

**§ 176.645**

**46 CFR Ch. I (10-1-04 Edition)**

(c) The pre-survey meeting may be conducted by teleconference, if agreed to in advance by the OCMI.

[USCG-2000-6858, 67 FR 21086, Apr. 29, 2002, as amended at 69 FR 47384, Aug. 5, 2004]

**§ 176.645 AHE Procedure.**

(a) To complete the underwater survey you must—

(1) Perform a general examination of the underwater hull plating and a detailed examination of all hull welds, propellers, tailshafts, rudders, and other hull appurtenances;

(2) Examine all sea chests;

(3) Remove and inspect all sea valves in the presence of a marine inspector once every five years;

(4) Remove all passengers from the vessel when the sea valves are being examined, if required by the Officer in Charge, Marine Inspection (OCMI);

(5) Allow access to all internal areas of the hull for examination, except internal tanks that carry fuel (unless damage or deterioration is discovered or suspect), sewage, or potable water. Internal sewage and potable water tanks may be examined visually or by non-destructive testing to the satisfaction of the attending marine inspector; and

(6) Meet the requirements in § 176.650 of this part.

(b) A marine inspector may examine any other areas deemed necessary by the OCMI.

(c) If the AHE reveals significant deterioration or damage to the vessel's hull plating or structural members, the OCMI must be immediately notified. The OCMI may require the vessel be drydocked or otherwise taken out of service to further assess the extent of damage or to effect permanent repairs if the assessment or repairs cannot be completed to the satisfaction of the OCMI while the vessel is waterborne.

[USCG-2000-6858, 67 FR 21086, Apr. 29, 2002, as amended at 69 FR 47384, Aug. 5, 2004]

**§ 176.650 Alternative Hull Examination Program options: Divers or underwater ROV.**

To complete the underwater survey portion of the AHE, you may use divers or an underwater remotely operated vehicle (ROV).

(a) If you use divers to conduct the underwater survey, you must—

(1) Locate the vessel so the divers can work safely under the vessel's keel and around both sides. The water velocity must be safe for dive operations;

(2) Provide permanent hull markings, a temporary grid system of wires or cables spaced not more than 10 feet apart and tagged at one-foot intervals, or any other acoustic or electronic positioning system approved by the OCMI to identify the diver's location with respect to the hull, within one foot of accuracy;

(3) Take ultrasonic thickness gaugings at a minimum of 5 points on each plate, evenly spaced;

(4) Take hull plating thickness gaugings along transverse belts at the bow, stern, and midships, as a minimum. Plating thickness gaugings must also be taken along a longitudinal belt at the wind and water strake. Individual gaugings along the transverse and longitudinal belts must be spaced no more than 3 feet apart;

(5) Ensure the third party examiner observes the entire underwater examination process;

(6) Record the entire underwater survey with audio and video recording equipment and ensure that communications between divers and the third party examiner are recorded; and

(7) Use appropriate equipment, such as a clear box, if underwater visibility is poor, to provide the camera with a clear view of the hull.

(b) You may use an underwater ROV to conduct the underwater survey. The underwater ROV operating team, survey process and equipment, quality assurance methods, and the content and format of the survey report must be accepted by the Officer in Charge, Marine Inspection (OCMI) prior to the survey. If you choose this option, you must—

(1) Locate the vessel to ensure that the underwater ROV can operate effectively under the vessel's keel and around both sides; and

(2) Employ divers to examine any sections of the hull and appurtenances that the underwater ROV cannot access or is otherwise unable to evaluate.

(3) If the OCMI determines that the data obtained by the ROV, including

non-destructive testing results, readability of the results, and positioning standards, will not integrate into the data obtained by the divers, then a third party examiner must be present during the divers portion of the examination.

[USCG-2000-6858, 67 FR 21086, Apr. 29, 2002, as amended at 69 FR 47384, Aug. 5, 2004]

**§ 176.655 Hull examination reports.**

(a) If you use only divers for the underwater survey portion of the Alternative Hull Examination (AHE), you must provide the Officer in Charge, Marine Inspection (OCMI), with a written hull examination report. This report must include thickness gauging results, bearing clearances, a copy of the audio and video recordings, and any other information that will help the OCMI evaluate your vessel for a credit hull exam. The third party examiner must sign the report and confirm the validity of its contents.

(b) If you use an underwater remotely operated vehicle (ROV) as the predominate means to examine the vessel's underwater hull plating, you must provide the OCMI with a report in a format that is acceptable to the OCMI, per § 176.650(b) of this part.

(c) The OCMI will evaluate the hull examination report and grant a credit hull exam if satisfied with the condition of the vessel. If approved and you exclusively use divers to examine the hull plating, you will receive a credit hull exam of up to 36 months. (Underwater examinations are required twice every 5 years.) If approved and you use an underwater ROV as the predominate means to examine the hull plating, you will receive a credit hull exam of up to 60 months (5 years).

(d) At least 60 days prior to each scheduled underwater exam, the owner may request a waiver from the OCMI if:

- (1) A satisfactory exam has been completed within the last three years;
- (2) The conditions during the last exam allowed at least 80 percent of the bottom surface to be viewed and recorded; and

(3) The results of the last exam indicated that an extended interval is safe and reasonable.

[USCG-2000-6858, 67 FR 21086, Apr. 29, 2002, as amended at 69 FR 47384, Aug. 5, 2004]

**§ 176.660 Continued participation in the Alternative Hull Examination (AHE) Program.**

(a) To continue to participate in the AHE Program, vessel operators must conduct an annual hull condition assessment. At a minimum, vessel operators must conduct an internal examination and take random hull gaugings internally during the hull condition assessment, unless waived by the Officer in Charge, Marine Inspection (OCMI). If the annual hull assessment reveals significant damage or corrosion, where temporary repairs have been made, or where other critical areas of concern have been identified, the OCMI may require an expanded examination to include an underwater hull examination using divers. If an underwater examination is required, the examination must focus on areas at higher risk of damage or corrosion and must include a representative sampling of hull gaugings.

(b) If an underwater survey is required for the annual hull condition assessment, the OCMI may require the presence of a third party examiner and a written hull examination report must be submitted to the OCMI. This report must include thickness gauging results, a copy of the audio and video recordings and any other information that will help the OCMI evaluate your vessel for continued participation in the AHE program. The third party examiner must sign the report and confirm the validity of its contents.

(c) You must submit your preventive maintenance reports or checklists on an annual basis to the OCMI. These reports or checklists must conform to the plans you submitted in your application under § 176.630 of this part, which the OCMI approved.

(d) Prior to each scheduled annual hull condition assessment—

- (1) The owner may submit to the OCMI a plan for conducting the assessment, or a request for a waiver of this