

## 16 Submarine and Overhead Cables

Symbols for submarine and overhead cables shown on most Canadian Hydrographic Service charts do not differentiate between cables conducting electric power, often at high voltages, and those that do not (See *Chart No. 1, D26-27 and L30.1-32*).

Because cables are subject to frequent change, those installed, removed or modified since the date of publication of a chart may not be shown. Changes are made through [Notices to Mariners](#) only as follows:

- a) for new submarine cables - if the cable is located on a chart other than a small-craft chart and if located in an area accessible to commercial shipping where anchoring or trawling may damage the cable
- b) for new overhead cables - if the cable is considered to be a hazard to navigation
- c) for existing overhead cables - if changes of significance to navigation in the vertical clearance occurs, or if the cable is removed.

### 1. SUBMARINE CABLES

**WARNING - Mariners should exercise every caution to avoid anchoring or trawling in cable areas, even though there may be no specific prohibition against doing so. Danger to mariners and serious interference with communications or power supplies may result from damage to submarine cables. Equal care should be taken wherever the symbol for a submarine cable is shown on any chart.**

In the event of any vessel fouling a submarine cable, every effort should be made to clear the anchor or gear by normal methods. Should these efforts fail, the anchor or gear should be slipped and abandoned without attempting to cut the cable. **High voltages are fed into some submarine cables and serious risk of loss of life or severe burns exists if any attempt to cut the cable is made.**

- a) Vessels responsible for breaking or damaging a submarine cable could face legal proceedings and could be held liable for the costs and expenses resulting from the damages to that cable.
- b) Vessels shall keep at least one nautical mile from vessels engaged in laying or repairing submarine cables. Fishing gear and nets shall be kept at the same distance. Fishing vessels shall be allowed up to twenty-four hours in order to enable them to obey this notice.
- c) Buoys marking cables shall not be approached within  $\frac{1}{4}$  nautical mile, and fishing gear and nets shall be kept the same distance from them.
- d) Vessels who can prove that they have sacrificed an anchor, a net or other fishing gear, in order to avoid injury to a submarine cable, may receive compensation from the owner of the cable.

For additional information, consult the [International Cable Protection Committee website](#).

### 2. OVERHEAD CABLES

The vertical clearance of overhead cables is given above Higher High Water, Large Tide in tidal waters. In non-tidal waters, vertical clearance is given above Chart Datum. Therefore, in non-tidal waters, the height of the water level above Chart Datum must be subtracted from the charted clearance to give the actual clearance at a particular time (See *Chart No. 1, D22*).

**WARNING - Because of the danger of arcing from overhead cables, mariners are cautioned to ensure an adequate clearance for safety between their vessel and all overhead cables. Be particularly careful with high-voltage cables. If the clearance to avoid a dangerous electrical discharge between a high-voltage cable and a vessel passing under it cannot be obtained from local authorities, then allow at least 7 m less than the vertical clearance.**

**Mariners are cautioned that the actual clearance of an overhead cable may differ from its charted value due to changes in atmospheric conditions, water levels and other factors. In particular, heavy icing may significantly reduce charted vertical clearances.**

Mariners are advised to consult the appropriate volume of CHS *Sailing Directions* to ensure they are familiar with local conditions.

Authority: Canadian Hydrographic Service (CHS)