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NVIC 2-01

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 2-01

Subj: QUALIFICATIONS OF ENGINEER OFFICERS SERVING ON SEAGOING
VESSELS WITH GAS TURBINE MAIN PROPULSION

- 1. PURPOSE. This circular provides information concerning the issuance of qualifications under the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW) to permit engineering officers to serve on seagoing vessels subject to the STCW that are propelled by gas turbine propulsion systems.
- 2. ACTION.
 - a. Operators of seagoing gas turbine propelled vessels should ensure that the engineering officers assigned to gas turbine vessels hold the proper license and STCW endorsements authorizing such service. Current policies for crewing of gas turbine vessels will remain effective until February 1, 2002 (see paragraph 4.c.).
 - b. This NVIC will be distributed within the Coast Guard by electronic means only. Officers in Charge, Marine Inspection are urged to bring this NVIC to the attention of vessel operators, mariners, professional organizations, labor unions, and other parties with maritime interests. This NVIC is available on the World Wide Web at <http://uscg.mil/hq/g-m/nvic/index.htm>.
- 3. DIRECTIVES AFFECTED. None.

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4. BACKGROUND.

- a. The STCW requires engineer officers at the management level (chief engineer and second engineer officer) to demonstrate competency in gas turbine propulsion systems (STCW Code Table A-III/2). Therefore, this requirement applies to all engineering officers holding licenses at the chief engineer and first assistant engineer levels to be qualified to serve on such vessels.
- b. The STCW does not specifically mention the types of propulsion systems in the STCW Code A tables that apply to officers in charge of an engineering watch [OINCEW - Equivalent to a third assistant engineer, second assistant engineer, or assistant engineer (limited - oceans)]. However, unless an OINCEW is competent in the areas set forth in the column titled "Knowledge, understanding, and proficiency" in the STCW Code Table III/1 as it would be applied to gas turbine operation, the OINCEW would not be authorized to serve on a gas turbine vessel. In addition, the competencies at the management level build upon the competencies established at the operational level (OINCEW). Therefore, knowledge of gas turbine propulsion systems applies to applicants for a license at the operational level who wish to serve on gas turbine vessels.
- c. Until STCW-95 became effective, the United States only recognized two propulsion modes for licensing purposes: steam and motor. Because a gas turbine system has elements that apply to both steam and motor propulsion systems, officers licensed in either propulsion mode were accepted for crewing a gas turbine vessel provided they held the proper grade of license. This policy will remain in effect until February 1, 2002. On and after that date, engineering officers subject to STCW-95 on gas turbine vessels must hold a license and a corresponding STCW form endorsed for service on gas turbine vessels.
- d. Engineer officers serving on a gas turbine vessel not subject to, or exempted from, the STCW may serve on such a vessel based on a steam or motor license unless the Officer in Charge, Marine Inspection deems that the unique nature of the vessel or its operations requires an engineer to hold a gas turbine qualification.

5. DISCUSSION.

- a. The STCW allows a Party to continue issuing credentials in accordance with the policies and procedures that existed prior to August 1, 1998, for those mariners who began the service or training to qualify for the license before that date. This authority extends through January 31, 2002, after which, the additional training and sea service requirements of paragraph 5.b. apply. In accordance with this authority, the following procedures apply to licensed engineers who began the service or training for their present license before August 1, 1998:

- (1) An engineer holding a third assistant engineer license, assistant engineer (limited - ocean) license, or designated duty engineer (DDE) - unlimited for any propulsion mode (steam or motor) may have that license endorsed as valid for service on gas turbine vessels and a corresponding STCW form issued. A third assistant engineer who upgrades to second assistant engineer in any propulsion mode may have the license endorsed for service on a gas turbine vessel at the second assistant engineer level. This authorization for endorsement of the second assistant engineer license is effective no matter when the service or training for the second assistant engineer license began.
 - (2) Engineers holding a second assistant engineer license for any propulsion mode may have that license endorsed for service on gas turbine vessels and a corresponding STCW form issued.
 - (3) Engineers holding a first assistant engineer license valid for steam or motor plants may have the license endorsed for service on gas turbine vessels and a corresponding STCW form issued. A first assistant engineer who upgrades to chief engineer in any propulsion mode may have the license endorsed for service on gas turbine vessels at the chief engineer level.
 - (4) Engineers holding a chief engineer license, chief engineer (limited - oceans) or chief engineer (limited - near coastal) valid for any propulsion mode may have the license endorsed for service on gas turbine vessels and a corresponding STCW form issued.
 - (5) Engineers eligible for a gas turbine endorsement under section 5.a may elect to have the endorsement added to their license at the next regular renewal even if that renewal occurs after February 1, 2002.
- b. An engineer who began the qualifying service or training on or after August 1, 1998, that leads to an engineer license may have that license and, if held, the STCW certificate endorsed for service on gas turbine vessels in accordance with the following guidance:
- (1) A third assistant engineer, assistant engineer (limited - ocean), or DDE unlimited licensed in either the steam or motor propulsion mode may qualify for issuance of a gas turbine endorsement and a corresponding STCW endorsement upon completion of an approved or accepted training course. Information about the training course is contained in paragraph 7.
 - (2) A second assistant engineer may qualify for an endorsement for the gas turbine propulsion mode and a corresponding STCW endorsement at the OINCEW level as follows:
 - (a) If the gas turbine endorsement is not held at the third assistant engineer level, the applicant will qualify for one based on completion of an approved or accepted training course at the third assistant level. Upon completion of 60 days of service as an engineering watch officer on a gas turbine vessel, the gas turbine endorsement may be extended to the second assistant license.

(b) If the gas turbine endorsement is already held at the third assistant level, it may carry over to the second assistant engineer license provided the applicant has at least 60 days of licensed experience on gas turbine vessels.

(3) A chief engineer unlimited or a first assistant engineer licensed in either the steam or motor propulsion mode, may qualify for the gas turbine propulsion endorsement and a corresponding STCW endorsement upon completion of an approved or accepted, management level training course. If a gas turbine endorsement was not previously held at the operational level then the mariner must also complete the training and sea service set forth in paragraphs 5.b.(1) and (2) or the gas turbine propulsion mode will be limited to service as a chief engineer (limited-oceans) to vessels of not more than 1,600 gross register tons (3,000 gross tonnage). Information for schools wishing to implement a training course is contained in paragraph 7.

(4) A limited chief engineer (limited-oceans or limited-near coastal) licensed for either the steam or motor propulsion mode, or both, may have the license and the corresponding STCW certificate endorsed for service on gas turbine vessels upon completion of an approved or accepted management-level, gas turbine training course.

c. It is anticipated that as the implementation date for STCW-95 approaches, U. S. Coast Guard Regional Examination Centers will receive an increased number of requests for STCW-95 certificates. To ensure timely issuance, engineer officers requiring a gas turbine endorsement by February 1, 2002, are encouraged to request the STCW certificate and endorsement as early as possible.

6. APPLICATION FOR A GAS TURBINE ENDORSEMENT.

a. Licensed engineers who qualify for a gas turbine endorsement in accordance with the guidance in either paragraph 5.a or 5.b should apply for the endorsement at any Coast Guard Regional Examination Center (REC). A user fee will be charged for the endorsement issued in accordance with paragraph 5.a or for an evaluation and endorsement issued in accordance with paragraph 5.b.

b. An REC receiving an application for an original license or for an upgrade based solely on gas turbine experience will forward the application to the National Maritime Center for evaluation of equivalency with the existing regulations for a steam or a motor license.

7. APPROVED OR ACCEPTED TRAINING COURSES. Organizations that wish to offer training that will lead to the gas turbine endorsement on an engineer's license should refer to NVIC 5-95, *Guidelines for Organizations Offering Coast Guard Approved Courses*. Separate courses will be required for officers at the operational level and the management level. The training must have been obtained within the five years immediately preceding the application for the license. For either course, special attention must be paid to the column "Methods for demonstrating competence" in either STCW Code Table III/1 or III/2. An organization must demonstrate that it has the capability to conduct assessments using one or more of the prescribed methods.



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