143-001
The Coast Guard should confirm that only new installations of equipment within the ambit of Subpart B that are not replacements in kind trigger the application of Subpart C.

Yes, existing vessels utilizing replacements in kind are not subject to Subpart C. However, new towing vessels have to comply with subpart C (and elements of subpart B).
Received Jun 2016
Answered 24 Jan 2017, updated 07 October 2020

143-002
The Coast Guard should ensure that operators of existing towing vessels understand that they may apply to the Marine Safety Center for approval of machinery or electrical systems.

This subsection (143.210) is only for alternative or novel designs, which may be approved by the Marine Safety Center. Existing installations that are not novel designs do not require approval by the MSC. An existing vessel would generally only be subject to this section if it were undergoing a major conversion to a novel or unusual arrangement such as listed in §143.210(a).
Received Jun 2016
Answered 24 Jan 2017, updated 07 October 2020

143-003
The Coast Guard should clarify where insulation is required.

It is clear from §143.220(b) where insulation is required-on surfaces above 428 deg. F.
Received Jun 2016
Answered 24 Jan 2017, updated 07 October 2020

143-004
The Coast Guard should clarify that additional operating stations are not required.

Additional operating stations are not required by this rule. IF they are installed however, all controls and indicators specified must be provided.
Received Jun 2016
Answered 24 Jan 2017

143-005
What is meant by "monitor and control the amount of thrust," and is it different from "indicate?"

"Monitor" has the same meaning as "indicate", but control is completely separate. E.g., the tachometer that indicates RPM is separate from the throttle control that adjusts RPM and thrust. Visual indication of vessel movement is acceptable for monitoring vessel thrust direction.
Received Jun 2016
Answered 24 Jan 2017, updated 07 October 2020

143-006
The meaning of "at the machinery location" should be clarified because a literal reading may require impractical installations of gauges on, rather than near, machinery.

"At the machinery location" means on or very near to the concerned machinery. E.g., the generator oil pressure gage cannot be two decks above the engine. "At the machinery location" typically means a gage board mounted on a frame very near to the machinery being monitored.
Received Jun 2016
Answered 24 Jan 2017

143-007
Explore an exemption from the requirement to log tests, as cruise ships have.

No exemption. The tests in the Table 143.245 (b) are basic but important tests that need to be recorded in accordance with all subparts of 46 CFR 140.
Received Jun 2016
Answered 24 Jan 2017, updated 07 October 2020

143-008
Do vent pipes need to discharge outside, or can they discharge in a contained area?

Vent pipes need to discharge outside to the weather deck area. If "contained" means a small volume area on the weather deck designed to catch overflows, that is acceptable. Cannot discharge internal to the vessel.
Received Jun 2016
Answered 24 Jan 2017

143-009
The Coast Guard should clarify these requirements.

CG will consider publishing additional guidance. It is not stated what in particular needs to be clarified in this large section.
Received Jun 2016
Answered 24 Jan 2017

143-010
All of our line boats were built before 1982. According to 143.265, J1942 only applies to vessels built after Jan 18, 2000. How would that work after a repower?

SAE J1942 is not required by §143.265, regardless of build date. Rather, it is "acceptable" to use J1942 hose in any vessel fuel installation.
Received Jun 2016
Answered 24 Jan 2017, updated 07 October 2020

143-011
Can companies exceed manufacturers' recommendations for overhaul hours, or replacement hours?

It is prudent to comply with manufacturer's recommendations, but it is not a USCG requirement. Some manufacturers may recommend an overhaul or replacement of equipment at an interval shorter than actually required. The only true indicator of the need for overhaul is a proper assessment or inspection of the present condition. E.g., why overhaul a transmission if it is otherwise working fine? Inspections and testing should be done at periodic intervals-not overhauls.
Received Jun 2016
Answered 24 Jan 2017, updated 07 October 2020

143-012, 143-013
For existing vessels, what does minimize shock and fire hazards for electrical systems mean? Does a vessel have to have GFCI electrical outlets?
What are the standards for wiring on existing vessels?

The electrical requirements for existing vessels are, with a few exceptions, grandfathered. In general, all current-carrying conductors must be protected by an appropriately-sized protection device to minimize shock and fire hazards. Current-carrying conductors and switches must be enclosed, and marking of equipment and circuit breakers must be provided. GFCI outlets are not required. See §§ 143.250(a) and (b) and 143.400.
Received 13 Jun 2016/9 Aug 2016
Answered 24 Jan 2017, updated 07 October 2020

143-014
Are ABYC electrical standards applicable to towing vessels?

A number of American Boat and Yacht Council (ABYC) standards are incorporated by reference into Subchapter M, and are listed under 46 CFR §136.112(b). ABYC standards for electrical systems are discussed in §143.520, Towing vessels built to American Boat and Yacht Council standards.
Received 9 Aug 2016
Answered 28 Dec 2016, updated 07 October 2020

143-015
What is considered a "fueling system documented maintenance plan?" What is considered an ample "supply of spare fuel filters onboard a vessel?"

A documented maintenance plan for the fuel system is a written or computerized preventative maintenance schedule (PMS) that serves to schedule and record maintenance and inspection events for the fuel system. Examples of PMS for the fuel system would be regular inspection and replacement (if necessary) of filters, gaskets, seals, valves, etc. An "ample supply" would be based on the service route of the vessel but, in general, two spares onboard for each installed fuel filter is sufficient.
Received 15 Sep 2016
Answered 24 Jan 2017, updated 07 October 2020

143-016
Do aft stations and engine rooms need a general alarm activation switch?

No. The activation switch for the general alarm is only required at the operating station. The engine room is required to have a general alarm announcement per §143.235, but not the activation switch.
Received 15 Sep 2016
Answered 24 Jan 2017, updated 07 October 2020

143-017
Do valves below deck plating in the engine room need an access hole directly above?

No. This may be an operational consideration for the vessel but it is not a CFR requirement. Deck plating covering the hull valve in a system penetrating the hull would generally not be considered 'accessible' unless, for example, the plating were hinged and valve location marked.
Received 15 Sep 2016
Answered 24 Jan 2017

143-018

Is the intent of 143.265 (d) to require all fuel piping to be seamless and made of steel (or other metals) or, is the intent of this regulation to align with 46 CFR 56.50-75 which (only) requires fuel supply piping to the engine to be made of seamless steel (or other identified metals)?

The intent of §143.265 is for fuel supply piping on vessels built after January 18, 2000 to be of seamless steel or other approved materials. 46 CFR §56.50-75 is not required for Subchapter M vessels.

Received Sep 2016

Answered 22 Nov 2016, updated 07 October 2020

143-019

Are there requirements for a breaker at sub-panels? If the main bus goes lug or live straight to another panel and that panel also doesn't have a breaker, is the towboat in compliance with 143.250?

The CFR does not specifically require a breaker at sub-panels. However, subsection 143.250(a) requires electrical equipment to be provided with circuit isolation, and a panel is considered electrical equipment. A breaker would likely be required to ensure compliance with §143.400(a) to minimize fire hazards, particularly if the conductor serving the panel is small compared to the generator breaker rating.

Received 26 Sep 2016

Answered 24 Jan 2017, updated 07 October 2020

143-020

Towing vessels have been in the process of being equipped with hydraulic fluid level alarms in the wheelhouse. Are we now being asked for pressure gauges in addition, or will the low level alarm for the steering fluid tank suffice? Will this be a grandfathered item on vessels constructed before July 2017?

Per §143.230(a)(6), a low hydraulic steering fluid level alarm is required at the operating station (if the vessel has hydraulic power steering). Per §143.230(c)(5), a hydraulic system pressure gauge is required at the steering gear machinery, but the pressure gauge is not required at the operating station.

Received 7 Oct 2016

Answered 24 Jan 2017, updated 07 October 2020

143-021
§143.400(c) states that electrical equipment must be marked with its respective current and voltage rating. The term "electrical equipment" is not defined and no distinction is made between vital or non-vital equipment, A/C and D/C, installed and uninstalled equipment or low voltage equipment.

The Coast Guard should clarify the intent of this regulation and define the range of equipment intended to be marked.

The primary focus of this requirement is larger equipment, such as motors, generators and transformers, which should all be marked with nameplate or equivalent information.

There should be, in general, a system design plan that reflects every electrical load in the distribution system.
Received 5 Dec 2016
Answered 24 Jan 2017

143-022
Do the electrical wiring cables have to be the armored type or can a towboat use unarmored cable?

Existing TVs need to meet the general electrical requirements of §143.400; armored cable is not required. Cable in general should be protected in areas subject to mechanical damage, and this is a requirement for new TVs in §143.575(a)(8).
Received 13 Jan 2017
Answered 4 Apr 2017, updated 07 October 2020

143-023 and 143-025
46 CFR 143.230(c)(3) states that the auxiliary generator must have gauges for lubricating oil pressure and engine RPM (Tachometer). If the unit is developing the proper cycles, what is the need for a tachometer? The cycle generation is the critical part.

Yes, the generator prime mover speed is normally proportional to and based on the required generator frequency. However, the design of the generator and proportionality to engine speed must be known in order to convert frequency to engine RPM. The engine tachometer is also an important instrument for verification of normal and overspeed engine settings. It is not uncommon for tachometers to be provided as part of an engine installation package, and the requirement in §143.230(c)(3) is for the machinery location only.
Received 27 Feb 2017
Answered 4 Apr 2017, updated 07 October 2020

143-024

46 CFR 143.585(d); The means to monitor the amount of thrust, rudder angle, and if applicable, direction (ahead or astern) of thrust must be independent of the controls required by § 143.225. Does this mean that on a conventional shaft and propeller towboat that the use of an independent shaft RPM and direction gauge would be required or would this section only applicable to non-conventional propulsion arrangements like variable pitch propellers or Z-drive? Does shaft RPM satisfy "amount of thrust"?

This section applies to both conventional and alternative arrangements such as variable pitch propellers. The primary purpose of this paragraph is to specify that both control and indication is required and must be separate. E.g., there may be a throttle setting of "full ahead", but there also needs to be an indicator such as propeller RPM showing the true speed. Yes, a shaft RPM indicator does satisfy the "amount of thrust" indication requirement.

Received 22 Feb 2017

Answered 4 Apr 2017

143-026

46 CFR 143.410(b)(1) states that battery powered emergency lighting must have a duration of no less than 2 hours. Currently, a leading manufacturer states that their lights will provide a duration of AT LEAST 90 minutes. Is the statement of AT LEAST 90 MINUTES satisfactory to meet the regulations?

No. The minimum battery duration is 120 minutes for emergency lighting. Lighting requirements vary by installation and total electrical load on the batteries. So if the battery type in question can be demonstrated to provide 120 minutes of emergency lighting to the satisfaction of the OCMI, then it would be considered acceptable.

Received 7 Mar 2017

Answered 4 Apr 2017, updated 07 October 2020

143-028

1. Must the check valve be installed on the suction side of the bilge pump? Wouldn't a check valve on the discharge side of the pump also prevent unintended back flooding?

2. If bilge piping serving a single bilge pump branches off into multiple segregated bilge sections, would the presence of a single check valve on the main "trunk" be in compliance?

1. In accordance with 46 CFR §143.275 "All installed bilge piping must have a check/foot valve in each bilge suction that prevents unintended back flooding through bilge piping." The check valve must be on the suction side.

2. The preamble to the regulation, second column of page 40065, states, the Coast Guard received several comments suggesting ''prescriptive'' regulations, such as those for larger ships in 46 CFR §56.50, be applied to §143.275. The Coast Guard decided not to impose a prescriptive requirement for bilge pumping systems in this regulation because of the extremely large number of different configurations possible for towing vessels. Specific engineering design arrangements may be verified for compliance as per §144.145.

Received 6 Apr 2017
Answered 3 July 2017, updated 07 October 2020

143-030

May an auxiliary generator frequency meter be substituted for the auxiliary generator engine tachometer?

No. 46 CFR §143.230(c)(3) specifically identifies that the generator engine must be equipped with a gauge at the machinery location which displays engine RPM.

Received 13 Apr 2017
Answered 21 June 2017, updated 07 October 2020

143-032
In the preamble to the Final Rule (page 40066, left hand column) the Coast Guard states that "specific berthing spaces are not required to have emergency lights." Does this mean that emergency lights are not required in "berthing spaces" as defined in 46 CFR 136.110? If no, would extra equipment (already installed lights in berthing spaces) have to meet the requirements of 46 CFR 143.410(b)?

Emergency lighting is required in berthing spaces and two specific options are given in §143.410. A distinction is made in §143.410 between emergency lighting sources with one being electrical battery powered lights and the other being phosphorescent emergency illumination strips where either is acceptable. The statement in the preamble that "specific berthing spaces are not required to have emergency lights" means that you may chose not to install battery operated emergency lights but may use the alternate source of illumination. §143.410(b) states that in the event of power loss, there must be sufficient illumination in the living areas to enable personnel egress.
Received 21 Apr 2017
Answered 21 June 2017, updated 07 October 2020

143-033
With respect to Propulsion Control Systems for main propulsion, I am requesting your guidance on the intent of 143.585 (a) 3.

Note that this is a requirement for new vessels moving tank barges carrying oil or hazardous material in bulk. The intent of §143.585(a)(3) is that in an emergency or loss of propulsion control due to control system failure, the alternate means will allow the crew to quickly re-establish control of the vessel and maintain that control until permanent repairs are made. To verify compliance of a system with design standards, follow the procedures outlined in §§ 144.135 through 145.
Received 26 Apr 2017
Answered 4 Aug 2017, updated 07 October 2020

143-034
143.230(b)(3) states that alarms must continue until they are acknowledged. All alarms on our vessels are automatically logged electronically. If an alarm cleared itself before it could be acknowledged, a crewmember would still be able to view which alarm was triggered. Is the intent of this regulation to require "latching" alarms that must be manually acknowledged even if the condition that resulted in the alarm returns to normal operating parameters?

Yes. The alarms listed in 46 CFR §143.230(a) must continue until acknowledged by a crew member in accordance with 143.230(b)(3).
Received 3 May 2017
Answered 13 Sep 2017, updated 07 October 2020

143-036

1) Can tachometers and the direction of the throttle be used as thrust monitoring? This seems reasonable for smaller vessels with traditional propeller propulsion. The preamble leads me to believe the Coast Guard is looking for something more sophisticated but virtually no small vessel operators I have encountered see the value in adding more instruments (at least on smaller vessels under 65').

1.a.) Similarly, is the Coast Guard going to accept the position of the tiller on vessel equipped with tiller style steering as an acceptable means for rudder angle indication? Again, the preamble suggests that a Rudder Angle Indicator is needed even on tiller style steering systems, but the smaller operators that I am speaking with aren't convinced of the value.

1) In part. Tachometers and throttles must be able to accurately and continually be capable of displaying direction and relative amount of thrust of an engine or propulsor in the ahead or astern mode. A tachometer is one example of a method to monitor thrust. Other methods may be used to monitor thrust to comply with §143.225.

1.a) Mechanical position of the steering tiller can be used as an alternative means of rudder angle indication if the position of the tiller and rudder can be directly and physically seen by the operator at each operating station. The direction of off-centerline thrust can be displayed by the use of mechanical or electronic rudder angle indicators. The use of vessel swing meters or swing of a compass card is another example.

Received 16 May 2017

Answered 25 May 2018, updated 07 October 2020