

The KeyNote



Newsletter of the Americas Chapter, FISTS CW Club—The International Morse Preservation Society
Issue 3, 2023

The Polybius Square: An Ancient Precursor to Morse Code

Bryan Bergeron

The evolution of moderate-distance, military communications reflects differences in cultures and geographic conditions. The alpine Swiss developed yodeling. Native Indians in the open plains developed drum and smoke signals. The various tribes in what is today Asia relied on bells, drums and gongs. In addition to visual and auditory modes of communications, relatively high speed, secure (i.e., directional) communications over light was developed and used extensively by the militaries of the ancient Greeks.

One notable secure light-based communications system was first described by the Greek historian Polybius, born in 200 BCE. The system, which bears his name, was based on interrupting or reflecting light from the sun or a flame. As such, it could be rendered useless in a storm. However, because it was based on light, it was also fast. You can only send so many smoke signals in a minute.

Polybius described a 5×5 grid or key of letters, numbers or special symbols. A particular cell could be identified by a string of dits representing the row, followed by a short pause and then a second string of dits, representing the column. A longer pause was used to signal a new cell was about to be identified.

The exact contents and order of contents was defined by this key, which allowed the transmitter to send secure messages to the recipient, knowing that, without the key, the communications

would be useless to an eavesdropper. The origin of the square could be the bottom left or right, or inverted. The square could contain all numbers or all letters.

The system described by Polybius, today referred to as the tap code or knock code, has survived the test of time. For example, it was used by the Allies during WWII and by American POWs in Vietnam. The more complex Morse Code, based on both dots and dashes, is certainly a more immediate, conversive communications system, but it never hurts to understand and appreciate the various coding and communications systems out there.

73, Bryan, NU1N

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"When you've worked a FISTS, you've worked a friend."

INFORMATION PAGE

When you have a question about FISTS, go to the source for the correct answer. Posting a question on a chat room or email reflector may yield the answer, but your best bet is to ask a FISTS volunteer or look in the reference issue. Several volunteer contacts and/or email addresses have changed from the last reference issue of *The KeyNote*. Please make note of the following listings.

When emailing a volunteer please put the word FISTS in the title of your email. This will help the volunteer recognize that your email is important and not spam.

Awards and Certificates

Dennis Franklin, K6DF, awards@fistsna.org
4658 Capitan Dr., Fremont, CA 94536-5448

Club Call, KN0WCW

“Vacant”

If interested email to:

Joe Falcone, N8TI, store@fistsna.org

Membership Questions; Renewals; Call Changes; Name, Mailing, and Email Address Changes

Dennis Franklin, K6DF, membership@fistsna.org
4658 Capitan Dr., Fremont, CA 94536-5448

FISTS Store Manager

Joe Falcone, N8TI, store@fistsna.org
9880 Musch Road, Brighton, MI 48116

Activities Manager

“Vacant”

If interested email to:

Joe Falcone, N8TI, store@fistsna.org

Website Changes (including getting your personal or club web page linked)

Dennis Franklin, K6DF, webmaster@fistsna.org
4658 Capitan Dr., Fremont, CA 94536-5448

Code Buddy Volunteers and Buddies

<http://www.fistsna.org/codebuddy.php>

FISTS Sprints

Ashley Lambe, KX4ASH

E-logs to sprintlogs@fistsna.org

Mail Logs to: FISTS Sprint Logs

4305 Roundwood Ct.

Indian Trail, NC 28079

The KeyNote Newsletter

Bryan Bergeron, NU1N, keynote@fistsna.org

**We need articles and reviews for
*The KeyNote!***

**NOTE: Image files need to be high resolution
JPGs (at least 1000 pixels wide).**

**Send your Word or text files to
keynote@fistsna.org**

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The Newsletter of the Americas Chapter of FISTS

Issue 3, 2023

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Send articles to:

keynote@fistsna.org

Production: Sandra Lindemann

“Tis the Season.”

By Joe Falcone, N8TI

No, not the Holiday Season, but the season for Ham Radio. As many of us know, the last four or five months have been downright terrible for the bands when it comes to noise and solar storms. It seems like every week there is a story on how the Northern Lights have been seen somewhere more South than normal. What that means, of course, is that the sun decided to throw stuff our way and when it did, our skies lit up.

While sunspots are great, as they make the upper bands come alive, the combination of noisy conditions and the hot weather just does not make for easy listening on the bands. That is why Fall is my favor time to listen to the radio. The weather is still fairly nice and the bands have quieted down. In addition, there is just something about listening to the radio during Fall that is something special.

I learned something a few weeks ago. I went to Iceland and traveled around that country. Iceland has only 390,000 people, so perhaps it is not surprising that it only has about 140 licensed hams. On the other hand, the United States has approximately 700,000 licensed hams.

What I noticed is that I did not see any ham radio antennas or antennas on cars. It is funny how you don't realize you are on the look-out for signs of ham radio operators in your normal everyday life. We all, I think, tend to read someone's callsign license plate if they

have one and perhaps wonder if we had worked the person. We might try to recognize what band the antenna on the car is for.

I realized that we are lucky that we have such a large and active ham radio community in the U.S. This creates a demand for radio supply stores to operate and compete to sell us the newest equipment at the best price. Facebook and other social media sites are full of hams communicating with each other and sharing ideas and experiences.

One thing that sets the United States hams apart is the fact that it always seems that the U.S. hams are “pushing the envelope.” We look for the best antennas, the best radios and the best locations to set up. The whole idea of “stealth” radio operations has been taken to new levels by American hams. Smaller radios, thinner antenna wire and a liberal reading of the rules of where a radio can be set up are part of our tradition,

We are lucky to have the right to operate on so many bands and with so many modes. We do constantly push to keep the right to operate healthy.

The grass may look greener on the other side of the fence or perhaps even in a different country, but I think what we have available to us in the United States is something worth taking advantage of. If you can fire up the rig and get on the air, do so. Enjoy this great hobby of ours.

“72,” de Joe N8TI

FISTS AWARDS

By Dennis K6DF

Congratulations to all who earned operating awards from May 16, 2023 to August 14, 2023.

Award certificates are available, from the Members Area of the Americas Chapter website, for members to download to their own computer for printing. A list of awards issued to your call/member-number is available in the Members Area. FISTS members may log into the Members Area from the following web page:

<https://fistsna.org/memlogon.php>

New Members can earn a free FISTS Club Key Patch for making their first 10-minute CW QSO with any FISTS member on any band, so get on the air and make your first 10-minute QSO with a FISTS member to earn your free KEY Patch!

New Member Patches Earned:

KC6EOA Bradley—QSO with NN5SD

We have a list of new members shown elsewhere in this issue of the *Keynote*. Please listen for them on the bands and help them to earn their FISTS Key Patch!

Award certificates are available free to all club members, in PDF format, so get out your favorite key and get on the air. You can also use the free “Log Converter” program to track your club awards, it’s also a good general logging program as well. The author of Log Converter, Graham G3ZOD, is constantly providing updates and improvements to the program. **This program was last updated on May 24, 2023 to version 4.3.3. If you are using a version older than this please update your program as older versions will not work properly due to a recent server update.** This FREE software will track your FISTS awards automatically and allow you to send in

your award logs to the FISTS Awards Manager at the click of a button! The best thing about it is . . . it’s FREE! Log Converter is available for download on the Americas Chapter web site. Look for the download link on the main web page just below the “Welcome New Members” list.

Be sure to check the Americas Chapter web pages for updated awards information and how to apply for them:

<https://fistsna.org/awards.html>

If you have any award questions or suggestions, send e-mail to me at:

awards@fistsna.org

Wishing you good DX during 2023.

73, Dennis K6DF ____ (30)

FISTS AWARDS ISSUED:

May 16, 2023–August 14, 2023

Basic Century: F5NFB, AE4OK, PE1EEC, EI7LC

Silver Century: M0KTZ, EA4HKF

Gold Century: MW0BGL, EA4HKF

Millionaire Award: WQ1C, PE1EEC, EI7LC

3 Million Award: IU0ITX, M0KTZ

4 Million Award: DL4FDM, MW0BGL

5 Million Award: AF5Z, DL4FDM, EA6BB, EA4HKF

6 Million Award: AF5Z, EA4HKF

10 Million Award: W7ZDX

11 Million Award: IU0HMB

17 Million Award: IK0IXI

Spectrum 30M: EA6BB

Spectrum 20M: DL4FDM, EA4HKF

(continued on page 7)

FISTS AWARDS (continued)

Spectrum 15M: EA4HKF

Perpetual Prefix: AF5Z, W7ZDX, PE1EEC

Perpetual Prefix 50: PE1EEC

Perpetual Prefix 100: PE1EEC, M0KTZ

Perpetual Prefix 150: PE1EEC, M0KTZ



What's Your Story?

Do you have a story to tell? Members would love to hear how you got interested in ham radio. Did someone mentor you as a child? Did you learn it in the service? What is an interesting experience you had using Morse Code? What is your favorite key/rig? Do you have an interesting QSO you'd like to tell members about? Or photos to share?

Send your stories/photos to keynote@fistsna.org.

JAN. 1, 2021 CHANGES TO AMERICAS CHAPTER MEMBERSHIPS

All Americas Chapter memberships will be dues-free.

- Expired memberships were changed to Life memberships on Jan 1, 2021.
- Current paid memberships that expired were changed to Life memberships on their expiration date.
- All New Memberships received since April 2, 2020 are entered as Life memberships.

Details about printed/mailed newsletter subscriptions appeared in Issue #4, 2020 of the *KeyNote*, which is available on the FISTS website at:

www.fistsna.org/publickeynotes.php

WELCOME NEW FISTS AMERICAS CHAPTER MEMBERS

Call	FISTS#	First Name	S/P/C	K0CWC	22212	Charles	CO
W3SHP	22079	Keith	PA	W7LG	22213	Michael	PA
KC5ZEJ	22080	David	LA	KD2KW	22214	Ken	TX
KE7DSH	22081	Doug	WA	KY4YC	22215	Roger	FL
VE3IDS	22082	Don	ON	KQ4DFW	22216	Robert	TN
W6UDT	22083	Ushesh	CA	AG5XU	22217	Louis	TX
N7SE	22084	Steve	CO	KI5PED	22218	Andy	Tx
KB3NSK	22085	Eric	PA	NP4C	22219	Ben	PR
N5SE	22086	Billy	Tx	K1YRW	22220	Rich	CT
WN1Z	22087	Orrin	CA	AG5ES	22221	Les	OK
HK4KM	22088	Guillermo	DX	KG8ZY	22222	Ralph	MD
KN0T	22089	Bob	IA	VA2RKV	22223	Ryan	QC
KI5WWP	22090	David	OK	KB0RIA	22224	Mike	ND
W7BRS	22091	Jeff	WA	KM4RIO	22225	George	NC
KQ4IWO	22092	Joseph	AL	KB8CW	22226	David	OH
WJ3FF	22093	Jeff	NC	KD8JX	22227	Thomas	WA
K4DAR	22094	David	TN	W8LEO	22228	Leonel	TX
KC6EOA	22095	Bradley	CA	KA8KNZ	22229	Steve	WV
KC9AFN	22096	William	IL	ZP7EDU	22230	Eduardo	DX
AE5JT	22097	Jeffrey	TX	K6XH	22231	Gerhard	VA
ND9Z	22098	Tom	IL	W4RJF	22232	Ronald	NC
K0ILP	22099	Jerry	NC	K7PV	22233	Lloyd	ID
AE0SF	22200	Steve	CO	N3RA	22234	Scott	OH
K5VFA	22201	David	TX	AD3DX	22235	Marilyn	AL
W7JLL	22202	James	OR	KI5JWV	22236	William	TX
N6EL	22203	Jeff	CA	KN6ZZG	22237	Ronald	CA
W1CTN	22204	Dave	NC	VE3NGN	22238	Chad	ON
KC3M	22205	John	PA	K5AM	22239	Mark	NM
N6BF	22206	Jeffrey	CA	AC7CG	22240	David	WA
KO4YDX	22207	Toria	FL	N8XX	22241	Bill	NJ
VA3LMI	22208	Graham	ON	W5AWS	22242	Andrew	OK
W3BGY	22209	Brayden	KY	VE3WWJ	22243	Jeff	ON
KC9CNH	22210	Johnny	IN	N6PE	22244	Rick	CA
W4RG	22211	Raymond	TN	KE8UEX	22245	Sriram	MI

Silent Key List

Call	FISTS#	First Name	S/P/C
K9QVB	1047	John	IL
K8LEN	1494	Patrick	IN
W9CC	1714	LARRY	IN
KA4FZI	1767	PHYLLISAN	FL
N1CK	2814	NICK	AZ
KA4CLM	4470	Arnold	FL
WA5ZJK	4978	GLENN	TX
KF7S	7069	KEN	UT
N1EAV	8178	GEORGE	MA
KK7UT	8611	DON	WA
KG6JSI	9304	PETE	CA
WA9FZP	12160	PHIL	WI
KG4BVS	13701	FRANK	AL
WA2UEM	13803	BARRY	NJ
K4EOR	14470	GEORGE	GA
K3PSD	16027	PAUL	PA
WB4OMM	16384	STEVE	FL
N7WBA	16706	ROBERT	WA
AJ4ON	17375	BOB	TN
K5PHB	17796	FRANK	TX
KG4WPD	18299	TOM	GA
K5JTO	18528	CLAUDE	LA
KI5AL	19987	ALLEN	TX

Get More Involved in FISTS-NA!

1. Enter one of the quarterly Sprints. If you are a new ham, it is a great way to practice your Morse Code. You can get on the air, meet other club members, and have some fun!
2. Submit an article, or articles, for the newsletter. We welcome all articles, photos, and experience levels. You don't have to be the great American novelist! Articles are lightly edited for typos and grammar.
3. Earn a free FISTS Club Key Patch when you make your first 10-minute CW QSO with any FISTS member on any band.
4. Volunteer! We are currently in need of an Activities Manager.
5. Submit suggestions about how FISTS-NA can be more relevant in 2021 and beyond.

SPRINT INFORMATION

Sprints will be held eight times throughout the year on the second Saturday and third Sunday in each of the following months: Feb., May, Aug, and Nov. Sprints will now run over a 24-hour period.

OBJECTIVE:

To exchange specified information with as many FISTS members as possible using Morse Code only, and within the time frame stipulated. Sprints are a great opportunity for our newer members to get on the air, meet other club members, and have some fun! We encourage more experienced operators to please QRS to match the other operator's speed.

PARTICIPANTS:

Any properly licensed amateur radio operator, FISTS member or non-member is invited to take part in the contest. At least one of the two stations in each QSO must be a FISTS member.

DATES AND TIMES:

SATURDAY SPRINT: from 0000 UTC to 2359 UTC on second Saturday in November.

SUNDAY SPRINT: from 0000 UTC to 2359 UTC on third Sunday in November.

BANDS:

Operation is limited to the following amateur bands: 3.5, 7, 14, 21, and 28 MHz amateur bands. Look for other participants around the FISTS frequencies: 3558, 7058, 14058, 21058, and 28058 kHz. You may NOT work the same station more than once.

ENTRY CLASSES:

There are three entry classes: QRO, QRP, and Club.

1. **QRO:** Over 5 watts to legal limit.
2. **QRP:** 5 watts output power or less.
3. **Club:** (regardless of power).

Entry class MUST be shown on logs to be considered for entry in a particular class, or will be assumed QRO. An entry must be ONE class only, no combination of classes allowed.

EXCHANGE:

The following information must be exchanged by both stations and shown in your log for each QSO to count as a valid QSO:

FISTS members: RST, S/P/C, first name, FISTS number. *Non-FISTS members:* RST, S/P/C, first name. (Enter "0" Zero if your logging program requires a power entry for non-members.) S/P/C = U.S. State/Canadian Province/DXCC Country

DX COUNTRY STATUS:

U.S. states and Canadian provinces are those states and provinces that are contiguous and found within the North American continent. DX are those entities listed in the current ARRL DXCC publication, other than the above.

MULTIPLIERS:

Each U.S. state (50) and Canadian province (13) counts as 1 multiplier. Count each only once, no matter how many times worked. Each DXCC country counts as 1 multiplier. Count each only once, no matter how many times worked. Canada and the USA do not count as DX multipliers

BONUS POINTS:

If the submitted Sprint log has a total of 25 or more listed QSO's, a bonus of 250 points will be added to the final calculated score.

SCORING:

Each QSO with a FISTS member: 5 QSO points. Each QSO with a non-FISTS member: 2 QSO points. Final score is total QSO points times the number of multipliers worked, then Bonus points are added.

CERTIFICATES:

Certificates will be awarded to the first, second, and third place finishers in each Sprint for each Entry Class. End-of-Year Certificates will be awarded ONLY to FISTS members with the highest cumulative point totals in the QRO, QRP and Club categories for all Sprints at the end of the year. Certificate will be sent to the winners via email in PDF format.

New Sprint Information (continued)

LOG SUBMISSIONS:

All log entries must be received within 7 days after the Sprint to be considered valid. Logs not sent to the proper address will not be considered for entry. The logs will be spot-checked for accuracy and correct scoring procedures. All logs **MUST** contain the following information for entry:

1. Your name, call sign, mailing address, and FISTS Number if a member.
2. Club name and call sign if entry is for a club station.
3. Sprint worked—Date of the Sprint worked.
4. Entry class—QRO, QRP, or Club.
5. Number of FISTS members worked.
6. Number of non-FISTS worked.
7. FISTS number for FISTS QSOs.
8. List of multipliers.
9. Your claimed score.

An entry form is available here and on the FISTS website at:

https://fistsna.org/pdffdocs/sprint_entry_form_rev2.pdf

ELECTRONIC LOGS:

We will accept electronic logs in standard Cabrillo or ASCII Text File format. If you're not sure about your format, please contact the Sprint Manager before the contest entry deadline. E-logs are sent to:

sprintlogs@fistsna.org ONLY.

PAPER LOGS:

Send log and entry form to:
FISTS Sprint Log
4305 Roundwood Ct.
Indian Trail, NC 28079



Begali Magnetic Travel Light, courtesy NU1N

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QR0 Category

Summer Saturday Sprint Results for August 12, 2023.

Callsign	Name	Fists #	QTH	QSO's	Mem	Non-Mem	Points	Multi	Score
VA3EON	Mario	21802	ON	5	5	0	25	4	100
WB9HFK	Mark	7606	IL	3	2	1	12	3	36
K6DF	Dennis	3076	CA	5	0	5	10	1	10
G4IZZ	Mike	17615	EU	1	1	0	5	1	5

SOAPBOX... Call

K6DF—*Poor band condx. Where were all of the FISTS members! 73 Dennis K6DF*

Summer Sunday Sprint Results for August 20, 2023.

Callsign	Name	Fists #	QTH	QSO's	Mem	Non-Mem	Points	Multi	Score
WB9HFK	Mark	7606	IL	16	11	5	65	10	650
K6DF	Dennis	3076	CA	9	4	5	30	6	180
N6IV	Mark	4056	CA	6	5	1	27	5	135
KE4QZB	Brian	1934	NC	3	1	2	9	2	18
KA5VZG	Alan	15363	TN	3	1	2	9	2	18
5B4AHO	Baz	10851	AS	1	1	0	5	1	5
K5YQF	Cecil	8077	TX	1	1	0	5	1	5

SOAPBOX... Call

K6DF—*Better band condx this Sprint. Nice to work some FISTS members. Tnx to all stations for participating. 73 to all, Dennis K6DF*

KE4QZB—*Enjoyed the Sunday Sprint! Only had an hour free to operate before work, but I like the flexibility the new 24-hour schedule offers! Missed the Saturday Sprint after a storm knocked our antenna down. Got to test out our new and improved 135' end-fed long wire at 50ft, thanks to my sharp shooting wife who precisely aimed the potato gun at the best (highest) tree branch—she got it the first time !! Better than I would have done! I Hope conditions will be better for the Fall Sprint !! 73 Brian KE4QZB*

5B4AHO—*Just rejoined FISTS...1st effort, only one contact but thought would put log in anyway. Couldn't find anybody despite listening and calling for quite long periods. Well done everyone, see you next time! 73 de Baz 5B4AHO*

K5YQF—*Sorry I've missed so many sprints this year. But managed 1 this afternoon. Turned into a 45 min ragchew. Cecil*

73, Ashley KX4ASH

FISTS SPRINT ENTRY FORM

Check Sprint Entered: Saturday _____ Sunday _____ Sprint Date _____

Entry Class: QRO _____ QRP _____ FISTS Club _____

Name _____ Call _____ FISTS # _____ Non Member _____

Address _____

City _____ State _____ Zip _____

If Club, Club Name, Call _____ FISTS Nr. _____

E-mail Address (optional) _____

SCORING: Number of FISTS member QSOs: _____ × 5 = Total [A] _____
 Number of Non-FISTS QSOs: _____ × 2 = Total [B] _____
 Number of multipliers worked: = Total [C] _____

Add [A] to [B] and multiply by [C] to get your TOTAL CLAIMED SCORE = _____

----- **CIRCLE WORKED MULTIPLIERS** -----

1	2	3	4	5	6	7	8	9	0	VE	DX
CT	NY	DE	AL	AR	CA	AZ	MI	IL	CO	NB	NF/LB
MA	NJ	MD	FL	LA		ID	OH	IN	IA	NS	NT
ME		PA	GA	MS		MT	WV	WI	KS	PE	YK
NH			KY	NM		NV			MN	QC	BC
RI			NC	OK		OR			MO	ON	
VT			SC	TX		UT			NE	MB	
			TN			WA			ND	SK	
			VA			WY			SD	AB	
						AK					

Please enclose paper logs ONLY, photos, comments, ideas, etc., with your entry and mail promptly to:

FISTS Sprint Logs
 4305 Roundwood Ct.
 Indian Trail, NC 28079

Statement: "I have observed all FISTS Sprint competition rules as well as all regulations for Amateur Radio in my country. My report is correct and true to the best of my knowledge. I agree to be bound by the decisions of the FISTS Awards Committee."

Date _____ Signature _____ Call sign _____

SOAPBOX COMMENTS: