Beginning Morse Code

This is the font size of the presentation so make sure you can view it from your seat...

Hello

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- keithford.com/files

Challenge Question

- Who here already knows morse code?
- Fastest speed?
- 40 WPM?

Terminology

- CW – continuous wave, the signal used to broadcast Morse code, often used interchangeably.
- QSO – an exchange between radio operators
- QRP – low power signal, typically less than 5 watts
- WPM – words per minute
- IMHO – In My Humble Opinion *(this entire presentation)*

Why Me? 😀

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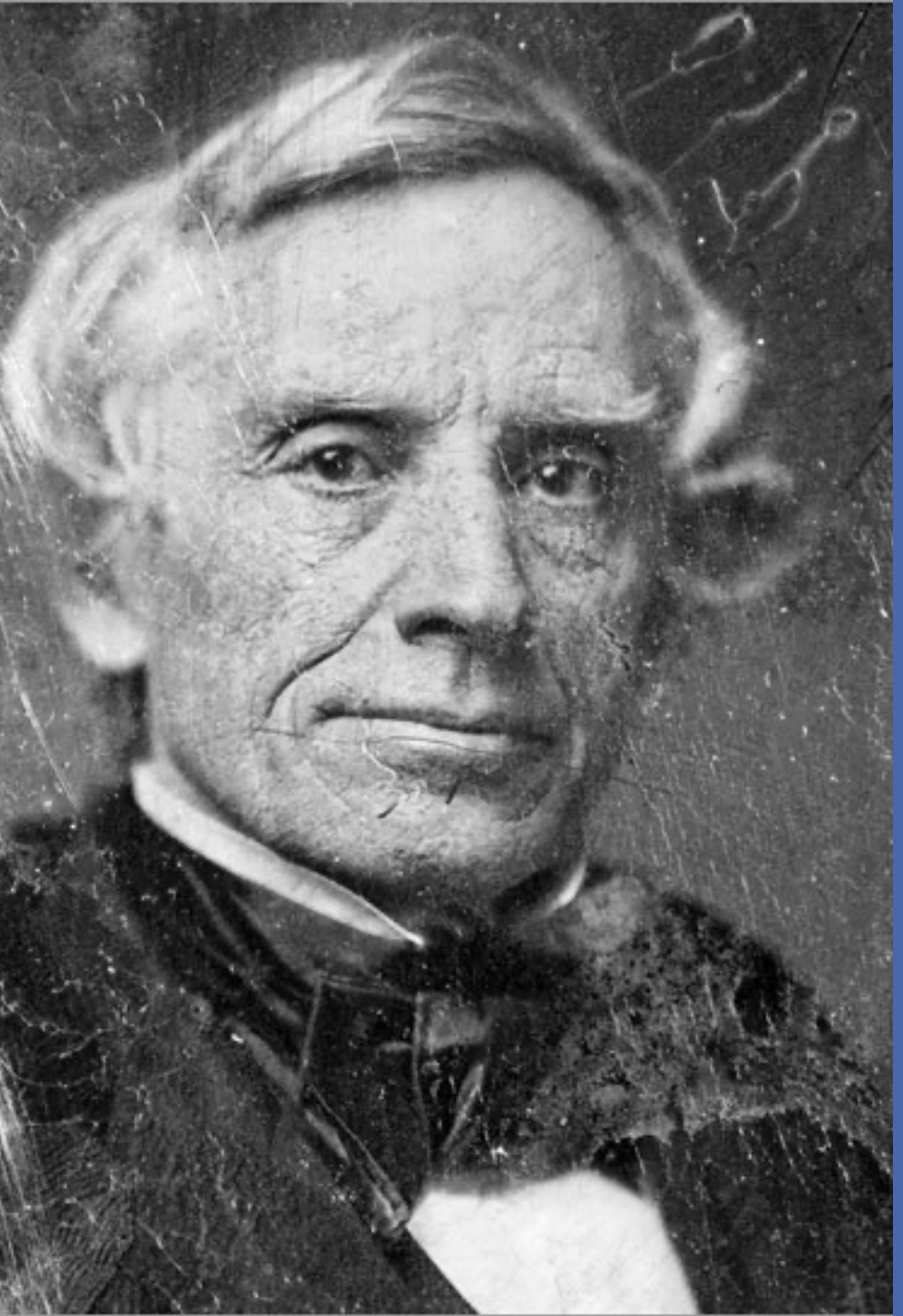
again



What is Morse Code?

- In 1832, Samuel Morse was traveling to the United States from Europe on a ship when he overheard a conversation about electromagnetism that inspired his idea for an electric telegraph.

  Though he had little training in electricity, he realized that pulses of electrical current could convey information over wires.

Challenge Question

- Will buying a boat and spending time on the water help you learn morse code?

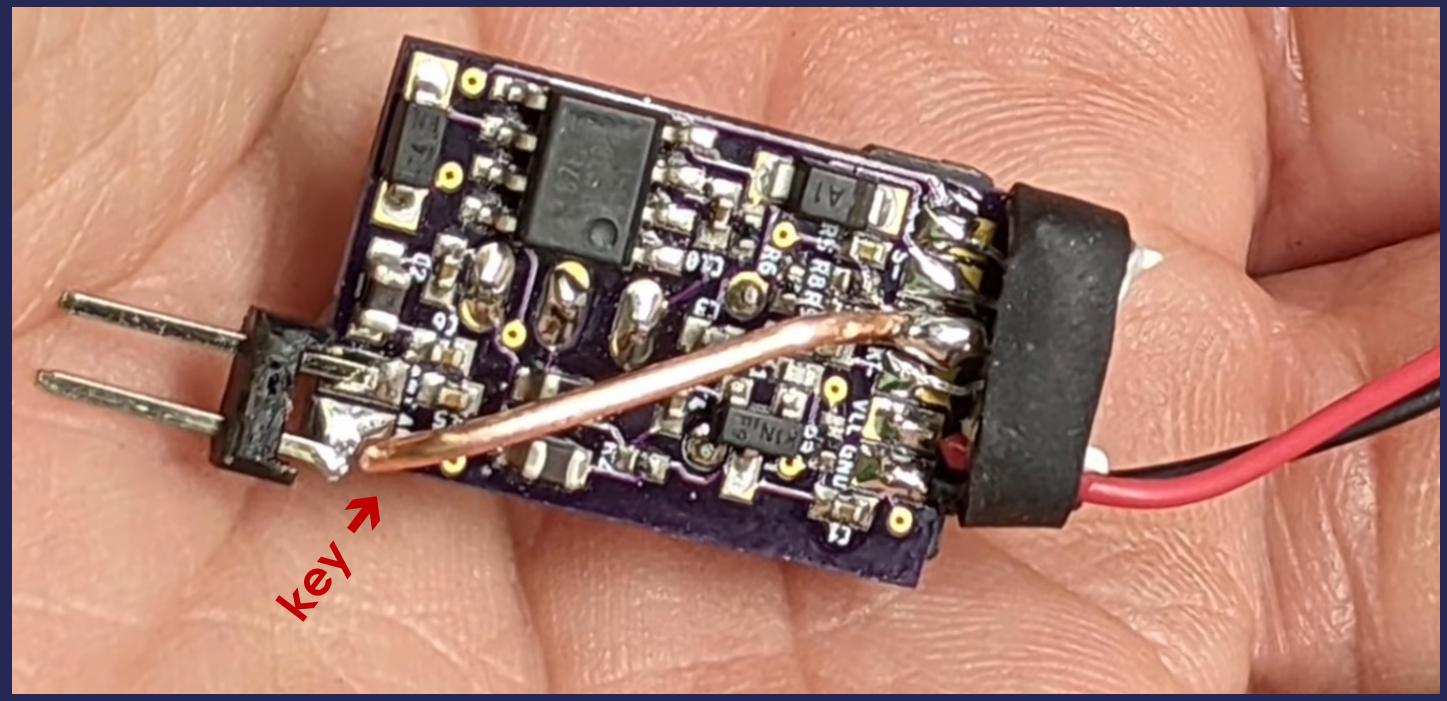
Hello

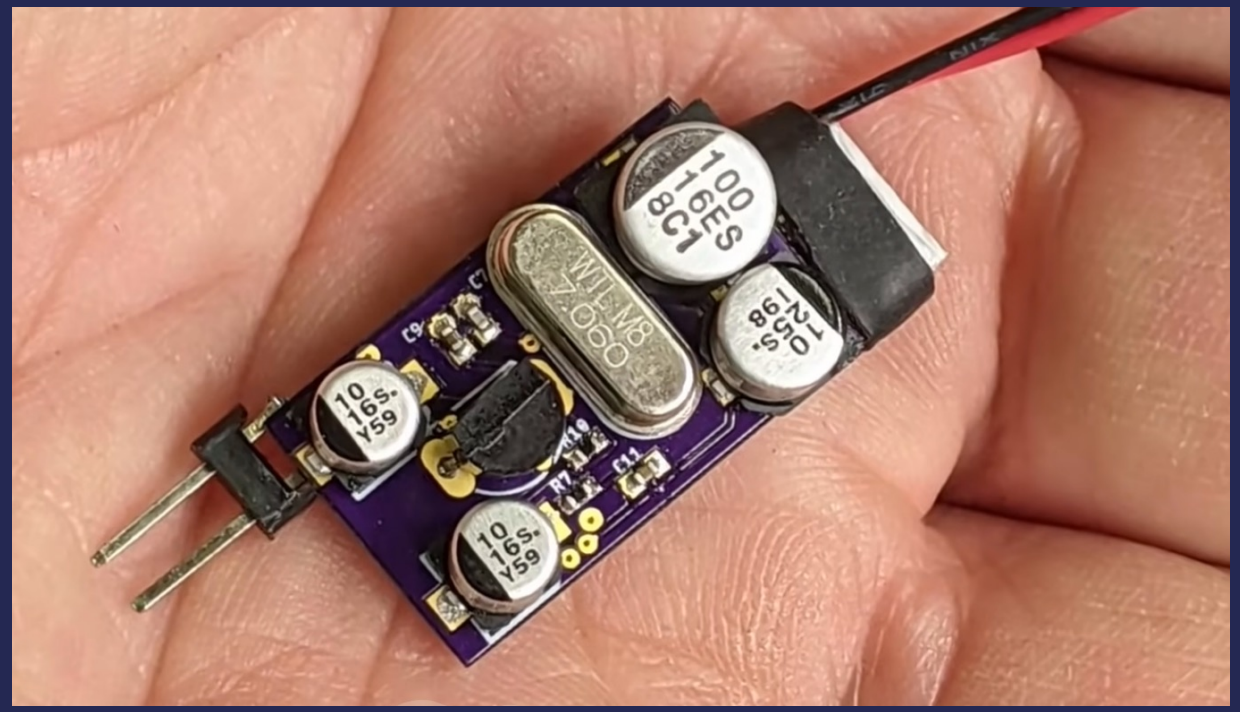
- Jerry Poplin
- KF4BOE

Why Learn Morse Code

- Challenging ➔ Rewarding
- POTA / SOTA / IOTA
- More bang per watt – 3kHz vs 100Hz
  - DX
  - QRP & QRPp
- Gear can be small and simple and cheap

Micro SOTA
850 mW
2.7 grams





It's Magic

- Modern, but old
- Used by generations past
- Free as in freedom

Challenge Question

- How is Mission Impossible theme song related to Morse Code?

Challenge Question

- How is Mission Impossible theme song related to Morse Code?

How **NOT** To Learn Morse Code

- Morse code is an aural language, you need to learn it with your ears, **not your eyes**.
- Attempts to learn it using any visual means may work initially but will most likely cause you to hit a wall when trying to increase your speed.

How **NOT** To Learn Morse Code

- Morse code is an aural language, you need to learn it with your ears, **not your eyes**.
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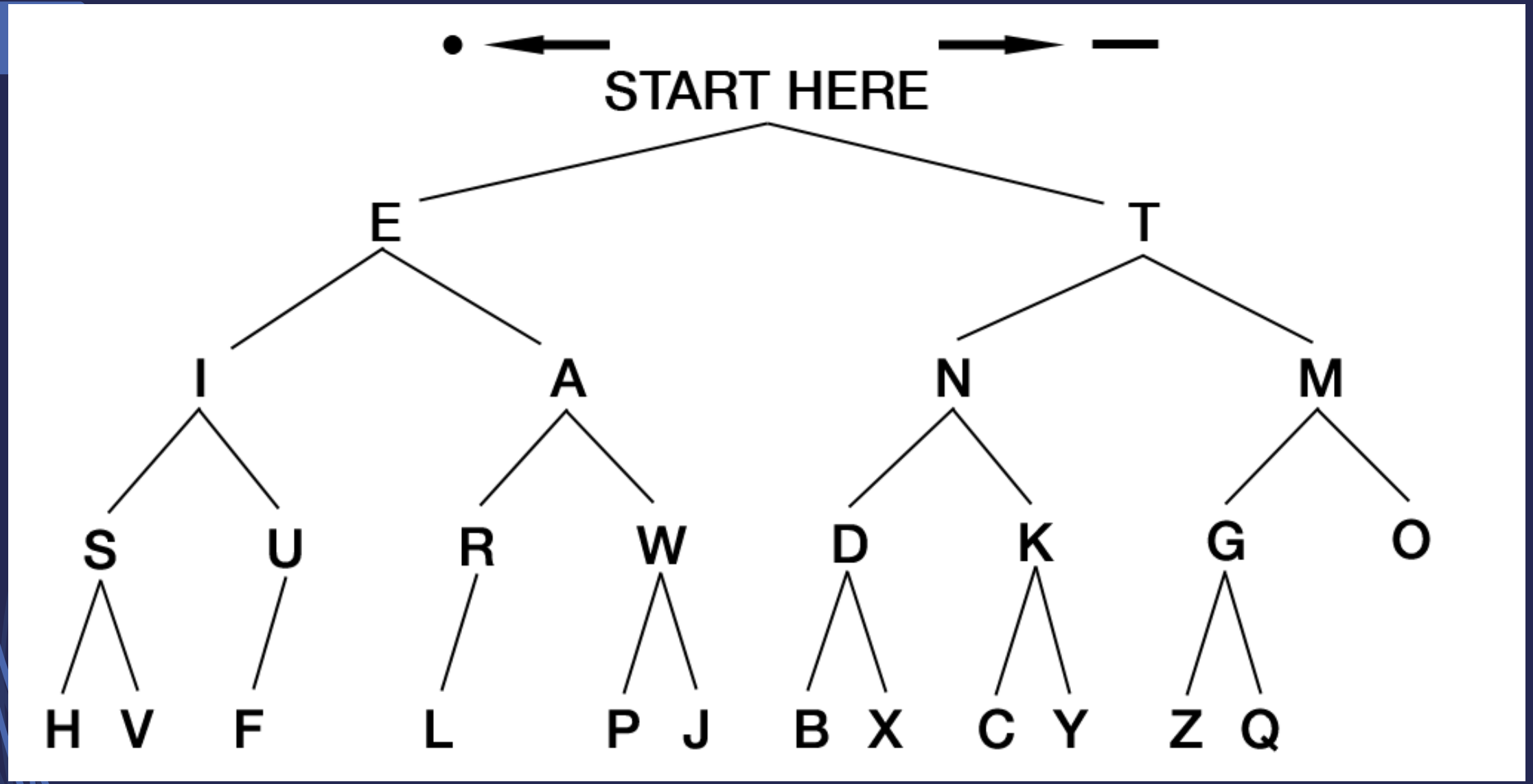
- Don't use your eyes???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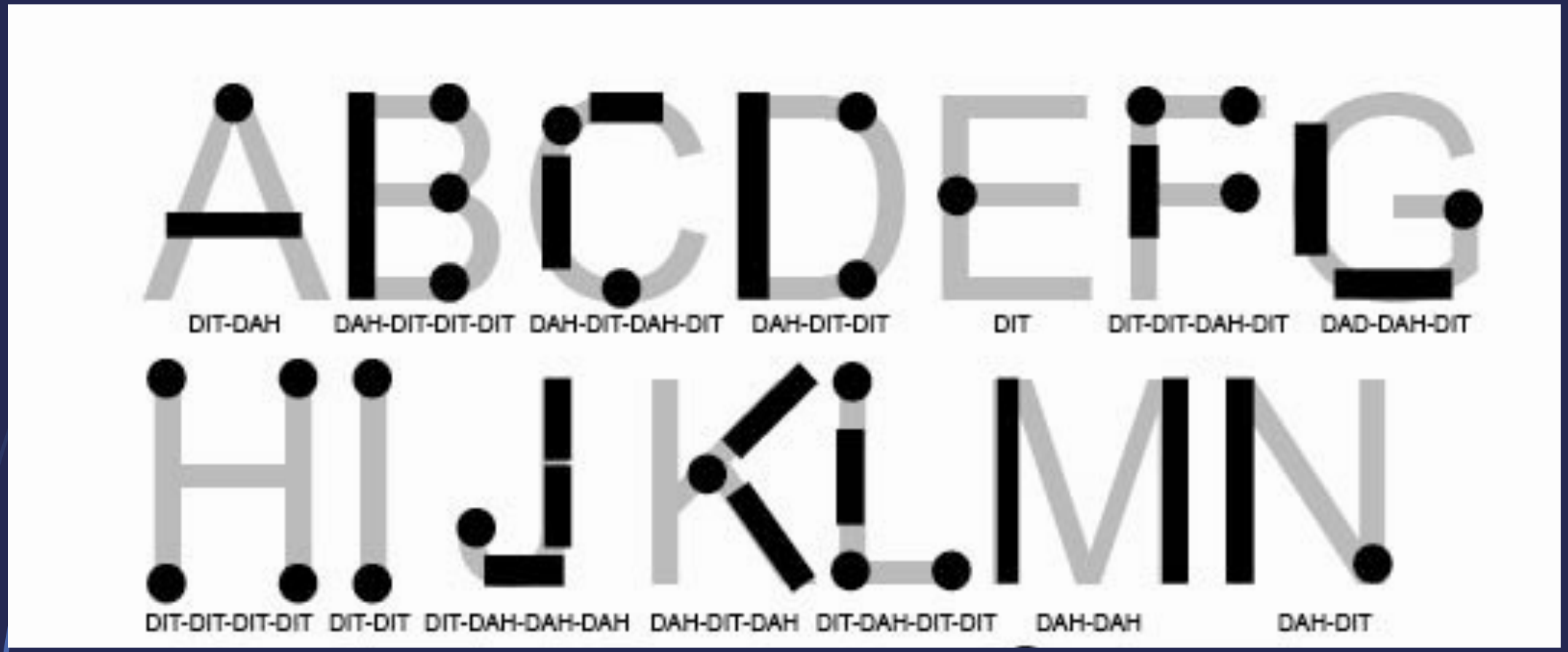
A
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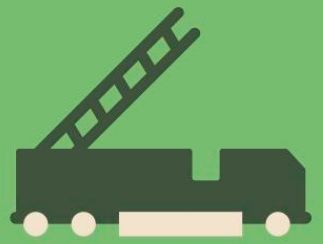
Eye



Firetruck

Giraffe

Insect

Jet

Kite

A ALL A-BOARD
Muddy Waters
B BULL-ET THE BLUE SKY
U2
C CRA-ZY WORDS CRA-ZY TUNE
The Nitty Gritty Dirt Band
D DRAG-GIN' THE LINE
Tommy James
E EYES
Rogue Wave
F FULL MOON EMP-TY HEART
Belly
G GO-ING GO-ING GONE
Information Society
H HIT THE ROAD JACK
Ray Charles
I I RAN
A Flock Of Seagulls
J JOHN WES-LEY HARD-ING (mon-o)
Bob Dylan
K KILL-ING ME SOFT-LY
The Fugees
L LOOK BE-FORE YOU CROSS
Evi-Edna Ogholi
M MAN-IC MON-DAY
The Bangles
N NO-WHERE MAN
The Beatles
O OR-ANGE BLOS-SOM SPEC-IAL
Johnny Cash
P PINK LIT-MUS PA-PER SHIRT
Strange Turn

C
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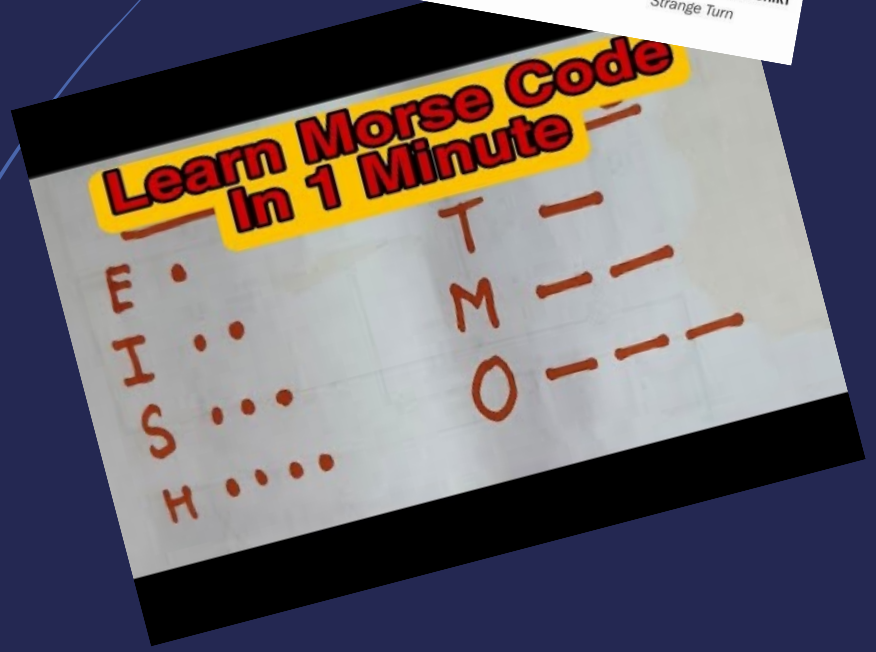
Learn Morse Code
In 1 Minute
E
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Minions
PARADE
Morse
Code

A ALL A-BOARD
Muddy Waters
B BULL-ET THE BLUE SKY
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tro phic
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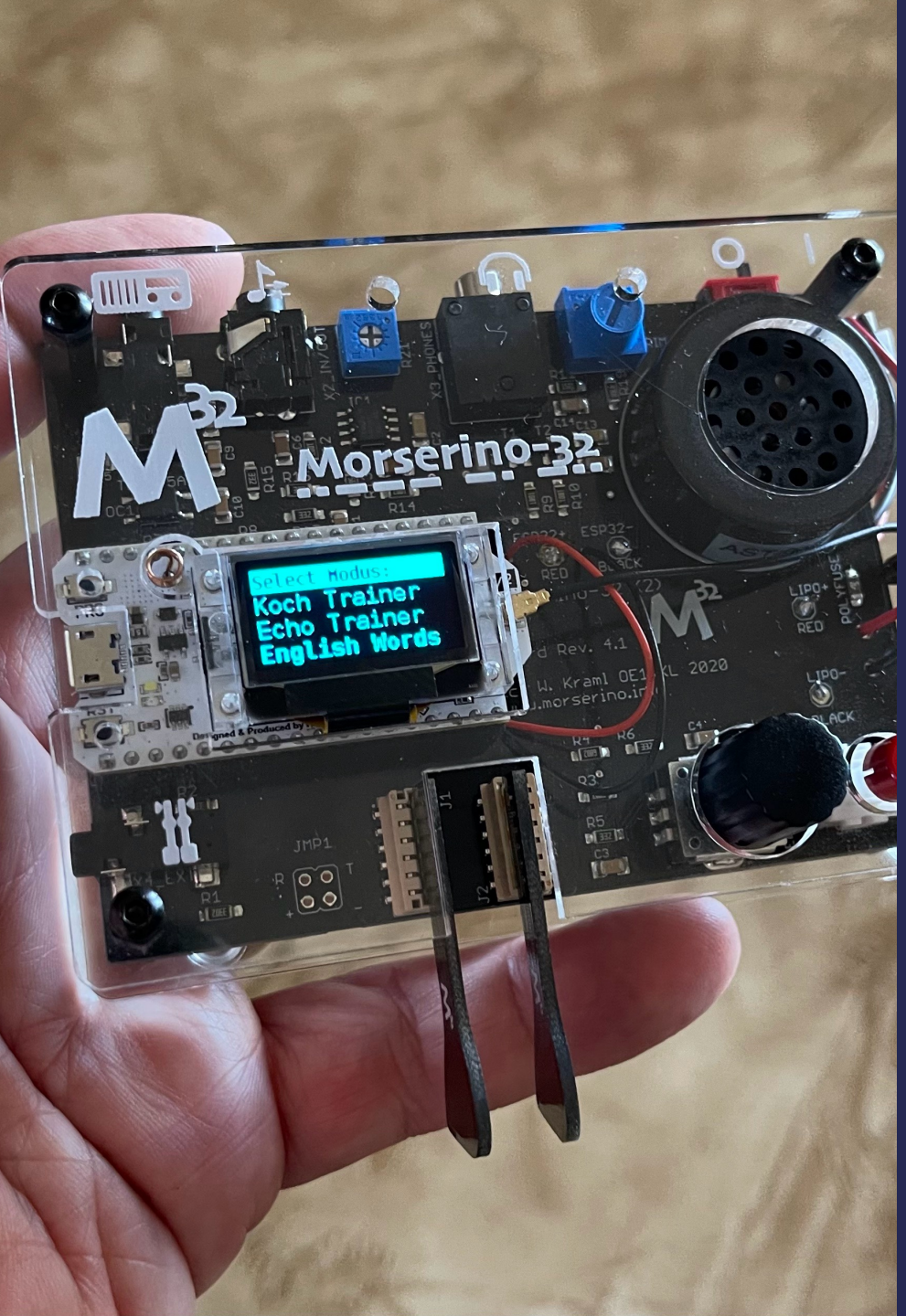
Learn Morse Code In 1 Minute
E .
I ..
S ...
H ....
Minion PARADE
Morse Code

How To Learn Morse Code

- *Practice, Practice, Practice, Practice, Practice, Practice, …*

Methods

- Learn by sound of the letter, then eventually the sound of entire words (do not count dits & dahs)
  - L is not "dot dash dot dot", but "di-dah-di-dit"
- Farnsworth – target character speed, adjust character spacing
  - 20/10 is common, may need go to 30wpm
- Koch – learn characters in certain order, start with two, add more as you become proficient
- Most Apps support Farnsworth and Koch



Helpful Tools

- Hardware (mostly sending)
  - Code Practice Oscillators
  - Decoders
    - Practice correct timing when learning to send with a straight key
  - Morserino-32 kit
    - CW Trainer, Echo Trainer, CW Decoder, CW Transceiver using LoRa or Internet
    - qsobot.online

Sending:
Key vs Paddles

- When one uses a straight key, one must use precise timing since the code is produced by physical manipulation. A paddle is different from a straight key since the difference in timing between the “dits” and the “dashes” is built into the unit.

Apps

- Web
  - lcwo.net
  - longislandcwclub.org
  - morsecode.ninja
- Mobile Apps
  - Ham Morse
  - Morse Toad
  - Morse Machine
  - Morse Mentor Pro
  - Morse Mania
- Desktop Apps
  - CW Trainer by G4FON

Some apps will send real QSOs, current headlines, and let you upload your own content.

They can also simulate real listening conditions such as band noise.

Tips

- Use both Koch and Farnsworth methods at the same time.
- Practice 10-15 minutes twice a day.
  * Habit Stacking *
- Track your progress. Some apps do this for you.
- Learn to copy before learning to send.
- CW operators will have "accents" so listen to real QSOs.
  (No radio? Try websdr.org)
- If you struggle, seek an elmer.

Challenge Question

- What one word sums up this presentation?

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PRACTICE

Questions?

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