet." Once all the logs are in, researchers will analyze the data to see what effect the eclipse had on radio propagation.

A YouTube video of a presentation at Dayton on the SEQP can be found at https://youtu.be/3EviY2Cuxpo?list=PLihPo8xWmo8-xDYAtpP9BWX9QnhUoT7k4

The SEQP will run from 1400Z - 2200Z on Monday, August 21. This is well before the eclipse is due to begin on the West Coast. The reason it starts before the eclipse is to establish a baseline for radio propagation conditions.

SEQP organizers urge you to make as many contacts as you can on as many bands as you can operate. Like nearly every contest, contacts are not allowed on 60m, 30m, 17m, and 12m. CW, RTTY, and PSK31 are the preferred modes because automated receivers can record those contacts, but phone and other digital modes count, too.

An interesting twist to this contest is that, like Field Day, you can earn a number of bonus points, including:

- Operating outdoors (100 points)
- Operating in a public place (100 points)

- Operating a wide-band automated receiver at your station (100 points)

Hams have had a long history of supporting scientific research. They provided communications for some of the early polar explorations and listened for Sputnik as it flew overhead. The Solar Eclipse QSO Party continues this tradition, and it's going to be a lot of fun as well. Visit the [HamSCI website](#) for more information.

Dan Romanchik, KB6NU, blogs about amateur radio at KB6NU.Com, and is the author of the "No Nonsense" amateur radio license study guides and the CW Geek's Guide to Having Fun With Morse Code." You can reach him by emailing cwgeek@kb6nu.com.

CLUB MEETING

This meeting 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 County	Pinellas ARK	Pinellas
2030 NI4CE system	EAGLE Net, NTS traffic net,	NI4CE system
2030 145.450 County	Pinellas ARK	Pinellas

TUESDAY

1830 147.060 no tone Petersburg	St Pete ARC daily net	from St
1900 50.200 USB	6M net	Brandon ARS

1900 28.450	WCF section net	Clearwater
1900 NI4CE system	WCF Section VHF ARES	NI4CE system
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	WCF Skywarn net	NI4CE system
2000 147.105+ 146.2	Tampa ARC net	from Tampa
2000 28.365 USB	simplex	Brandon ARS
2030 NI4CE system	EAGLE Net, NTS traffic net	NI4CE system
2100 28.465 USB	10/10 net	from Orlando

WEDNESDAY

1830 147.060 no tone	St Pete ARC daily net	from St Petersburg
1930 52.020 simplex	Suncoast 6'ers	from St Petersburg
1930 NI4CE system	WCF Section Digital Info Ne	NI4CE system
2000 147.105 146.2	Greater Tampa CERT net	from Tampa
2000 146.97- 146.2	Clearwater ARS	from Clearwater
2030 NI4CE system	EAGLE Net, NTS traffic net	NI4CE system
2100 NI4CE system	Tampa Bay Traders Net	non-affiliated

THURSDAY

1800 146.52 simplex	Hillsborough ARES/RACES	North Tampa
1830 147.060 no tone	St Pete ARC daily net	from St Petersburg

Time	Frequency	Net	Location
1900	444.750 +146.2	Fusion net	from Tampa
1930	146.850- & 442.625+ both pl 146.2	Wormhole	from St Petersburg
1930	146.6385 -127.3	Lakeland ARC	from Lakeland
1915	224.660- no tone	St Pete ARC	from St Petersburg
2030	NI4CE system	EAGLE Net, NTS traffic net	NI4CE system

FRIDAY

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

SATURDAY

Time	Frequency	Net	Location
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

Time	Frequency	Net	Location
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, 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

August 19   TARCFest, TARC Clubhouse, 22ⁿᵈ St at the river, $4 entry plus $3 to tailgate, inside tables $15 in advance, talkin on 147.105 +146.2, more info at http://hamclub.org/

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, Pl 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.spar-hams.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, 3rd 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