



16711
D8(m) Policy Ltr 01-2004
30 June 2004

MEMORANDUM

From: D. F. Ryan, II
CCGD8 (m)

A handwritten signature in black ink, appearing to read "D. F. Ryan, II", written over a horizontal line.

To: Distribution

Subj: MACHINERY AUTOMATION TRIAL PERIOD FOR REDUCED MANNING

Ref: (a) 46 CFR Part 62
(b) Marine Safety Manual, Vol. III, Chapter 25
(c) 46 CFR Part 130

1. **PURPOSE:** The purpose of this policy is to provide guidance on the need for trial periods to evaluate the automation of vessel machinery for reduced manning on Offshore Supply Vessels (OSVs), Subchapter "T" cargo vessels, and Multi-Service certificated vessels as defined by Eighth District Policy Letter 09-2001.

2. **DIRECTIVES AFFECTED:** None.

3. **BACKGROUND:** The regulations concerning the testing of automated self-propelled vessels are limited in scope and do not envision OSVs and crewboats. Even with the additional guidance in reference (b), there are still inconsistencies between units, specifically in regard to the need for and the duration of trial periods on sister vessels. This Policy Letter delineates which class of vessels must conduct trial periods and the duration of these trial periods.

4. **DISCUSSION:** This Policy Letter affects three specific classes of vessels. Each is discussed below:

a. Vessels ≥ 500 GT inspected under Subchapter "T". The regulations in reference (a) governing the automation of machinery for Subchapter "T" vessels ≥ 500 GT does not provide specific guidance on the trial periods required before reduced manning of the vessel can be initiated. Reference (b) was written to fill this regulatory gap. This guidance requires a trial period of 3000 hours on first-in-class vessels to validate the design, installation and operational reliability of the automation intended to replace engine room personnel. It allows for follow up vessels of the same class to have a reduced trial period depending on the successfully completion of the first-in-class vessel. But does not define what constitutes a reduced trial period, leaving the door open for inconsistencies of similar vessels being built in separate geographic areas.

b. Vessels inspected under Subchapter "L". During the development of the regulations in reference (c), the provisions for a trial period of the automation system were excluded. The duration of the voyages for many OSVs are relatively short (hauling personnel and supplies offshore) before returning to

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extensive shore based support and repair facilities. If the machinery should fail, assistance is normally relatively close by. Many of the OSVs currently being built utilize similar automation systems that have proven their reliability in the field. Trial periods, in many cases, would be an excessive burden on the offshore oil and mineral industry without a corresponding increase in safety.

c. Multi-Service Certificated Vessels. Vessels that have chosen to be inspected under more than one subchapter normally utilize the most stringent regulations. There are three types of Multi-Service vessels that needs to be addressed by this Policy Letter as discussed below:

(1) Single Tonnage Vessels < 500 GT. Because of their reduced tonnage, these vessels shall be treated similar to Subchapter "L" vessels which do not require a trial period. The guidance of reference (c) shall apply.

(2) Single Tonnage Vessels \geq 500 GT. These vessels shall be evaluated for a trial period and reduced manning on a case-by-case basis. Issues to consider are the complexity of the machinery and automation systems. On one end of the spectrum are vessels that carry only drilling mud and other supplies out to the field; whereas, others may be fitted with moon pools, bow/stern thrusters, dynamic positioning systems, and other capabilities that require complex machinery systems. Vessels with a simple configuration of machinery automation may require no trial period due to similar "sister systems" on other vessels that has proven their reliability while vessels with rather complex or unique systems may require a modified trial period to verify reliability and ensure the vessel can operate safety with reduced manning. The 3000-hour trial period in reference (b) was primarily intended for deep draft vessels on normally long voyages. These deep draft vessels could complete this trial period in 4-6 months. However, for most of the Multi-Service vessels addressed here which operate in the Gulf of Mexico on voyages of much shorter duration, it could take 2-3 times as long to satisfy the 3000-hour period. Under these short duration voyages a 1500-hour trial period should allow the automation system to prove its reliability and meet the intent of the guidance of reference (b).

(3) Dual Tonnage Vessels \geq 500 GT ITC with the GRT < 500 tons. If the tonnage is \geq 500 GT ITC but the GRT is < 500, than the automation shall be evaluated similar to Subchapter "L" vessels which do not require a trial period. The guidance of reference (c) shall apply.

5. **ACTION:** Eighth District OCMI's shall used the enclosed Machinery Automation Trial Period Matrix to determine if and what duration a vessel must perform a trial period prior to receiving a reduced manning endorsement. My primary POC for this matter is LT Phillip Ison at (504) 589-3049.

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Enclosures: (1) Machinery Automation Trial Period Matrix

Dist: All D8 MSOs and MSUs

Copy: COMDT (G-MOC-1)
LANTAREA (Am)

MACHINERY AUTOMATION TRIAL PERIOD MATRIX

<u>Trial Period Category:</u>	<u>Trial Period Required:</u>	<u>Trial Period Duration:</u>
I. <u>Cargo & Miscellaneous:</u> a. Vessels \geq 500 GT Inspected Under Subchapter "I" - First-in-Class b. Sister Vessels - Provided the First-in-Class vessel satisfactory completed trial period	Yes No	3000 Hours N/A
II. <u>Offshore Supply Vessels Inspected Under Subchapter "L"</u>	No	N/A
III. <u>Multi-Service Certificated Vessels:</u> a. Single Tonnage < 500 GT b. Single Tonnage \geq 500 GT with simple machinery / automation systems c. Single Tonnage \geq 500 GT with complex or unique machinery / automatic systems d. Dual Tonnage \geq 500 GT ITC but < 500 GRT	No Case-by-Case Trial period may not be required based on OCMI evaluation Yes No	N/A Case-by-Case 1500 Hours N/A