

Game: radio listening - naval messages

The Coast Guards of all countries regularly send radio messages about navigation activities and dangers, weather forecasts, etc.. Let's discover how to receive and interpret them.

Learning targets: Let Scouts/Guides discover the radio spectrum using online receivers - Discover and interpret weather forecasts and danger/emergency communication in nautics - get familiar with latitude and longitude in topography.

Material:

Hardware:

- PC
- Internet connection.

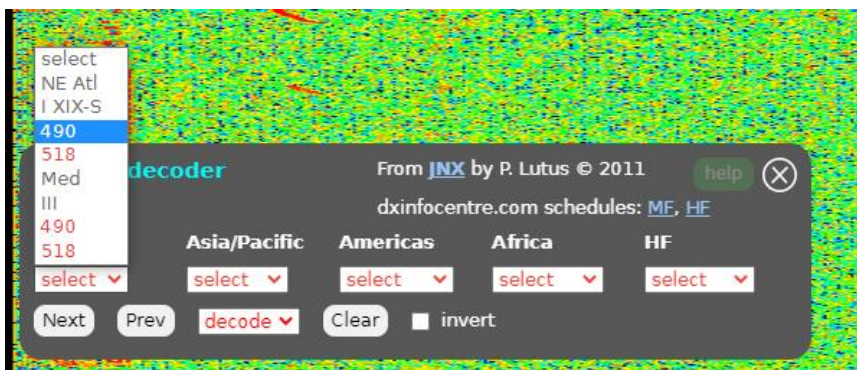
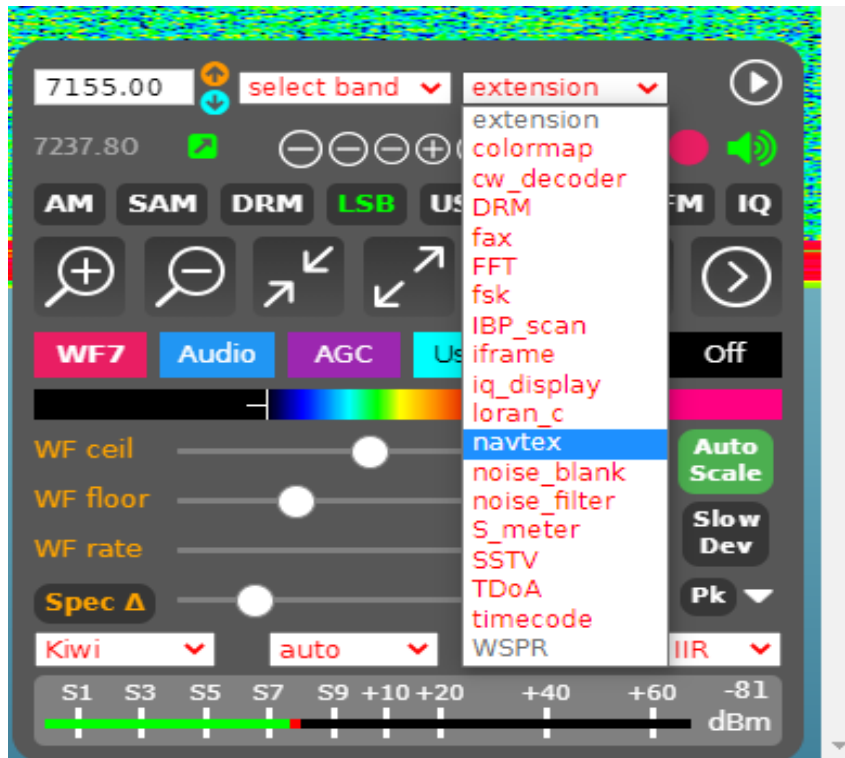
Software:

- browser (pref. Chrome)
- FLDIGI (optional)
- Virtual cable (optional)

Time and preferred place: 1 day (not continuously). Home activity.

Description: Individuals or patrols, using online receivers, must listen, decode and interpret NAVTEX text messages from the coast guard. When the coordinates of ships or elements of danger are indicated, the Scouts/Guides must locate that point on a map. All this information must be reported to the Scout/Guides leaders.

Two lists of online receivers are available at <http://websdr.org/> and <http://kiwisdr.com/> . The use of online receivers is described in a separate activity (listening to broadcasting stations). With the online receivers of the first list it will be necessary to use Virtual Cable and FLDIGI, as described in a separate activity (digital modes). With kiwisdr the decoding functionality is embedded in the receiver:



At 490 kHz national messages are transmitted, while the 518 kHz frequency is used for international communication. Listening is suggested during the evening and the night.

For more information:

- <https://www.ndblist.info/datamodes/navtexabbreviations.pdf>
- <http://www.navtex.lv/navtex/MainTable>
- https://en.wikipedia.org/wiki/List_of_Navtex_stations
- <http://www.iderc.cu/documents/10523/48304/Manual+NAVTEX+2018/d5200fd8-21dd-4a02-ae7d-feb0a2ff4626>
- https://www.sdrplay.com/resources/decoding_navtex.pdf