

# Morse code

Find all the important information about Morse code as a transmission technology here.

## Morse rules

### Division of tasks

Transmitting station and receiving station has:

- Recorder: dictates / writes down characters
- Transmitter: sends characters
- Observer: observes the signs

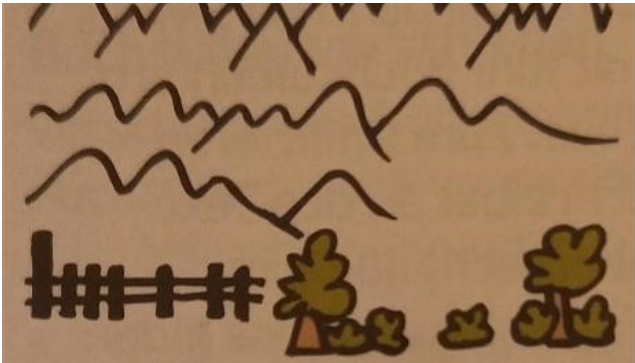
### Notes on transmission

- Always in the same rhythm
- A dash should be 5 times longer than a dot
- Observe the distance between the individual characters
- Agree whether to morse with or without acknowledgement sign ( . = understood / - = not understood)
- Keep the message as short and clear as possible
- Select the means of transmission according to the distance and conditions

## Means of transmission

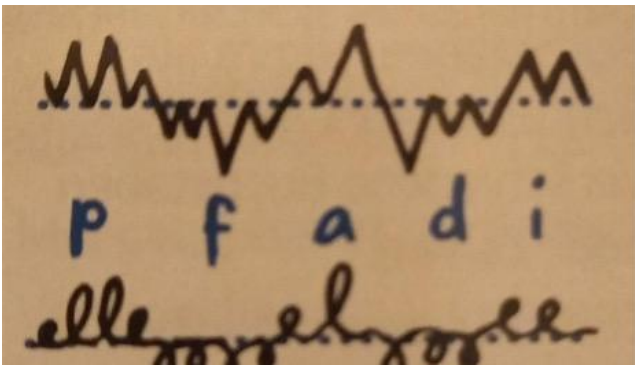
| Day<br>Night | Means of transmission | Condition        | Transmission range |
|--------------|-----------------------|------------------|--------------------|
| T            | Morse flags           | clear view       | 1-2 km             |
| T            | Arms of people        | clear visibility | 500-700 m          |
| T            | Heliograph (mirror)   | Sun              | 20 km              |
| T            | Smoke                 | Calm             | 1 km               |
| T+N          | Whistle               | Calm             | 500 m              |
| T+N          | Morse code            | --               | Cable length       |
| T+N          | Radio                 | same channel     | 10 km              |
| N            | Searchlight           | clear view       | 30 km              |
| N            | Candle lamp           | clear view       | 4 km               |
| N            | Flashlight            | clear view       | 2 km               |

## Alternative transmission methods



## Painting a Morse code picture

Hide Morse code messages in the picture. For example, in the mountains, hill shapes, flowers, garden fence, etc.



## Fever curve

Dots are small peaks, dashes are large ones. The page is changed when words are exchanged.

## Program idea

### Connection with card reading

- Two groups receive a card with a dot on it. They have to move to the dot and send a message at a predetermined time. One group sends, the other receives. They then meet again at a meeting point.
- If necessary, plan a training block for Morse code beforehand.

### Post run

- Post run with various posts where the Morse code technique is taught.
- Prepare different means of transmission to try out

## Sources

Overview image:

<https://th.bing.com/th/id/R.3c297cd8ca1c853ea525abf6d027c128?rik=WMPwEejYcWqmxw&riu=http://www>

other pictures and text: Jungschar EGW Herzogenbuchsee