- (b) Each cable constructed to IEC 92–353 must meet the flammability requirements of Category A of IEC 60332–3–22 (incorporated by reference; see 46 CFR 110.10–1).
- (c) Medium-voltage electric cable must meet the requirements of IEEE 1580 and UL 1072 (incorporated by reference; see 46 CFR 110.10-1), where applicable, for cables rated above 5,000 volts.
- (d) Electrical cable that has a polyvinyl-chloride insulation with a nylon jacket (Type T/N) must meet either UL 1309, IEEE 1580, or section 8 of IEEE 45–2002 (incorporated by reference; see 46 CFR 110.10–1).
- (e) Electrical cable regardless of construction must meet, at a minimum, all of the performance and marking requirements of section 5.13 of IEEE 1580.

[USCG-2003-16630, 73 FR 65198, Oct. 31, 2008]

## §111.60-2 Specialty cable for communication and RF applications.

Specialty cable such as certain coaxial cable that cannot pass the flammability test contained in IEEE 1580, test VW-1 of UL 1581, or Category A of IEC 60332-3-22 (all three standards incorporated by reference; see 46 CFR 110.10-1) because of unique properties of construction, must:

- (a) Be installed physically separate from all other cable; and
  - (b) Have fire stops installed-
- (1) At least every 7 meters (21.5 feet) vertically, up to a maximum of 2 deck heights;
- (2) At least every 15 meters (46 feet) horizontally;
- (3) At each penetration of an A or B Class boundary;
- (4) At each location where the cable enters equipment; or
- (5) In a cableway that has an A-60 fire rating.

[CGD 94–108, 61 FR 28280, June 4, 1996, as amended by USCG–2003–16630, 73 FR 65198, Oct. 31, 2008]

## §111.60-3 Cable application.

- (a)(1) Cable constructed according to IEEE 1580 must meet the provisions for cable application of section 24 of IEEE 45–2002 (both incorporated by reference; see 46 CFR 110.10–1).
- (2) Cable constructed according to IEC 92-353 or UL 1309 (both incor-

- porated by reference; see 46 CFR 110.10–1) must meet section 24 of IEEE 45–2002, except 24.6.1, 24.6.7, and 24.8.
- (3) Cable constructed according to IEC 92-353 must be applied in accordance with IEC 60092-352 (incorporated by reference; see 46 CFR 110.10-1), Table 1, for ampacity values.
- (b)(1) Cable constructed according to IEEE 1580 must be applied in accordance with Table 25, Note 6, of IEEE 45–2002.
- (2) Cable constructed according to IEC 92-353 must be derated according to IEC 60092-352, clause 8.
- (3) Cable constructed according to NPFC MIL-C-24640A or NPFC MIL-C-24643A must be derated according to NAVSEA MIL-HDBK-299 (SH) (all three standards incorporated by reference; see 46 CFR 110.10-1).
- (c) Cable for special applications defined in section 24 of IEEE 45–2002 must meet the provisions of that section.

[USCG-2003-16630, 73 FR 65198, Oct. 31, 2008]

## § 111.60-4 Minimum cable conductor size.

Each cable conductor must be #18 AWG (0.82 mm²) or larger except—

- (a) Each power and lighting cable conductor must be #14 AWG (2.10 mm<sup>2</sup>) or larger: and
- (b) Each thermocouple, pyrometer, or instrumentation cable conductor must be #22 AWG (0.33 mm<sup>2</sup>) or larger.

[CGD 94-108, 61 FR 28280, June 4, 1996]

## $\S 111.60-5$ Cable installation.

- (a) Each cable installation must meet—
- (1) Sections 25, except 25.11, of IEEE 45-2002 (incorporated by reference; see 46 CFR 110.10-1); or
- (2) Cables manufactured to IEC 92–353 must be installed in accordance with IEC 60092-352 (both incorporated by reference; see 46 CFR 110.10-1), including clause 8.
- (b) Each cable installation made in accordance with clause 8 of IEC 60092–352 must utilize the conductor ampacity values of Table I of IEC 60092–352.
- (c) No cable may be located in any tank unless—