



CAN YOU CRACK THE CODES?

Flaghoist spelling alphabets use individual flags to represent letters, numbers or specific messages for visual communication between ships.

Originating in the seventeenth century, these systems became formalised by the late eighteenth and early nineteenth centuries, notably through British naval codes and the Commercial Code of Signals in 1855. Today, the International Code of Signals continues this tradition as a global standard for maritime communication.

Flags allowed ships to coordinate operations, request assistance and identify themselves when verbal or radio communication was impossible. In naval battles and merchant trade, flag signalling was vital for fast, clear and standardised communication across nations. Even with modern technology, flaghoist systems remain in use as ceremonial or emergency backups.

How the System Worked

Ships hoisted flags in sequence on masts to spell words or convey specific codes, using distinctive colours and shapes for visibility. Substitute flags represented repeated letters to simplify displays. Whether spelling full words such as HELP or raising a single flag for urgent signals, flaghoist alphabets offered a reliable way to maintain communication across the open sea.

Morse code is a way to send messages using dots and dashes. Each letter and number has its own pattern. You can send it by sound, light, or even tapping.

A man named Samuel Morse helped invent Morse code in the 1830s. He worked with Alfred Vail to make it better and easier to use.

People made Morse code to send messages quickly over long distances. Before that, messages had to be carried by hand, which took a long time.

Morse code was used all over the world — on trains, ships, and in the army. Sailors used it to call for help by sending “SOS”.

Each letter is made from short signals (dots) and long signals (dashes). You can send them by beeping, blinking, or tapping. A person who knows Morse code can read the message.

Before lights and radios, sailors used semaphore flags to send messages. These weren't exactly Morse code but were another early signalling method. Later, single flags were waved in Morse code patterns using up and down movements.

By the late 1800s and early 1900s, many ships had radio telegraph machines. Operators tapped out Morse code to send messages over long distances using radio waves — this is how SOS was sent from sinking ships.

How Flag Signalling (Semaphore) Worked

1. The Basics

A sailor held a flag in each hand and moved their arms to different positions to represent letters of the alphabet. Each letter had its own unique arm-angle combination, a bit like hand signals or clock positions.

2. The Flags

The flags were usually red and yellow, bright and easy to see at a distance. They were held at full arm's length to make the shapes clear.

3. Sending the Message

The signalman stood in a clear place, often high up on the ship (like the bridge). They would form each letter one at a time using the correct flag position. The person receiving the message watched and wrote it down as each letter was shown.

4. Spacing and End of Message

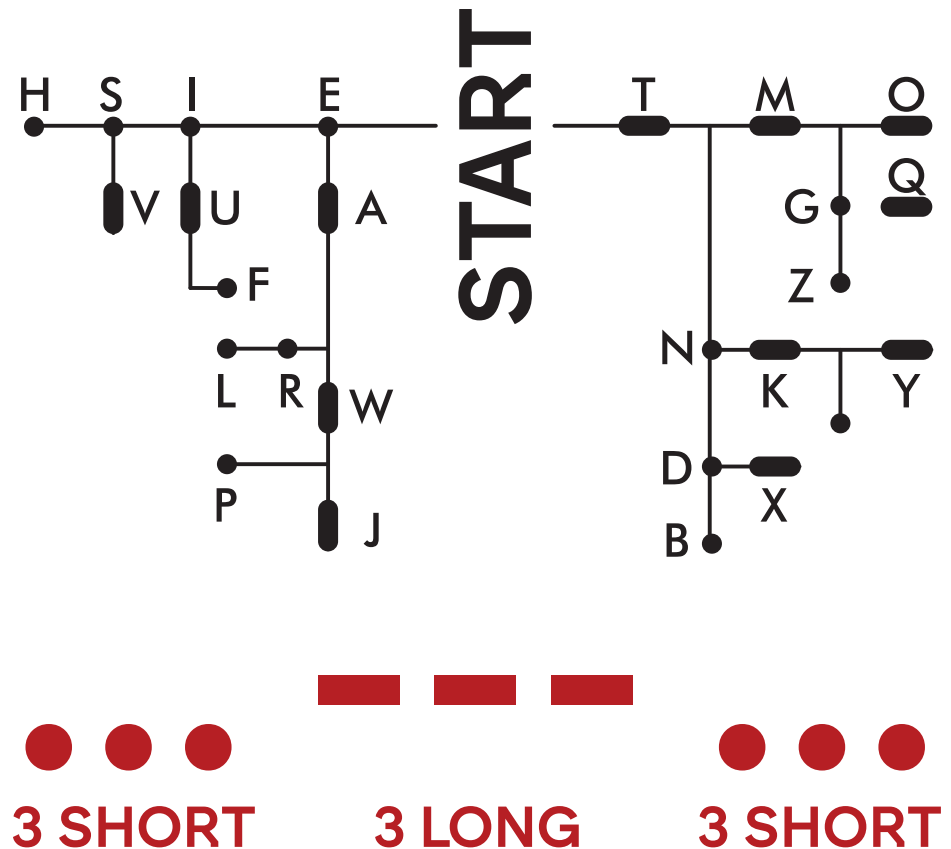
To show a new word was starting, the signalman would briefly hold the flags in a rest position.

There were also specific signals to mean “end of message”, “error”, or “repeat”.

Example: To signal the word HI: The sailor would make the arm position for H, pause, then move to the arm position for I.

MORSE CODE

Samuel Morse and Alfred Vail invented Morse code in the 1830s so people could send messages quickly across long distances using telegraph wires. By tapping a telegraph key, they created short and long signals that the receiver then interpreted.



IMAGINE YOU ARE A SAILOR, HARBOURMASTER OR REPORTER... WHAT MESSAGE WOULD YOU SEND?

Messages sent between telegraph offices and railway stations for government, businesses, newspapers, and the public helped local and international news spread quickly.

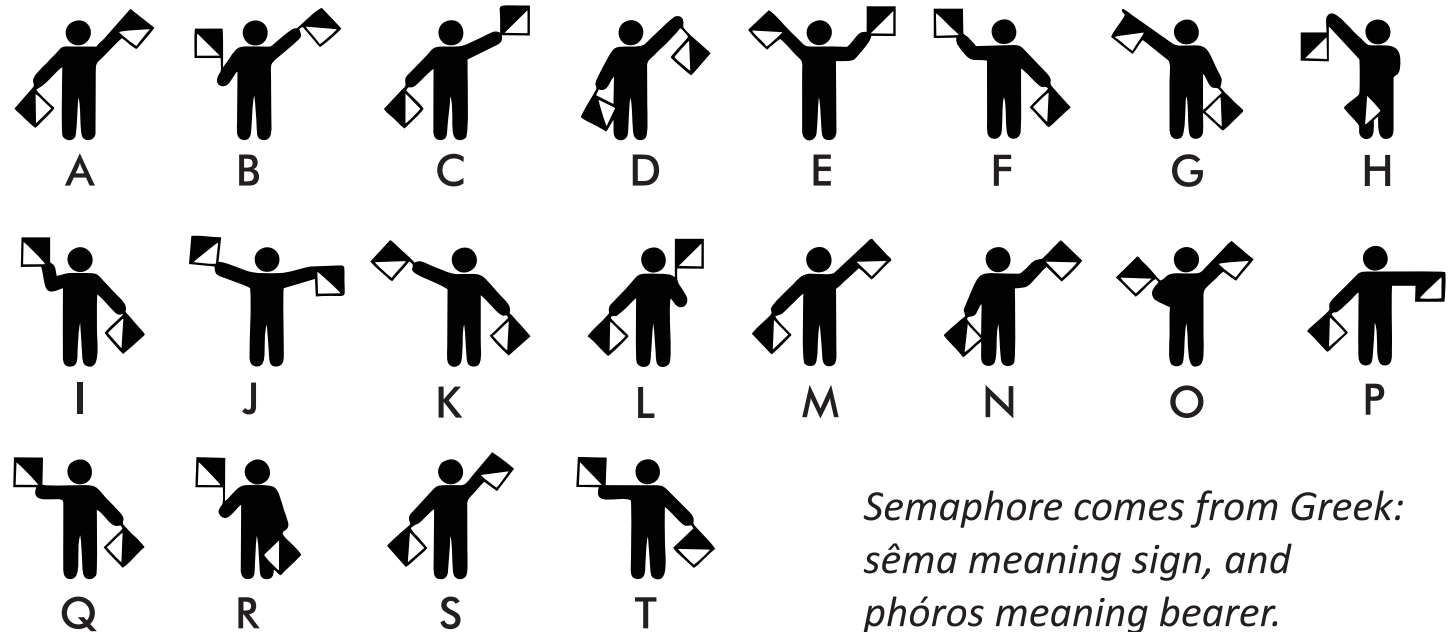
Around the 1900s, ships used wireless radios to send Morse code messages, including the Save Our Souls distress signal. Before that, ships and harbourmasters relied on visual signals such as flags and flares.

INTERNATIONAL CODE OF SIGNALS (ICS)

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|--|--|---|---|---|--|---|---|
| A  Alpha/Alfa I have a diver down; keep well clear at slow speed. | B  Bravo I have dangerous goods. (Originally used by the Royal Navy specifically for military explosives.) | C  Charlie Affirmative. | D  Delta Keep clear of me; I am maneuvering with difficulty. | E  Echo I am altering my course to starboard. | F  Foxtrot I am disabled; communicate with me. | G  Golf I require a pilot. | H  Hotel I have a pilot on board. |
| I  India I am altering my course to port. | J  Juliett I am on fire and have dangerous cargo on board. | K  Kilo I wish to communicate. | L  Lima Stop immediately. | M  Mike My vessel is stopped and making no way through the water. | N  November Negative. | O  Oscar Man overboard. | P  Papa Report. Proceed to sea. |
| Q  Quebec My vessel is healthy. | R  Romeo No ICS meaning as single flag. | S  Sierra I am operating astern propulsion. | T  Tango Keep clear of me. | U  Uniform You are running into danger. | V  Victor I require assistance. | | |
| W  Whiskey I require medical assistance. | X  X-ray Stop, watch for my signals. | Y  Yankie I am dragging my anchor. | Z  Zulu I require a tug. | | | | |

Sailors and harbourmasters hoisted groups of signal flags. ICS became official in 1901, developed from earlier flag systems like the 1817 Marryat Code.

SEMAPHORE FLAGS



Semaphore comes from Greek: sêma meaning sign, and phóros meaning bearer.

The Greeks used signal systems in 350 BC, and Claude Chappe modernised semaphore in the 1790s. Sailors used two flags and arm positions used to warn each other, call for help, or give instructions.