



Official Publication of the
West Allis Radio Amateur Club

Hamtrix

Volume 74, Issue 11 November, 2025

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NOVEMBER CLUB HAPPENINGS



Meeting 7pm at new building
November 11, 2025 7:00 pm

Location: (More info on page 4)

Hickory Grove Community Center

2600 S Sunnyslope Road Rn 310
New Berlin

Program

November 11th 2025 Meeting

Portable Antenna Decisions presented by
Mike Johnson W09B

NUT NET
3.985mhz
Monday-Saturday
8:15am CT

WARAC 4th Tuesday
Breakfast
At the Forum
Layton & Hyw 100 at
8:30am

The Milwaukee-Florida
Net time is:
7:15 - 8:00AM Central
8:15 - 9:00AM Eastern
Mon through Sat

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Premeeting dinner
New Berlin Ale House
5:15pm
16000 W. Cleveland Ave
West of Moorland Rd.



WARAC 4th Tuesday Breakfast

NOTE NEW LOCATION

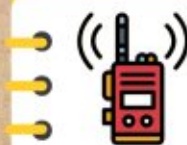
Several years ago there was talk among Nut Net members that we should get to meet each other. A breakfast get together idea was started. It was open to all hams, XYL/partners and anyone who wanted to learn about amateur radio. Even visiting OM/XYL couples joined us.

So, on the fourth Tuesday each month at 8:30 am we meet at [The Forum Restaurant](#), corner of [HWY 100 and Layton](#), [Greenfield, WI](#). Looking forward to seeing you, mark your calendar.

Phil, W9NAW

WARAC Find Us On The Air

VHF Simplex 146.55 Mhz & AllStar #63584



Looking for a Club Member to chat with? Fire up the VHF rig and give a shout out on the VHF Simplex Frequency 146.55 / Allstar 63584. You'll be surprised how often someone is listening. Hit the PTT and say "Hello"

DMR - BM TG 3155 WI State



The WI State 3155 TG is available on all the local DMR Repeaters AND via your HotSpot. Put yourself monitoring and come find a Club Member

Nut Net - Mon to Sat on 3.985 Mhz @ 8:15 AM



Join The Nut Net on 80 Mtr SSB from 8:15 to 9:00 AM Mondays thru Saturdays. Check-ins are from all over WI. You'll be a Nut Netter regular in no time. This is a general discussion net that gets your day started out right.

Milw - Florida Net - Mon to Sat 14.290 Mhz 7:00 AM



Join Tom, K9BTQ, for this early morning Check In Net, Mon thru Sat on 20M from 7:00 AM to 8:00 AM. Get the news to get your day started out just right.

It's a New Year....for WARAC



It has been a busy month and I am most definitely looking forward to the November club meeting. Every once in a blue moon our VP Pierre agrees to host the monthly meeting and he's up this month. It is nice to watch the show from the back row every now and then. Having gotten through the election process it will be good to get back to our more standard meeting format.

Speaking of elections, I want to thank

the returning board members who have reupped for another year and also to welcome new Member-at-Large Scott Sherer to the group. As a reminder to the club, the Treasurer position remains unfilled. Bill Reed is still manning the post, but he's been giving me the squinty eye look across our shared sideyard fence. As a welcome aboard, we had our first board meeting on Nov 4th. Amongst the usual agenda items, we are working on producing a club road map and operational goals document for 2026. We will share and discuss those specifics hopefully at the next meeting. It's a good thing to be moving forward with efforts to grow the club.

As for growing the club, **November is membership renewal month.** As we have done in the past you should be in receipt of an email reminder. We cleaned up the format and added a very convenient online payment option which will allow you to click and pay with a credit/debit card or Paypal. Renewals went great last year, and we have never seen Treasure Bill Reed happier. That's always a good thing.

The presentation this month is "Portable Antenna Decisions" by yours truly. Should be a fun presentation on some of what I've learned building, selling and using antennas for POTA, SOTA, mobile and Field Day operations.

As usual, we will have the premeeting dinner at the New Berlin Ale House. As fair warning, we are looking to try out some new places, so keep an eye on the emails for potential restaurant changes in the coming months.

New WARAC Meeting Location



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Location:

**Hickory Grove Community Center
2600 S Sunnyslope Road
New Berlin**

Located at the northeast corner of Sunnyslope Rd and Cleveland Ave, about ½ mile east of the old meeting place.



Meeting Room:

We will meet in the Lily Room, #310. The room is located on the upper floor.

Access:

The main entrance faces west toward Sunnyslope. When you enter, take either the nearby stairs or the elevator to the next floor up. The meeting room is well marked.

WARAC General Meeting Minutes - October 14, 2025

Called to order by Mike Johnson, WO9B @ 7 pm.

Attendance: 26 – 25 Member's, 1 Visitor.

ARRL HOA letter: Send your letters.

Pre-Meeting Dinner Location: Exploring new options.

Publication of the month: Rpi 4, Case, Hat, Preloaded for \$150..

General Meeting Minutes: July, August, September – Approved.

Board Meeting Minutes: July – Approved.

Treasurer's Report, Bill Reed: Bottom line. Our income exceeded budget and our expenses were under budget. The club has about \$25k cash assets, with a little over half for the scholarship funds. We have a 2026 budget that was discussed and approved by the Board. Which mirrors what we had for this year.

Bill Reed is stepping down as treasurer.

FUNDING AUTHORIZATION REQUEST: “WARAC will be authorizing a \$3,000 scholarship amount for 2026. The normal endowed funding typically supports a \$2,000 scholarship amount.

We are requesting the membership approve a disbursement not to exceed \$1,000 from the club's scholarship accounts for WARAC's portion of the 2026 scholarship.”

Approved. *** Howard is stepping down as Scholarship Chairman.

Club Status Synopsis:

Issues that we face:

1. Membership:
 - a. Membership numbers remain steady.
 - b. Members are getting older.
 - c. Membership Growth has been organic.
2. Budget:

Excellent condition. Currently, income (Dues, fund raisers, donations) exceeds our expenses. (WIQP, Field Day, pizza party, internet, insurance.)
3. Staffing mandated club officer positions.

In 1988 the club incorporated in to a 501 3c non profit organization.
This requires a board of directors, officer regiment.

 - a. We need a treasurer. And at the end of 2026 we will need a President and Secretary.
4. Staffing on going Operations.
 - a. Field Day: Dave is still Chairman for 2026. Dave need people to help.
 - b. Hamtrix: Frank remains at the helm. Frank needs people to submit material to print.
 - c. WIQP: Chuck can't do it alone. Anyone interested. Talk to Chuck.
 - d. Webpage: Tom Macon is the one who knows the webpage.
If interested in assisting with the webpage talk to Tom.

Solutions to Consider -MJ: The club has some challenges ahead.

We have a great club with top notch members.

Staffing: We can't leave open positions. This creates legal problems.

Officers can not hold multiple positions.

No treasurer: Do we fill from outside the club? Will it cost us money?

President: Change the Meeting Format,

Club Growth: Scott Sherer KC9WPS - Marketing and Growth Techniques.

Scott has done startups of business's, been on company boards. He see's the club as a 3 Alarm Fire going on. "You are going to close you doors in 12 months. If you don't do something. That doesn't mean you cant meet once a month in this building as Ham's. But WARAC is done in 12 months". Not be able to have volunteers to run is only the tip of the iceberg. The fact that you have surplus in the Treasury is a catastrophe. You have more money then expenses, means you don't have a single dreamer. No body with goals, or visions, or dreams, or hope for the next generation. If we want to keep this club going. We need energy. We need enthusiasm. We need participation. We need ideas. Need an active Board and officers. Also a business plan with a vision with dreams and hopes. And accountability to get things done. Marketing is important and hard work. There are Grant's out there. Which takes time and effort to find, apply for. And wait to see if you get accepted. There are Schools, industry out there that we could work with. Even senior in this center and community. How about if you use some of the club scholarship fund to buy a station to try and put in to a High school. Now you have 50 or more kids learning about Ham radio. Ham's are intelligent people, who have or had interesting professions. If we want to keep this club going to give to future generations. We Need Vision, Dreams, and Do the Hard Work to keep the club moving into the future. We all need to work as a Team to get it done. A different club used our club's idea of setting up a club remote radio system for members to use. They increased their membership. We missed that opportunity. The membership should gather their thoughts / ideas and bring them to the next meeting. MJ will talk with the membership.

ELECTIONS Results:

President: Mike Johnson, WO9B

Vice President: Pierre Porter, KD9SSY

Secretary: Bill Dargis, KD9BJZ

Treasurer: Open Position

Open Board Position: Scott Sherer, KC9WPS

Remaining in Board Position: Tom Macon, K9BTQ

Presentation by Dave, WB9OWN - Bird Song with a Pi.

Dave is a bird watcher. He took a Ornithology course. For the last year and a half one of the members from Schlitz Audubon has a raspberry pi setup to listen to bird song and identifying the birds. Merlin bird app "Cornell University", has recorded 6,000 bird calls all over the world. Raspberry Pi (4 or 5) has 2 program to identify bird calls. BirdNet-Pi, it has been out about 6 years. Not to many bells and whistles. BirdNet-Go, easy to

install. Simple cut an paste from github. Has pie charts, analysis data, logs. There can be false positives. Police sirens.

Meeting Adjourned at 8:43 pm.
Respectfully Submitted
Bill Dargis KD9BJZ
Secretary WARAC, October 14, 2025

WARAC Board Meeting Minutes - October 7, 2025

Board meeting called to order by Mike Johnson WO9B @ 7:05PM.

Present: Mike Johnson, WO9B, Pierre Porter, KD9SSY, Bill Reed, N9KPH, Bill Dargis, KD9BJZ, Jeff Pahl, W9JSP, Feroz Ghouse, WU9N, Tom Macon, K9BTQ, Howard Smith, WA9AXQ.

Treasurers report - Bill Reed: Approved.

Field Day: 2026 Site selected.

Scholarship: Arrl scholarship fund is in excellent shape as of July. MJ proposed a Membership Scholarship funding proposal. For pre-approval of up to \$1k to add to the Arrl fund of expected \$2k. To maintain a \$3k Scholarship when we hear from the fund in January. Board approved to go for membership vote. Howard will talk to the fund to see what is needed to fully fund a \$3k scholarship from the fund. Howard mentioned that we would need to have \$75k in the Arrl fund to possible produce \$3k just from the fund. The secondary account must have twice the amount of the scholarship. Howard will be stepping down from the scholarship.

Symposium: - Feroz: On hold.

Website: MJ, Feroz to collaborate.

Meeting place status: With the help of Pierre we have a permit to use the Hickory Grove location thru April 2026. Looking at changing pre-meeting meal location. Do we have access to internet, screen, projector, white board, TV?

FTP site replacement: Issue - Google Drive with updated security standards. You need a user name, password, 2 factor authentication. How do we share with the Board members.

Elections: - October: Bill Reed is stepping down as treasurer. People willing to stay another year. Mike, Pierre, Bill D, Tom, Jeff. Bill D. Would like 2026 to be his last year serving. Club members can run for any position. We need a new Treasurer.

Clubs Future (Structure and Direction) - MJ: The club has settled into a pattern. We are not doing new things as a club. We sponsor the WIQP. We publish a newsletter Hamtrix. The club does Field Day. We have the Scholarship. If the club disappeared tomorrow the scholarship would continue. We do monthly meetings with programs.

Coming up with interesting subjects and finding people to do presentations is a lot of work. Financially we are in great shape. The club is not getting younger members to participate in the clubs actives and run for positions. Where is the club heading. What are we really doing, what do we want to do, and what are we capable of doing. The membership is getting older. How do we get new members. The club needs to grow. Will bring this to the membership.

Oct. - Elections, Bird Song with a Pi.

Nov. - Portable Antenna Selection and Performance.

Dec. -

Jan. - Holiday Party.

We need program ideas for 2026. Thing about interesting ideas and possible presenters, and report back.

Meeting Adjourned at 8:25PM.

Respectfully Submitted

Bill Dargis KD9BJZ

WARAC Secretary, October 7, 2025



November 9th and 10th, there is an ARRL EME contest for the moonbounce aficionados, along with the FISTS Saturday Sprint for CW fans, but it's truly a great weekend for digital. If you are into those modes, there is a Worked All Europe RTTY Contest, a PODXS 070 Club Sprint (PSK31) on 160, 80, and 40 meters, and the 10-10 International Fall Contest (Digital Edition).

November 16th and 17th bring the ARRL Sweepstakes, the SSB edition. Much like the CW edition, the exchange and activity are wild (serial number, precedence, call sign, check, and section). You can operate at most 24 of the 30 hours between Saturday 4PM and Sunday 10 PM) The other weird rule in Sweepstakes is that you may only contact each station once (instead of once per band, as in most other contests), which means that Sunday afternoon can be a slog if you're calling CQ the entire time. If you are "fresh meat", however – a station that hasn't been on the air much or at all – and you show up on Sunday, you're

bound to be on the receiving end of a pileup.

November 23rd and 24th are very quiet contest weekends, with the biggest event being the North American Sprint (SSB). This is one of those weird, Sprint-style events (ha, just like in the name), where you answer a CQ but then the station gives you the frequency. Then you call CQ, make your contact, and then give up the frequency to them. It's a lot of fun but it's challenging. The exchange is also fairly involved (both stations' calls, serial number, op's name, and state/province). It's Saturday evening here from 6-10 PM. Give it a shot if you have the time, but do a little research ahead of time so you know what's going on.

Finally, November 28th through 30th bring the CQ Worldwide DX Contest (CW), maybe the biggest contest of the year, in terms of the number of stations on the air. It's a very simple exchange ("599" plus your CQ zone – we are 4 here), and the worldwide activity level is astronomical. My station isn't really built for DX, but all of the "big guns" around the world are on, so if you want to work a lot of DX, this is a relatively easy way to do it.

The first weekend in December brings a couple of contests but they are specialty things. One is the ARRL 160-meter contest – great if you have the real estate for 160-meter antennas and the patience and skill for Top Band – and the FT Challenge, a weekend-long FT8/FT4 event on 80, 40, 20, 15, and 10 meters.

This month's DX focus is on several DXpeditions in Africa:

Banana Island: This island in the Atlantic off of Sierra Leone is home to **9L9L**, already active on 40, 20, and 17 meters CW and FT8, and they plan to be active all the way up through 6 meters. They are QRV through November 10th.

The Gambia: C5R will be on the air until November 12th though one of their main purposes was operating in the CQ WW SSB contest.

Togo: Look for **5V7RU** active on all HF bands but especially 160 and 80 meters, all modes. They will be active November 5-19.

Madagascar: 5R8TT is QRV on CW, SSB, and RTTY, and 5R8XX is QRV on FT8 (normal mode, not SuperFox or related). Their eight operators will be active until November 16th. They are equipped for 160-6 meters.

Burundi: 9U1RU is active through November 17th. They have 7 high power stations, all bands, all modes.

Sierra Leone: Through November 10th, 9L8MD is QRV with ops from the Mediterraneo DX Club. They are active analog and digital, most HF bands.

See you next month,
-Michael AA9RK



Young Ladies' Radio League

ARRL AFFILIATED



click on
picture for
web page

Hi Members

There is a nice group of YL operators that I joined. We are known as the Young Ladies Radio League. Facebook has a website for the group. There are members all around the world. I've participated in a yearly certificate award, a YL/OM contest in February (Yes OM's are welcome) and collected QSL cards from many YL stations. There's even a grandma certificate that I am eligible for working other YL grandma stations. There are contests, certificates and scholarships for licensed amateurs around the world. It is a 501(c) 3 charitable organization. We also have several YLRL nets to check into just for YL operators. I've checked into the YL net on 20m Wednesdays at 01:00 utc when the net control announces it by email.

We get together one afternoon during Hamvention with speakers and raffles for new and current members. We have a group picture every year. Gil was there, too. There's also a YLRL Convention every five years. Last year it was held in St. George, Utah coinciding with the HamCon:Zion ARRL Rocky Mountain Division. They presented a POTA talk at Hamvention which was very interesting. We also have a semi-monthly Harmonics newsletter. There is a Chair person for each District in the US. Membership in the League shall consist of the following:

1. **FULL MEMBERS** who shall be entitled to all rights and privileges of the League.
2. **FAMILY MEMBERS** who shall be entitled to all rights and privileges of the League except for receiving the official publications.
3. **ASSOCIATE MEMBERS** who shall be entitled to all the rights and privileges of the League except the right to hold office.
4. **LIFE MEMBERS** who shall be entitled to all the rights and privileges of the League.
5. **HONORARY MEMBERS** who shall be entitled to all the rights and privileges of the League except the right to vote or hold office.

I hope this gives you some encouragement to become a member. It doesn't cost much and affords you additional information in the radio hobby. Thanks for your support.

73's

de WB9TFF Donna





November 2025

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Hamtrix

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By Michael Johnson, W09B

Updating RPi Devices

Ah the bane of leaning on my overworked and underappreciated little Raspberry Pi devices. I'm not sure what a handful of little RPi's are called. I've only got three on the firing line at the moment, and only two of them are technically interconnected, so I think it is a stretch to call them "networked". Is three enough to be called a "gaggle"? Or how about a "litter"? I certainly don't have enough to constitute a "school" or a "swarm". Well, whatever you call it, for the most part they churn away tending to my DMR and AllStar network tasks mostly without complaint. They really are trusty little buggers. The exception is when updating due to linux software version changes come a knocking.

Let me throw out a disclaimer. I am a software update freak. If there is a new version or even a minor software update available for any of my computer devices...I'm on it. Can't get it installed fast enough. I have come to understand that this compulsive behaviour has its downside, but it is what it is.

Getting back to my RPi "clutch", they all run as their core operating system Debian Linux (Raspbian is a specialty Debian version). The Debian maintainers, bless their hearts, are update fanatics. So much so that they have this all planned out for years to come.

Versions of Debian stable

Version	Code name	Release date	End of life date
15	Duke namesake		
14	Forky namesake		
13	Trixie namesake	2025-08-09	
12	Bookworm namesake	2023-06-10	2026-06-10
11	Bullseye namesake	2021-08-14	2024-08-14
10	Buster namesake	2019-07-06	2022-09-10

So, as of August, they released Debian 13 codenamed "Trixie" which is all the rage. As any Linux user knows, version updating is generally a process that takes a little time, but almost always goes trouble free with the odd library problem or two. Nothing too terribly serious. In ham world this is not always the case however. As is our lot in life, hams tend to do things differently. The DMR software I use, WPSD, spins its hooks deeply into the OS making version updates a big deal. Same goes for AllStar. Both packages rely on library dependencies which are decidedly non-mainstream and therefore version updates are not maintained in lockstep with the Debian updates. In short, it's a bit messy.

For those running WPSD, you need to download and install a completely new disk image. It is

not hard to do, but you will need to restore your configuration from backups and most likely reenter your DMR network credentials manually. AllStar? No can do at the moment. That will be an exciting work in progress. Perhaps I'm just griping because yet another firmware update came out for my DMR radios. Oh joy!!

The Invention and Implementation of Q Codes in Morse Communication

In the early 20th century, long before voice radio became widespread, Morse code was the primary means of wireless communication across ships, aircraft, and telegraph stations. However, language barriers often made international communication difficult. A British initiative solved this problem by introducing the Q Code system, a standardized set of three-letter abbreviations beginning with the letter "Q."

The Origin of Q Codes

The Q Code was first developed by the British government in 1909, primarily by the British Post Office, to simplify and standardize radio communication among ships and coastal stations. The goal was to create a common language that could be universally understood, regardless of nationality or spoken language. Since English was not universally spoken by all radio operators, these three-letter codes helped operators quickly exchange important information using only Morse code. Each code represented a complete question or statement.

For example:

QRM – "Is my transmission being interfered with?" or "Your transmission is being interfered with."

QRN – "Are you troubled by static noise?" or "I am troubled by static noise."

QTH – "What is your location?" or "My location is ____."

This made international communication both faster and more reliable.

Adoption and Expansion

By 1912, the International Radiotelegraph Convention officially adopted the Q Code system, and it soon became a global standard. It was expanded beyond maritime use to include aviation, military, and amateur radio communications.

The codes were grouped by function:

QRA–QRZ: General operational information

QSA–QSZ: Signal quality and strength

QTA–QTZ: Message handling and procedures

QRA–QRZ: Identification and station details

This organization allowed operators to instantly identify the meaning based on the prefix range.

Implementation in Morse Code

In Morse code, each Q Code consists of three letters, each transmitted in dots and dashes. For example:

QTH in Morse:

— . — . —

During communication, the operator would send these letters followed by a question mark (if it was a query) or by relevant data (if it was an answer).

For instance:

"QTH?" → "What is your location?"

"QTH London" → "My location is London."

This short format dramatically reduced transmission time, saving valuable bandwidth and minimizing operator fatigue during long shifts.

Q Codes in Amateur (Ham) Radio

With the rise of amateur radio (ham radio) in the 1920s and beyond, hobbyists quickly adopted Q Codes because they were concise and universally understood. Even today, Morse code operators and voice radio users continue to use many Q Codes, often mixed into casual speech.

For example:

“My QTH is Paris.”

“There’s heavy QRM tonight.”

Such expressions remain part of ham radio culture, linking modern operators with their historical roots.

Conclusion

The invention of Q Codes represents one of the most practical and enduring solutions in communication history. Created over a century ago to overcome language barriers, these compact three-letter groups made Morse code faster, clearer, and truly international.

Even in the era of satellites and the Internet, Q Codes continue to remind us of the ingenuity of early radio pioneers who turned simple dots and dashes into a universal language of connection.

TAP

A Morse alternative mode for the HAM, with no need for training
article written on 19-May-2022, mode originally thought by sv3ora

Introduction

The thinking of this new mode, came to me when someone posted that he quit the HAM hobby because he did not learn Morse code and he did not want to use computers to do the job for him. Some time I faced a similar situation and I believe many do one day or the other. So I thought that I had to do something about it. It is too bad people quit the hobby or missing the fun of the KEY operation, because of the obstacle of Morse code. No matter what CW operators that already learnt Morse might say, the fact is that Morse requires patience, continuous practice and most importantly time. After all military had dedicated courses on it in the past, so it must be more than true. These are things not all people can, or are willing to do. An alternative that gives the same pleasure like Morse and operates with the same techniques, but requires no training and time must exist. Meet the TAP mode!

Mode description

This mode has its roots to ancient Greece. You may read the article in Wikipedia for more information on the Polybius square. A form of it, was used in the previous century in war times, for in-prison communication. A modified version is presented here by me, that fits perfectly the HAM radio. This modified TAP code scheme, is dedicated to HAM radio and includes the numbers and the letter “k”.

1	2	3	4	5	6
1	a	b	c	d	e
2	g	h	i	j	k
3	m	n	o	p	q
4	s	t	u	v	w
5	y	z	0	1	2
4	5	6	7	8	9

This is all you need to know in order to send and receive TAP. It is easy to follow and easy to generate on paper. This is a 6 by 6 table, with the first six alphabet letters placed in the first line, the next six in the second and so on. After the alphabet ends, the numbers are put in the same manner. That’s it!

Sending TAP

It is better to describe the sending procedure with an example. To send the letter “i” you send two dots (“i” is on the second row), wait a bit and then send 3 more dots (“i” is on the third column). In other words, you first count the number of rows where the letter exists, then wait a bit and then you count the number of columns where this letter exists. Before sending the next letter, leave a bit of more time, so as to distinguish that this is a separate letter and not the time between rows and columns. That’s it! Try it now without any transceiver! Write the TAP table on a piece of paper (you do not need to write the row and column numbers), or read it from the website. Tap on your desk with your finger and send some words to the colleague near you.

See how easy it is?

There are actually four spacing's involved. The spacing between adjacent dots, the spacing between the row and the column, and the spacing between letters and the spacing between words. Follow the PARIS spacing, like Morse code Michigan's First Special Service Club

does, if your intent to write a software for it. However, in practice, manual operators would need to consider just two spacing's, the spacing between rows and columns and the spacing between letters. These are the most important. Just make the one bigger than the other and communication should be achieved without problems.

Receiving TAP

It is better to describe the receiving procedure with an example.

To receive the letter "i" you listen two dots ("i" is on the second row), then a short silence time and then listen 3 more dots ("i" is on the third column). In other words, you first listen for a number of dots (this is the row where the letter exists), then sense the silence and then you listen for the next number of dots (this is the column where the letter exists). The silence time between two letters is greater than the silence between rows and columns and this can be distinguished easily. That's it!

Try it now without any transceiver! Write the TAP table on a piece of paper (you do not need to write the row and column numbers), or read it from the website. Put your colleague to send you some TAP words and you should be able to decode them by counting the rows and columns in the TAP table. A programmer that may need to implement the mode in software, should follow the PARIS spacing to distinguish the different parts of the code, as described above.

TAP advantages

Here are some advantages I can think, of TAP in comparison to Morse.

No training is required, start using it immediately, even by non-HAM people and kids. This probably is the greatest advantage and this is why most would want to use TAP in HAM radio.

The encoding/decoding square can be drawn easily; it is very easy to remember how to draw it.

Decoding by hardware or software means, becomes very easy, as there are no dashes to account for. Dot lengths can be anything and can be even varying from dot to dot, it does not matter.

All you count, is how many ON-states (taps) there are and the rough timing between them, to decide between a row-column or a letter. Because of this independency from dashes, the code can be used on any means, radio, light, pipes, walls, desks etc.

If dot lengths are kept very short (up to the point where channel noise allows it), RF amplifiers can be pushed beyond their limits (due to limited duty cycle), or otherwise run cooler within their limits. There are some mediums, like light communication, where bright pulses of light can be produced easily (eg. xenon tubes), but not kept for duration and TAP is ideal on them.

TAP disadvantages

Here are some disadvantages I can think, of TAP in comparison to Morse. Speed limit issues probably. TAP beginners achieve for sure faster speeds than Morse beginners. However, a trained Morse HAM, can achieve greater speeds with Morse. Learning the table by heart, can be tricky in comparison to Morse. However, war prisoners had tricks to learn by heart the 5x5 TAP square.

Not known (yet) among the HAM community, like any new mode. Why not change that by let HAMs know about it?

TAP common points to Morse

There are some common points shared between TAP and Morse code.

(Continued next page)Michigan's First Special Service Club Page 6

Both are relatively slow modes.

Both are ON/OFF keying modes; efficient Class-E amplifiers can be used.

Both share the same channel bandwidth and noise-related characteristics.

Both are human-oriented, although TAP does not require training. Both share the PARIS timing when implemented in software.

Both allow for the “joy of the KEY”. You send TAP with the same equipment as Morse.

Both are ideal for homebrew QRP, due to efficiency and transceivers simplicity.

TECH TRIVI

Satellite News – Submitted by Pierre KD9SSY

HAMTV MAKES 1ST ARISS CONTACT IN 7 YEARS

(Source: [Amateur radio Newsline 10/24/2025](#))

The Amateur Radio on the International Space Station program has reason to celebrate. With the help and hard work of technicians, engineers and other team members, ARISS marked the first contact in seven years that made use of HamTV - a QSO between the 1st Radford Semele Scout Group in the UK and NASA astronaut Jonny Kim KJ5HKP on the 18th of October. The digital amateur TV transmitter based in the Columbus module permits the audience to view live video downlinks during their contacts with the astronauts.

As he called up to the space station to say the team and the European HamTV ground stations were ready, Ciaran Morgan, MØXTD, ARISS operations lead for the UK, dedicated the call to Gaston Bertels, ON4WF. Gaston was at the helm of the HamTV technical team until he became a Silent Key in December 2024. He had been a key player in getting the L/S band antennas installed on the Columbus module. HamTV operated until 2018, when its failure brought it back to earth so repairs could be made. The unit was returned to the ISS in 2024. This past July, it resumed its transmissions and members of the British Amateur TV Club, who were standing by for those first signals, happily reported good copy.

To see the HamTV contact between the ISS and the Scouts visit the YouTube channel of SP5LOT at the link below:

https://www.youtube.com/watch?v=7c-rFdr07bg_]

REPORT: LITTLE OR NO SECURITY FOR SATELLITES' SENSITIVE TRANSMISSIONS

(Source: [Amateur radio Newsline 10/31/2025](#))

Using a commercially available satellite dish, a team of researchers at two US universities confirmed the lack of security protecting the at-times sensitive content being broadcast from satellites. The teams at the University of Maryland and UC San Diego said that they easily tapped into geostationary satellite transponders sending private consumer data, internal corporate communications, voice and SMS transmissions from mobile phones and - perhaps most disturbing - military transmissions that were particularly sensitive.

The research teams released their findings on the 13th of October and the contents were carried by the website Wired. They said that the satellites' extreme vulnerability was discovered with the use of nothing more than off-the-shelf radio equipment that is widely available on the market.

The teams concluded that at least half of the geostationary satellites carrying such data do not have effective encryption in place, leaving the contents of the transmissions accessible to hackers and others with the ability to monitor them.

According to the report, the researchers alerted many of the satellite operators after the discoveries were made. They wrote, in their report: [quote] "In several cases, the responsible party told us that they had deployed a remedy." They included WalMart, T-Mobile and KPU. They note that remediation was still going on for other affected parties and, as such, the team did not identify them in the report. In the meantime, they said, end users are able to encrypt their network traffic via a Virtual Private Network and, on mobile devices, the use of end-to-end encrypted apps.

See Amsat web page for Membership info

<https://launch.amsat.org/Membership>

Editorial

November is here. Seems too soon; maybe that is due to the leaves seeming to hang on longer than normal. The WO9B QSO party team was out on the road for the Illinois QSO party on October 19, 2025. We use this QSO party as sort of a shake down trip for Wisconsin QSO party. Besides it's a good break for us. All the equipment worked. I had rebuilt my screwdriver antenna and it performed well. I looked us up and we were detected with "reverse beacon network" on the west coast of Africa on 20 meters. Not bad for a mobile antenna. All the parts were firing on all cylinders HI HI

I put in a couple articles I found interesting. The history of the Q codes is interesting. They are still used in ham radio and even phone. Wonder if the Data modes use them? Might be a way to make them usable between modes. HI HI

Not much else going on especially with ham radio. Everyone have a good Thanksgiving. Hopefully everyone finds something to be thankful for.

73

Frank

2024 Challenge for our membership. Have someone you meet, Ham or Ham wannabe come to a meeting this

DON'T KEY LIKE A PHONE MAN



SLOW SPEED CW QSO NET

Monday's - 8:00 PM - 146.55 Simplex and AllStar Node #63584

CW Practice

One of the best and maybe the only way to get better at CW is practice. Having someone else who also wants to practice also helps. Just makes it more fun.

The West Allis Radio Club is going to try to help. We are running a CW practice net on Monday at 8pm The repeater is 147.045+ 127.3 the CW portion is on HF

Mike WO9B has been joining me and setting up some practice but we are open for suggestions on where to go with this. Come join us.

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