***NAVTEX Abbreviations FOR Ice FEATURES***

1. *General rules*

Abbreviations concerning ice type shall have two parts: the first part indicates the ice concentration, the second part the ice thickness or stage of development.

1. *Concentration*

The concentration abbreviations shall be given in tenths **or** in amount of ice. A 2-symbol abbreviation exists for all concentrations.

**Table 1 – Concentration**

|  |  |  |  |
| --- | --- | --- | --- |
| Abbr. | Description | Abbr. | Description |
| 1T | 1 tenth | BW | bergy water |
| 2T | 2 tenths | OW | open water (less than 1/10) |
| 3T | 3 tenths | VO | very open ice |
| 4T | 4 tenths | OP | open ice |
| 5T | 5 tenths | CL | close ice |
| 6T | 6 tenths | VC | very close ice |
| 7T | 7 tenths | CO | compact or consolidated ice |
| 8T | 8 tenths | FI | fast ice |
| 9T | 9 tenths |  |  |
| +T ; 9+ | 9+Tenths |  |  |
| XT | 10 Tenths (X is roman 10) |  |  |

1. *Ice thickness and stages of ice development*

The ice thickness should be given as a range in cm or as a stage of development. When given as a range, a single thickness should have at least 2 digits (e.g. 05-10 cm, 30-50 cm).

All stages of sea ice development shall be characterized by a 2-symbol abbreviation, but for lake ice 3-symbol abbreviations shall be used.

Note: It is also possible to use the abbreviation GT (greater than) and LT (less than) as in GT80 cm.

If thickness is not known (or not applicable as in bergy water) Members should use “??” as the 2-symbol abbreviation.

The abbreviated sea ice type, using stages of development, shall consist of 4 symbols. For lake ice most ice types shall consist of 5 symbols.

Note 1: For example: 5TGR (5 tenths gray ice), +TNI (9+ Tenths new ice), FIGW (gray-white fast ice). This makes it clear, that with only 3 symbols there was a transmission problem.

Note 2: Clearly more symbols are needed if a thickness range is given (e.g. CL10-20 cm).

**Table 2 – Stages of ice development**

|  |  |  |  |
| --- | --- | --- | --- |
| **Abbr.** | **Description** | **Abbr.** | **Description** |
| NI | New ice | FY | first year ice |
| NL | Nilas | F1; W1 | thin first year stage 1 (Baltic white ice stage 1) |
| DN | dark Nilas | F2; W2 | thin first year stage 2 (Baltic white ice stage 2) |
| LN | light Nilas | FM | medium first year |
| GR | gray ice | FT | Thick first year |
| GW | gray-white ice | OI | old ice |
| YG | young ice | MY | multi year ice |
|  |  | THN | thin ice (main use for lake ice) |
|  |  | MED | medium ice (main use for lake ice) |
|  |  | THK | thick ice (main use for lake ice) |
|  |  | VTK | very thick ice (main use for lake ice) |
|  |  | ?? | undetermined |

1. *Ice surface topography*

As required, the ice type abbreviation should be followed by an abbreviation giving the topography of the ice. The topography should be separated with a ":".

Note: There can be none, one or several of these abbreviations. For example XTGW:HRDG:ROTN (10 tenths gray-white ice which is heavily ridged and rotten).

1. *Egg-code*

As required, an Egg-code should be used.

In this case the ice definition shall start with the total concentration (in tenths, using just the first letter of the ice concentration abbreviations) followed by EGG. The partial ice type shall then follow separated with "-".

Note: For example: 9EGG-5TGW:RDG-4TNI (total concentration 9 tenths, with 5 tenths of ridged gray-white ice and 4 tenths new ice).

**Table 3 - Ice surface topography**

|  |  |
| --- | --- |
| **Abbr.** | **Description** |
| LVL | level ice |
| RFT | rafted ice |
| HRFT | heavily rafted |
| RDG | ridged ice (hummocked) |
| HRDG | heavily ridged |
| ROTN | rotten ice |

1. *Other abbreviations to be used in the text*

**Table 4 – Miscellaneous abbreviations**

|  |  |
| --- | --- |
| Abbr. | Description |
| PRESS | ice pressure |
| LGT | Light |
| FI-LEAD | lead along the fast ice |
| CSTL-LEAD | coastal lead |
| GT | greater than |
| LT | less than |