



News from

The GLORIOUS SOCIETY OF THE WORMHOLE

December 2025

Hello Worms

THE MEETING WILL NOW START AT 1000

Another organizations meeting is starting at 1230 meaning they arrive at 1200. Unfortunately that means our meeting after meeting that sometimes runs for hours will no longer be available. We could always go somewhere and get a cup of coffee.

I worked the Run For The Children charity run/walk again and was very disappointed that we did not have enough volunteers to man all the stations. Sad that there are not 12 hams willing to work a 4 hour event for charity.

This month's digital QST is out with the Field Day scores for the non-contest event. Hillsborough County ARES/RACES, N4HCA, finished third in the nation and first in the state in the 1F, EOC class. Congratulations to us, not bad for the three of us that worked it.

I just got the new Ham Radio Outlet 2025 winter catalog and find 16 pages of stuff from OPEK. Looks like someone at Autotek has decided to expand their offerings and exposure.

“Kenwood is getting out of the amateur radio HT and mobile business. HF only for amateur radio, HT and mobile for commercial only”. A quote from a Kenwood sales guy at Hamcation 2024. Well, it sure looked like he was right as no HT or mobile Kenwood were available. Until now. Kenwood now has a new triband HT, the TH-D75A. 144/430/220 with APRS and D-Star (simultaneous dual receive), USB-C and Bluetooth ... all the modern stuff . Stuff that I personally never use and do

not foresee ever using but I am sure there are those out there who need all the bells and whistles or maybe is a dedicated D-Star user and the dual receive is a draw. At \$750 it would take a lot of needing for me to buy one.

Bring your drink of choice and lunch to the meeting if you want. We will not be cooking but we have access to the Chamber of Commerce kitchen which has a microwave and a toaster oven so you can heat up/cook what you bring.

DID YOU KNOW

The Buddha commonly depicted in statues and pictures is a different person entirely. The real Buddha was actually incredibly skinny because of self-deprivation.

THIS MONTH'S STIFF – ALEXANDER STEPANOVICH POPOV

By Philip Neidlinger, PE KA4KOE

Entered Mortal Coil: 16 March 1859

Assumed Room Temperature: 13 January 1906

First, before we even get started, we need to play a bit of music to set the proper mood for reading this essay. Download this audio file located at my internet website <http://home.comcast.net/~ka4koe/russiananthem.wav> and play it whilst you're reading. Strange? Well, what do you expect reading these little essays from my twisted mind?

We're going to change gears a little bit and introduce a bit of controversy into our ongoing discussion of dead electrical pioneers of yesteryear. I am sure that many of you have read my previous essays on Guglielmo Marconi, or Dr. Lee Forest. Marconi got patent recognition for his radio system, and good ole' Lee claimed to be the "Father of Radio"...please suppress your giggles

now, okay? But what if I told you that both of these gentlemen were pre-empted by Mr. Popov in the invention of the first radio transmitter? Now, I'm not even going to suggest that this is a case of "*goulosh communism*", where Nikita Krushchev and his Soviet thugs were claiming that everything under the sun was invented by scientists from good old Mother Russia. In this particular instance, the Bolsheviks may have actually been correct in their wild claims. Sounds incredible, doesn't it?

Perhaps the primary reason that the scientific world at large places priority on Marconi is the fact that Alex was not an entrepreneur. He was first and foremost a scientist doing science for the pure love of it. Seeking publicity for his work would have been distasteful and boastful for this modest man. A good publicist would have done the Russian a world of good.

Let's discuss the **POP-TARTs**; an acronym for **Popov's Transmitting And Receiving Tests**. Alex was aware of Heinrich Hertz's experiments verifying the existence of electromagnetic waves, as was most every other scientist at the time. Experimental work on a coherer had been undertaken earlier by Edouard Branley and Oliver Lodge. Popov reasoned that he could detect lightning strikes many miles away by using a coherer and a simple receiver built around a door bell. He also attached an aerial and a ground wire. Whenever lightning struck nearby (up to 20 miles), the coherer conducted, causing the bell to ring. When the bell clapper sprang back, it struck the coherer, thereby readying it for the next lightning discharge. In all, it was an ingenious and simple device. He demonstrated the lightning receiver on May 7, 1895 to the Russian Chemical and Physical Society in St. Petersburg.

Another, more impressive test was conducted by Alex and his assistant Ribkin on March 12, 1896 over a distance of several hundred feet at St. Petersburg University, again for the Russian Chemical and Physical Society. The words "HEINRICH HERTZ" were successfully received using Morse code and written on a chalkboard. Unfortunately, the event was not very well documented at the time, and was only written about some years later from eyewitness accounts.

A stumbling block was encountered by Popov in that he didn't make the connection between transmitter performance and the requirement for good "earthing" and an antenna, although his lightning receiver had both. Alex assumed that increased transmitter power was the key to increased range. As we now know, higher power output is important in its own right, but antennas are unquestionably the key to success. At this point, Popov was frustrated in his experiments and turned his energies to exploring Roentgen rays (X-Rays).

Later in 1896, the news of Marconi's successes became known to Alex, and he was understandably disturbed at his hesitation in pursuing his work on his radio equipment. As a tribute to the maturity of the man, Alex later met Marconi and had a cordial discussion with his fellow scientist. No professional jealousy was apparent, as Popov later gave Marconi a samovar and a sealskin coat as wedding gifts.

To this day, May 7 is officially celebrated in Russia as Radio Day in honor of Popov. Make your own choice lads.....Popov or Marconi.

73.

Philip Neidlinger, PE
KA4KOE

*** DATE AND VENUE FOR 12TH ANNUAL TECHCON SET ***

WCF SECTION PRESS RELEASE #25-36 - 11/03/25: DATE AND VENUE FOR 12TH ANNUAL TECHCON SET

The date for the 12th Annual TECHCON, the Annual Technical Conference for the ARRL West Central Florida Section, is Saturday February 28, 2026. The venue for the 12th Annual TECHCON will once again be the Hillsborough County Public Safety Operations Complex, located at 9450 E. Columbus Dr., Tampa, FL 33519, on the east side of Tampa, just on the west side of I-75.

Starting with the 12th Annual TECHCON, we will no longer live stream the presentations as the logistics to do are to difficult to manage properly. The 12th Annual TECHCON presentations will be recorded and the presenter slides will be added to it during post-production editing, once again facilitated by Russ Delaney N4RTD, one of our Assistant Section Managers. Upon completion they will be uploaded to the Section YouTube channel once they are completed. The Section YouTube channel is located at https://www.youtube.com/channel/UCFA4-HEjr-1YMFisVG_Nk5A.

Registration for the 12th Annual TECHCON is now open. We are looking for presenters for TECHCON. To have a successful

TECHCON, we must have those who are willing to be presenters, especially those who have not been a presenter before. The topic of presentation is, as always, the choice of the presenter, as long as the topic is related to amateur radio.

You may register to either attend or make a presentation for TECHCON at <http://arrlwcf.org/section-forms/wcftechconfregistration/>. For more information about TECHCON you may go to the TECHCON webpage on the Section website at <http://arrlwcf.org/wcf-special-events/wcftechconference/>.

*** SPACE SAILORS" SEEKING DOWNLOAD HELP ***

ZCZC AS02

QST de W1AW

From ARRL Headquarters

Newington, CT December 2, 2025

To all radio amateurs

SB SPACE ARL ARLS002

ARLS002 "Space Sailors" Seeking Download Help from Ham Radio Operators

A group of students at Cornell University is seeking participation from radio amateurs who are equipped with satellite stations for help in listening for signals from a retroreflective laser sail that is scheduled to be deployed later this week. The sail is currently attached to a 1U CubeSat that was launched early Tuesday, December 2, 2025, from the International Space Station, but will separate and become its own free-flying spacecraft equipped with four tiny "ChipSat" flight computers that will transmit telemetry data back to Earth.

This is the first flight of their ChipSats, and it is this data that the students seek help detecting, according to Ph.D. candidate Joshua Umansky-Castro, who has an amateur radio license, call sign KD2WTQ. The light sail's ChipSats will be transmitting

data using the LoRa digital protocol on 437.400 MHz. The sail, stowed within the CubeSat, is expected to be released a couple of days after deployment - tentatively this Thursday, December 4 - and will likely function independently for no more than 48 hours due to the drag created by the sail.

Additional information, including LoRa parameters and links to a list of compatible receivers and the decoder file, may be found at the <https://alphacubesat.cornell.edu> site in the ChipSat Ground Station Guide located at <https://cornell.app.box.com/s/n4se5ku0ltjb1of2piagfz1y7xa92n47>.

It is hoped that the ChipSat and light sail will become the trailblazers for future missions around the solar system, and one day to our closest stellar neighbor, Alpha Centauri.

NNNN

/EX

*** WORLD'S FIRST MICROPROSSOR WAS 30 YEAR SECRET***

Tom's Hardware, News by Mark Tyson

The MP944 was the 'real' world's first microprocessor, but it was top secret for nearly 30 years — F-14 Tomcat's chip lived in the shadow of the Intel 4004, but was eight times faster. This pioneering microprocessor was a classified military secret from 1970 to 1989, as a vital part of an advanced fighter aircraft's control systems. For a long time, what is now considered to be a prime candidate for the title of the 'world's first microprocessor' was a very well-kept secret for nearly 30 years. The MP944 is the inauspicious name of the chip we want to highlight today. It was developed to be the brains behind the U.S. Navy's F-14 Tomcat's Central Air Data Computer (CADC). Thus, it isn't surprising that the MP944 was a cut above the Intel 4004, the world's first commercial microprocessor, which was designed to power a desktop calculator.

For those historians that like claims I respectfully submit the following claims on the F14 MP944 microprocessor:

1st microprocessor chip set

1st aerospace microprocessor

1st fly-by-wire flight computer

1st military microprocessor

1st production microprocessor

1st fully integrated chip set microprocessor

1st 20-bit microprocessor

1st microprocessor with built-in programmed self-test and redundancy

1st microprocessor in a digital signal (DSP) application

1st microprocessor with execution pipeline

1st microprocessor with parallel processing

1st microprocessor with integrated math co-processors

1st Read-Only Memory (ROM) with a built-in counter

Being an essential component of a flight system also meant the military pushed for safety and failsafe measures. That was tricky, with such a cutting-edge development in a new industry. What ended up being provided to the F-14 Tomcats was a system that could constantly self-diagnose issues while executing its flight computer duties. These MP944 systems could apparently switch to an identical backup unit, fitted as standard, within 1/18th of a second of a fault being flagged by the self-test system.

We have published several retrospectives highlighting Intel's 4004, and it was indeed pivotal to the development of the PC and the industry that holds many of us in thrall to this day. However, there's an alternative future where the MP944 wasn't kept secret for over a quarter-century, and one wonders what the shape of the computer industry would be in that case.

As mentioned above, this processor of many firsts seems to be of largely academic interest nowadays. However, if Holt's attempts to publish the research paper outlining the architecture of the F-14's MP944-powered CADC system had been cleared back in 1971, we'd surely now all be living in a different future.

2025 SANTA NET

For those with young kids around, children, grandchildren or just a little friend the Santa Net returns for the 20th year. The Santa Net runs on 3.916 MHz at 7:00PM Central. Check-ins begin 15 minutes before the net.

<https://www.cqsanta.com/>

2025 Schedule

Friday, November 28

Saturday, November 29

Thursday, December 4

Friday, December 5

Saturday, December 6

Thursday, December 11

Friday, December 12

Saturday, December 13

Thursday, December 18

Friday, December 19

Saturday, December 20

Sunday, December 21

Monday, December 22

Tuesday, December 23

Please note: There is no Christmas Eve net. The last net is December 23rd.

HACKER TO REPAY \$5M IN CRYPTO

BBC World Service by Joe Tidy

A British man who hacked high profile Twitter - now known as X - accounts as part of a Bitcoin scam has been ordered to hand over £4.1m in stolen cryptocurrency.

Joseph O'Connor, from Liverpool, hijacked more than 130 accounts in July 2020, including those of Barack Obama, Joe Biden and Elon Musk. The 26-year-old fled to Spain where his mother lives before being arrested and extradited to the US for trial. He was sentenced to five years for cyber crimes but now must hand over a haul of crypto he gathered through various hacks and scams. O'Connor, who went by the alias PlugwalkJoe, carried out the so-called "giveaway scam" with other young men and teenagers - breaking into Twitter's internal systems and taking over high profile accounts.

Three other hackers have been charged over the scam, with US teenager Graham Clark pleading guilty to his part in the deception in 2021. The hackers gained access to the accounts by first convincing a small number of Twitter employees to hand over their internal login details - which eventually granted them access to the social media site's administrative tools. They used social engineering tricks to get access to the powerful internal control panel at the site. Once inside the Twitter accounts of famous individuals, they pretended to be the celebrities and tweeted asking followers to send Bitcoin to various digital wallets promising to double their money.

As a result of the fraud, an estimated 350 million Twitter users viewed suspicious tweets from official accounts of some of the platform's biggest users, including Apple, Uber, Kanye West and Bill Gates. Thousands were duped into believing that a crypto giveaway was real. Between 15 and 16 July 2020, 426 transfers were made to the scammers of various amounts from people hoping to double their money. A total of over 12.86 BTC was stolen which at the time was worth around \$110,000 (£83,500). It is now worth \$1.2m.

The Crown Prosecution Service (CPS) said investigators believed more crypto linked to O'Connor was obtained through criminal hacks he carried out with other teenagers and young people he met whilst playing Call of Duty online. The CPS has

recovered 42 Bitcoin and other digital currency in total from him. Adrian Foster, Chief Crown Prosecutor for the CPS Proceeds of Crime Division, said O'Connor "targeted well known individuals and used their accounts to scam people out of their crypto assets and money". "Even when someone is not convicted in the UK, we are still able to ensure they do not benefit from their criminality," he said.



CLUB MEETING and ZOOM

The meeting time is 1000 on Saturday morning at the Lurie Civic Building on the St Petersburg College campus in Seminole. Turn west at the light at 113th St N and about 92nd Ave N. It's the first building on the north side. Here is a link to a Google map: [Google Maps](#). There are a few parking spots in front the Chamber building but double parking is fine since we will be able to find the owner to move his vehicle if necessary. Alternately if you go another 100 yards past you can park in the college parking lot. We will not be offering a ZOOM of the meeting



CLUB NETS

Check in on the club net Thursdays at 1930 and 2000 (or at the end of the 2M net). 2M at 146.850 – with a tone of 146.2. Our 6M net runs after our regular 2M net on 53.150 – 1MHz offset 146.2 tone.



LOCAL NETS

MONDAY

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	6M net	Brandon ARS
1900	28.365 USB	10M 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

1900 146.490 simplex 3RD Tuesday monthly, Hillsborough Co ARES simplex Net

WEDNESDAY

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

1900 147.165 + 136.5 Humpday Net from Bandon

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

0000-2359 HF Winlink Winlink Wednesday Net

<https://winlinkwednesday.net/reminder.html>

THURSDAY

1800 146.52 simplex Hillsborough ARES/RACES North Tampa

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

1900 444.750 +146.2 Fusion net from Tampa

1915 224.660- no tone St Pete ARC from St Petersburg

1930 146.6385 -127.3 Lakeland ARC from Lakeland

1930	440.1 +162.2	Hillsborough ARES/RACES	from Tampa	
1930	146.850- 146.2	Wormhole	from Pinellas Co	
2000	53.150 –1MHz	146.2	Wormhole	from Pinellas Co
2030	NI4CE system	EAGLE Net, NTS traffic net	NI4CE system	
FRIDAY				
1830	147.060 no tone	St Pete ARC daily net	from St Petersburg	
1900	3.830 LSB	Brandon 80M Net	from Brandon	
2030	NI4CE system	EAGLE Net, NTS traffic net	NI4CE system	
SATURDAY				
0730	3.940 (7.281 Alt.)+/- QRM	WCF Section HF Net	from WCF	
1830	147.060 no tone	St Pete ARC daily net	from St Petersburg	
2030	NI4CE system	EAGLE Net, NTS traffic net	NI4CE system	
SUNDAY				
0800	3.933	Florida Traders Net	non-affiliated	
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 can ask club members for the persons contact information. 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. If you want to see anything here and you are coming to the meeting let the seller know, maybe he can bring it.

FOR SALE,

See Bill AG4QX for the following: make me an offer.

*ICOM IC-W32A , 2m and 440 HT, AA battery pack	\$25
*Heathkit HD-1215 Phone patch looks ok	\$10
*Drake WV-5 wattmeter looks ok	\$75
*Cushcraft A4S, 10/15/20 4 element beam	\$250
*Cushcraft AV-12AVQ, 10/15/20 vertical	\$125
*Cushcraft A50-#S, 6m beam	\$125
*Cushcraft A-#WS, 17/12 WARC beam	\$250
*15000 V neon sign transformer currently used for Jacobs ladder	\$30



HAMFESTS

2025

December 12 & 13 **Plant City, the 2025 Tampa Bay Hamfest and West Central Florida Section Convention**, Friday and Saturday, **at the Strawberry Festival grounds, admission \$13, 16x40 ft tailgate space \$10, electric \$10,**

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 at a meeting ;-)

2026

January 17

TARCFest TARC Clubhouse, 22nd St at the river, 8AM-1PM, \$5 entry including tailgate, a few inside tables must be reserved in advance, talkin on 147.105 +146.2, license testing after, more info at <http://hamclub.org/>
Date not confirmed .

February 28

TECHCON 2026 Hillsborough County Public Safety Operations Complex, located at 9450 E. Columbus Dr., Tampa, FL 33519 You may register to either attend or make a presentation for **TECHCON** at <http://arrlwcf.org/section-forms/wcftechconfregistration/>.



Fourth full weekend January

Winter Field Day <https://www.winterfieldday.com/>

Late January

Gasparilla celebration

Late February

West Central Florida Tech Conference <http://arrlwcf.org/wcf-special-events/wcftechconference/>

March/April

MS Walks

April

MS150 bike now named Suncoast Challenge <http://www.citrustour.org/register.php>

March/April

Mass Casualty Exercises

Late April

Southeastern VHF Society Conference, <http://www.svhfs.org>

Late April

Florida QSO Party

Mid May

March For Babies (was March of Dimes)

<https://www.marchforbabies.org/Registration/Events>

Mid May

Annual Armed Forces Crossband Test

Mid-May

Florida Hurricane Exercise

Late May

Dayton Hamfest

May, Memorial Day Weekend	Wormfest
First weekend in June	Museum Ships on the Air
Fourth weekend in June	Field Day http://www.arrl.org/contests/announcements/fd/
Third weekend in August	International Lighthouse/Lightship Week https://illw.net/
September	Run for All Children's
Mid October	The Great Shakeout https://www.shakeout.org
October, 3 rd weekend	JOTA, Scout Jamboree-on-the-AIR (around 14.280MHz)
Early December	ALS bike ride in Walsingham Park
December, Second weekend	Tampa Bay Hamfest http://www.fgcarc.org/

North American QSO Party

Mode	Contest Weekend
CW	2nd full weekend January 1 st full weekend August
SSB	3 rd full weekend January 3 rd full weekend August
RTTY	last Saturday February 3rd full weekend July



YOUR WORMHOLE OFFICERS

Bill AG4QX is President and editor of this newsletter, the Vice President position is open, Treasurer is Jim KD4MZL, Paul KA4IOX is the Secretary, Dee N4GD is the Repeater Trustee and Mike KV0OOM is our webmaster.

YOUR WORMHOLE REPEATERS

53.150 -1Mz PL 146.2

442.625 +5Mz PL 146.2

146.850 - 600Kz PL 146.2

The Wormhole 2M and 440 repeaters are both now dual mode Yaesu DR-2X. FM analog as always and Yaesu Fusion, a C4FM digital mode.

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](mailto:ag4qx@arrl.net)