



## TOP 10 SMALL PASSENGER VESSEL (SUBCHAPTER T) DEFICIENCIES

We conducted an analysis of all deficiencies recorded by CG Marine Inspectors while inspecting certificated Small Passenger Vessels. The purpose of this analysis was to identify the 10 most common deficiencies to share with Small Passenger Vessel Owners so problems can be rectified prior to scheduling their next Coast Guard examination.

The top 10 deficiencies, including a brief explanation of the deficiency, applicable regulation, and potential correction methods are provided below. These deficiencies are not listed in any specific order.

 Dead End Wires (46 CFR 183.340): All cables or wires must serve some piece of equipment or system onboard the vessel. In situations where a piece of equipment or system is removed and not replaced, the cable or wire that serviced the equipment or system must also be properly removed from the power supply.



2. <u>Deteriorated Hull Material</u> (46 CFR 189.40; NVIC 7-68; NVIC 8-87; NVIC 7-95): Routine examinations of a vessel's hull both internally and externally are critical to the safety of a vessel. Wood vessels are notorious for having wasted wood planking and deteriorated fasteners. Steel and Aluminum hulled vessels are prone to get cracked welds following allisions with objects such as docks and also due to routine operations in rough seas. Steel is also prone to rusting, especially in



areas where the plating is uncoated or where the coating may have failed. Fiberglass hulled vessels are also subject to hull deterioration due to delamination, blisters, or cracks/knicks in the gel coat which can allow water to permeate through the various layers of fiberglass and weaken the hull structure. Vessel owners/operators should make a concerted effort to examine all accessible internal hull components including through hull fittings on a regular basis. Identifying problems early can prevent costly repairs or even major hull damage in the future.

3. Inoperable Bilge High Level Alarm (46 CFR 182.530): All certificated small passenger vessels 26 feet or greater, regardless of build date, must have visual and audible bilge high level alarms for normally unmanned spaces that might flood, whether from a fractured through-hull fitting below the deepest load waterline, spaces containing charged sea water piping, and spaces with a non-watertight closure, such as a space with a non-watertight hatch on the main deck. Vessels constructed of wood must also provide bilge level alarms in all watertight compartments except small buoyancy chambers. Testing bilge level alarms and visual indicators are relatively easy to perform and should be conducted on a regular basis to ensure proper operation of the bilge alarm system.





- 4. Portable Hand Bilge Pump Inoperable or Missing (46 CFR 182.520(b)): As per 46 CFR Table 182.520(a), specific small passenger vessels are permitted to have portable hand bilge pumps as a secondary or emergency means of dewatering a space. Many of the examination activities showed that vessel owners failed to maintain a portable pump onboard, but most found that a portable pump was either inoperable or not usable in all spaces of the vessel. The regulations require that the portable hand bilge pump be capable of pumping water from all watertight compartments on the vessel, which means that the suction hose must be long enough to reach the deepest part of the vessel. Vessel owners/operators should test their portable hand bilge pumps on a regular basis to ensure proper operation.
- 5. FCC Station License Missing (46 CFR 184.502 & 47 CFR 80.13): Marine Radios, EPIRBs, and AIS equipment required to be installed on small passenger vessels must comply with FCC requirements including FCC issued station licenses mandated in 47 CFR 80.13. Many certificated small passenger vessels are issued deficiencies for not having an FCC Station License for their marine radio.



- 6. Running Lights (Stern, Mast, Side) Inoperable (46 CFR 183.420): All vessels must have navigation lights in accordance with the International and Inland Navigation Rules. During safety examinations, many vessels are found to have inoperable stern, mast, and sidelights. In some instances the installation of these lights was also found to conflict with the International and Inland Navigation Rules. Vessels of greater than 65 feet in length must also have navigation lights that are compliant with UL 1104 standards. Though many vessels normally operate in daylight hours only, vessel owners/operators should test their navigational lights prior to each voyage to ensure proper operation.
- 7. <u>Light Guards Missing</u> (46 CFR 183.410, UL 595 & 1570/1/2/3/4): All light fixtures that may be subject to damage must have a guard or be made of high strength material. Light fixtures on the open weather deck, engine room, or other machinery space must be protected with guards. Lights in accommodation spaces are normally exempted from this requirement because they are not subject to damage.



8. Expired First Aid Kit Medication (46 CFR 184.710 & 46 CFR 160.041): All certificated small passenger vessels certificated must have a first aid kit approved under 46 CFR 160.041 or an equivalent that contains all required contents listed in 160.041. The most common deficiency with first aid kits is expired medications. When an expired medication is discovered, it must be replaced promptly. Individual items in CG approved first aid kits may be replaced as necessary with equivalent medications. Just because one item in a first aid kit is expired does not mean that the whole kit must be replaced!





- 9. Navigational Charts Outdated or Missing (46 CFR 184.420): All certificated small passenger vessels must carry appropriate navigational charts that cover the area in which they operate. These charts must be kept current using regularly published Notices to Mariners. Many vessels that received deficiencies for outdated or missing navigation charts were also found to be missing other required nautical publications which include the U.S. Coast Pilot, Coast Guard Light List, Tide Tables, and Current Tables. Vessels may use extracts from these publications for the area of operations in lieu of carrying the complete publication.
- 10. Expired EPIRB Hydrostatic Release (46 CFR 180.64): All small passenger vessels that are certificated to operate on the high seas or three miles beyond the coastline of the Great Lakes must have a FCC Type Accepted Category 1, 406 MHz Emergency Position Indicating Radiobeacon (EPIRB) installed in a float free system. It was discovered that many small passenger vessels failed to replace the hydrostatic release prior to its expiration date. Vessel owners/operators should inspect their EPIRBs monthly to ensure they operate properly. The hydrostatic release unit for the EPIRB must be replaced prior to expiration to ensure that it will successfully release the EPIRB should the vessel sink.

For more information about Small Passenger Vessel inspections and how you can prevent these common deficiencies, including performing your own self inspection, please contact your local Coast Guard Sector/Inspections Division. For a listing of local Sector Offices, click on "Sector Directory" on Homeport: <a href="http://homeport.uscg.mil">http://homeport.uscg.mil</a>



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