



DEPARTMENT OF TRANSPORTATION
 UNITED STATES COAST GUARD

MAILING ADDRESS (G-MVI-1)
 U.S. Coast Guard
 Washington, D.C. 20593
 202-426-1464

NVC **8-81**
 27 JUL 1981

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. **8-81**

Subj: Initial and Subsequent Inspection of Uncertificated Existing Offshore Supply Vessels Under P.L. 96-378

1. **PURPOSE.** This Circular establishes procedures for the issuance of Certificates of Inspection to existing offshore supply vessels, as defined by the Act of October 6, 1980, P.L. 96-378, Section 1, 94 Stat. 1513, (46 USC 404-1), hereinafter Section 4426a of the Revised Statutes that were not previously inspected. Section 4426a states that:
 - a. An offshore supply vessel is a vessel that -
 - (1) Is propelled by machinery other than steam,
 - (2) is not within the description of passenger carrying vessels in Section 1 of the Act of May 10, 1956 (70 Stat. 151), as amended (46 USC 390),
 - (3) is of more than fifteen and less than five hundred gross tons, and
 - (4) regularly carries goods, supplies, or equipment in support of exploration, exploitation, or production of offshore mineral or energy resources.
 - b. An existing offshore supply vessel is one that was operating as such on or before January 1, 1979, or that, if not in service of any kind on or before that date, was contracted for on or before that date and entered service as such before 6 October 1980.
 - c. A new offshore supply vessel is one that is not an existing offshore supply vessel.
2. **BACKGROUND.** On 6 October 1980, the President of the United States signed into law P.L. 96-378. The law provides for the inspection and certification of all offshore supply vessels within the above definition. Uncertificated existing offshore supply vessels are to be inspected and certificated in accordance with 46 CFR Subchapter I and the provisions of this Circular. The Circular takes into account the method of operation and the service of these vessels. Provisions have been made in the law to facilitate assimilation into the inspected fleet of most existing offshore supply vessels which are not currently certificated to be in compliance with the inspection laws and regulations.

DISTRIBUTION - SDL No. 113

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
A																										
B		2	10		3		3	1		2				85	1		6	1								
C					4*		1					1	4*												1	
D	1	1		1								1														
E		1											1*	1*	2											
F			1									1					1									
G																										
H																										

NON-STANDARD DISTRIBUTION: (See page 4)

3. DISCUSSION.a. Initial Inspection

- (1) Registration of an uninspected existing offshore supply vessel as defined by Section 4426a of the Revised Statutes shall be accomplished by the owner of the vessel by submitting a completed "Registration of U.S. Vessel Under the Provisions of P.L. 96-378" form to an Officer In Charge, Marine Inspection. This was to be completed no later than 6 January 1981. As soon as possible after submission of the Registration form, the owner of the existing offshore supply vessel shall contact an Officer in Charge, Marine Inspection, and arrange an appointment to meet with the Officer in Charge or his designee to schedule the initial inspection by the U.S. Coast Guard of the registered existing offshore supply vessel. The initial inspection must be made within two years of the date of the Registration form submitted to register the existing offshore supply vessel; otherwise, the vessel loses eligibility as an existing vessel under P.L. 96-378. Upon registration, each existing offshore supply vessel will be held to be in compliance with P.L. 96-378 until the initial inspection is conducted.
- (2) The initial inspection will be conducted to preclude especially hazardous conditions. The vessel being inspected will not be subject to rules, regulations, or standards for major structural or major equipment requirements unless compliance therewith is necessary in order to remove an especially hazardous condition.
- (3) At the time of the initial inspection for certification of the existing offshore supply vessel, all especially hazardous conditions, such as fire/explosion hazards, and unguarded moving machinery and electrical shock hazards, will be corrected. All lifesaving and firefighting equipment must be of sufficient quantities and in satisfactory working condition. All lifesaving equipment, and semi-portable/portable firefighting equipment must be Coast Guard approved. Unapproved fixed firefighting systems that are found to provide an adequate degree of protection as determined by the cognizant Officer in Charge, Marine Inspection may be accepted. When replacement of unapproved fixed firefighting equipment becomes necessary, such replacement equipment shall be U.S. Coast Guard approved. The intent of this section is to assure that sufficient equipment is aboard to provide adequate protection for the vessel and the personnel on board. In addition, navigation lights and shapes as well as radio equipment will be in full compliance with the currently applicable regulations for offshore supply vessels.
- (4) Deficiencies noted during the course of the initial inspection for certification that do not require immediate correction shall be recorded on form CG-835, Merchant Marine Inspection Requirements. Those deficiencies listed shall be corrected within a reasonable time frame as determined by the cognizant Officer in Charge, Marine Inspection.

3.a.(Cont'd) Upon completion of the initial inspection for certification, a Certificate of Inspection shall be placed on the vessel. Noted on the face of the certificate shall be the words "Existing Offshore Supply Vessel, inspected in accordance with P.L. 96-378: (Small Vessel Inspection and Manning)." This notation in no way restricts the use or operations of an existing offshore supply vessel certificated pursuant to P.L. 96-378; but serves to insure consistency of inspection standards at subsequent inspections for certification. Standards applied were relaxed based upon 46 CFR Subchapter I.

(5) The scope of the initial inspection for certification and all subsequent inspections for certification of existing offshore supply vessels as defined by Section 4426a of the Revised Statutes is set forth in Encl. (1).

b. Manning

(1) The manning of all offshore supply vessels will be in accordance with applicable statutes as summarized in Encl. (2).

c. Certificate of Inspection

(1) The type and period of validity of each Certificate of Inspection shall be in accordance with Subchapter I. The "Service" listed on the Certificate of Inspection shall be: "Offshore Supply Vessel".

(2) "Passengers" as defined by Section 4426a of the Revised Statutes may not be carried on offshore supply vessels except in an emergency. The manning entries on the Certificate of Inspection shall indicate the crew requirements as defined by the law in accordance with applicable regulations and existing policy. (Reference NVC 10-80 concerning licensing). All other persons listed in Section 4426a(4)(i) through (ix) of the Revised Statutes shall be referred to as "Other persons as defined in Revised Statutes 4426a(4)" for the purpose of endorsing an offshore supply vessel's Certificate of Inspection.

d. Existing Offshore Supply Vessels Certificated Prior to 6 October 1980

(1) Vessels certificated prior to 6 October 1980 that are offshore supply vessels as defined in Revised Statutes 4426a(1) will subsequently be inspected under the same standards as before. This means that an existing certificated vessel that was inspected under the provisions of Subchapter I, Cargo and Miscellaneous Vessels, or Subchapter T, Small Passenger Vessels will continue to be inspected under the same standards of the respective subchapter as applied during previous inspections.

Cancelled by NVC 21 May 1981

3. e. Existing Offshore Supply Vessels 20 Years or Older After 1 January 1989

- (1) On or after 1 January 1989 each existing offshore supply vessel that is twenty (20) years or older shall be subject to inspection the same as a new offshore supply vessel.


CLYDE J. LUSK, JR.
Chief, Office of Merchant Marine Safety

- Encl: (1) Scope of Initial and Subsequent Inspections for Certification of Existing Uncertificated Offshore Supply Vessels
(2) Manning of Offshore Supply Vessels

NON-STANDARD DISTRIBUTION:

- Ce: Baltimore (75); San Francisco, Mobile, Pittsburgh, Providence, Norfolk (50); Galveston (30); Cleveland, Portland OR, Sturgeon Bay (25); San Diego, Savannah, Buffalo, Corpus Christi (20); Tampa, Valdez, Milwaukee, Louisville, Detroit, Toledo, Nashville, Anchorage (15); Portland ME, Duluth, Charleston, Huntington, Minneapolis-St. Paul (Dubuque), San Juan, Guam (10); Juneau, Cincinnati, Memphis, Wilmington, Miami, Paducah, Albany (5) extra
Cm: New Orleans (250); New York (200); Seattle (100); Houston (50); Terminal Is. (LA-LB), Philadelphia (40) extra
Em: New London, Houma (30); Ludington (8); extra
En: Ketchikan, Kenai, Kodiak, Lake Charles (5) extra
List CG-12
ZTC-68

Cancelled by NVIC 081-0121 May 1997.

189

SCOPE OF INITIAL AND SUBSEQUENT INSPECTIONS FOR CERTIFICATION
OF EXISTING UNCERTIFICATED OFFSHORE SUPPLY VESSELS

The below listed items constitute the particulars that will be given specific attention during the initial and subsequent inspections for certification of existing offshore supply vessels as defined by Section 4426a of the Revised Statutes.

STABILITY

The stability of an existing offshore supply vessel will be considered adequate if there exists a U.S. Coast Guard Stability Letter or Stability Statement issued for the vessel and the vessel has not been materially altered since the issuance of the Stability Letter or Stability Statement. A letter signed by the owner or legal representative of the owner, affirming that the vessel has not been materially altered, will be presented to the cognizant Officer in Charge, Marine Inspection, as a condition of acceptance of the existing Stability Letter or Stability Statement.

If a Stability Letter or Stability Statement does not exist or the vessel has been materially altered, a stability evaluation, satisfactory to the cognizant Officer in Charge, Marine Inspection, shall be performed. Based on this stability evaluation, a Stability Letter will be issued at the same time as the initial Certificate of Inspection.

DRYDOCKING

All existing offshore supply vessels shall be drydocked in the presence of a Coast Guard marine inspector as a part of the initial inspection for certification and at such subsequent intervals as are required by the applicable regulations.

The scope of the initial inspection and subsequent drydock examinations for offshore supply vessels shall be to assure the satisfactory condition of the hull, tailshafts, sea valves and rudders. Existing offshore supply vessels, must be in satisfactory condition with regard to the hull, tailshafts, sea valves and rudders, and free from any especially hazardous conditions prior to initial certification.

PRESSURE VESSELS

All pressure vessels which are in good condition and can be identified as built to the ASME Code or other equivalent standards may be continued in service at the initial inspection for certification.

Class II and Class III pressure vessels which are in good condition but cannot be identified as built to the ASME Code or other equivalent standards may be continued in service if they successfully pass a 1 1/2 MAWP hydrostatic test.

All pressure vessels which remain in service at the time of the initial inspection for certification shall be subjected to the appropriate periodic tests and inspections as required by the applicable regulations.

All pressure vessels shall be fitted with adequate relieving devices.

27 JUL 1981

ELECTRICAL

Emergency lighting and alarm systems shall be adequate and shall be in good operating order. Arrangements deemed to be equivalent to the applicable regulations may be accepted as satisfactory by the cognizant Officer in Charge, Marine Inspection.

Electrical wiring, fixtures and equipment shall be in good condition.

COMBUSTIBLE AND FLAMMABLE LIQUIDS PIPING AND VENTING

Tank vents and piping carrying combustible or flammable liquids will be inspected to identify potential failure points and associated fire hazards. Particular attention should be given to supports, materials, spray shielding and flexible hose in locations where a source of ignition exists and could be expected to present a fire hazard. Discrepancies that present a fire hazard must be corrected prior to issuance of the Initial Certificate of Inspection.

BILGE SYSTEM

The bilge system will be inspected for coverage and material condition only. An automatic bilge alarm will be provided for all unmanned machinery spaces and must sound in the vessel's pilothouse.

MARINE SANITATION DEVICE

An approved marine sanitation device, or suitable equivalent, deemed by the cognizant Officer in Charge, Marine Inspection, to provide compliance with the intent of the applicable regulations, will be installed at the time of the Initial Inspection for certification. This system will be considered to meet all requirements applicable at the time of the Initial Inspection and at all subsequent inspections for certification provided it is properly maintained in good working condition.

OIL POLLUTION SYSTEMS

Oil pollution systems, deemed by the cognizant Officer in Charge, Marine Inspection to provide compliance with the intent of the applicable regulations, will be installed at the time of the Initial Inspection for certification. These systems will be considered to meet all requirements applicable at the time of the Initial Inspection and at all subsequent inspections for certification provided they are properly maintained in good working condition.

LIFESAVING EQUIPMENT AND FIREFIGHTING EQUIPMENT

All lifesaving and firefighting equipment will be in satisfactory working condition and in sufficient quantities to provide adequate protection for the vessel and the personnel on board. All lifesaving equipment must be Coast Guard approved. Semi-portable and portable fire extinguishers, fire hoses, fire axes, nozzles, etc. shall be an approved type (either U.L. marine or USCG). Unapproved fixed firefighting systems that are found to provide an adequate degree of protection as determined by the cognizant Officer in Charge, Marine Inspection may be accepted. Replacement of unapproved fixed firefighting equipment must be with Coast Guard approved equipment.

186

23 MAR 1988

MANNING OF OFFSHORE SUPPLY VESSELS

The following minimum manning examples reflect current statutory and regulatory requirements applicable to any vessel meeting the statutory definition of an offshore supply vessel.

Less Than 100 Gross Tons:

1 Master	2 Deckhands
1 Mate	

If the vessel is away from a shoreside dock, or has persons in addition to the crew on board, or both, for not more than 12 hours in any 24 hour period, the crew may be reduced to:

1 Master	2 Deckhands
----------	-------------

When appropriate, and under conditions specified by the OCMI, an additional endorsement permitting a reduction from the 24 hour manning may be made on the Certificate of Inspection for a vessel of less than 100 gross tons which moors to a safe offshore mooring buoy for 12 or more hours in any 24 hour period.

At Least 100 Gross Tons But Less Than 200 Gross Tons: *

1 Master	2 Able Seamen
2 Mates	1 Ordinary Seaman
**Chief Engineer	**Oiler(s)
**Assistant Engineer(s)	

200 Gross Tons or More: *

1 Master	2 Able Seamen
2 Mates	1 Ordinary Seaman
1 Chief Engineer	**Oiler(s)
**Assistant Engineer(s)	

* When the vessel is on a voyage of less than 600 miles, the crew may be reduced by one mate and one able seaman.

23 MAR 1988

**Variables

The engineering manning is controlled by the statutes 46 USC 8101, 8301, and 8304. On vessels of less than 200 gross tons, there is no requirement for a licensed engineer (chief or assistant) or oilers (QMEDs). However, one or more may be required under 46 USC 8101 if the engine room is not automated to an acceptable degree or the OCMI determines it necessary for safe operation of the vessel. On vessels of 200 gross tons or more, 46 USC 8304 requires at least a chief engineer, irrespective of the degree of automation. Other assistant engineer(s) and/or QMEDs may also be required by the OCMI under the provisions of 46 USC 8101 if necessary to enable the vessel to safely operate. In general, OSVs are normally automated to such a degree that a licensed engineer or QMEDs will not be required on those vessels in the less than 200 gross ton category, and an assistant engineer or QMEDs will not be required on those of 200 gross tons and above.

Cancelled by NVIC 8-91, dated 2/10/93

23 MAR 1988

GUIDANCE PERTAINING TO INITIAL AND SUBSEQUENT INSPECTION OF EXISTING LIFTBOATS

In addition to the items listed in enclosure (1) of NVIC 8-81, the following items will be given specific attention during initial and subsequent inspections for certification of existing liftboats, due to their specialized construction and operation, in order to apply the appropriate existing standards indicated.

FREEBOARD. Vessels required to have a loadline are to comply with the provisions of 46 CFR, Subchapter E. Vessels not required to meet loadline regulations are to maintain a minimum freeboard of 2 feet amidships. The vessel's stability letter will restrict operation in the floating mode to wave heights not exceeding 2 times the unit's freeboard unless it can be demonstrated by calculation or model test that the vessel may be safely operated in a higher sea state. The purpose of this restriction is to avoid the adverse effects of excessive water on deck.

STRENGTH. All units should be analyzed for strength using the guidelines of the American Bureau of Shipping (ABS) Rules for Building and Classing Mobile Offshore Drilling Units, 1985 edition, contained in Section 4. In absence of any recognized industry leg strength standard, the K factor or effective length factor which accounts for support conditions at the ends of the unsupported length of column may be assumed to be no less than 2. Additionally, the primary supporting structure is to be analyzed using the loading conditions stipulated by the ABS Rules for Building and Classing Mobile Offshore Drilling Units, 1985 edition, sections 3.5 and 3.9, and take into consideration the allowable stresses of the effective structural elements outlined in section 3.11. The stress calculations should consider the most adverse combinations of loading.

STABILITY. The stability of an existing liftboat is considered adequate if a U.S. Coast Guard Stability Letter or Stability Statement was issued to the vessel and the vessel has not been materially altered since the letter or statement was issued. The vessel owner/operator should state in writing to the cognizant officer in charge, marine inspection (OCMI) that the vessel has not been altered or modified.

If stability of a liftboat has not been evaluated by the Coast Guard, one of the two following criteria should be met. Lightship values that are required to perform the calculations for either criteria may be obtained from an inclining experiment or derived from a detailed weight takeoff verified by a deadweight survey witnessed by the Coast Guard.

1. **Unrestricted Operation.** A vessel will be permitted to have an unrestricted area of operation if all the provisions of 46 CFR 174, Subpart C are met, within the full range of leg positions encountered while jacking.

(191)

23 MAR 1988

2. Restricted Operation. A vessel unable to meet the criteria for unrestricted operation, but capable of meeting the following provisions, will be restricted to operation within 12 hours of a harbor of safe refuge or a location where it may be elevated to survive 100 knots of wind, at a water depth specified by the stability letter. The loading condition center of gravity (KG) for all loading conditions may not exceed the maximum KG when the wind heeling moment curve is superimposed over the vessel's righting moment curve for:
- a. A 70 knot wind heeling moment criteria for the survival condition and a 60 knot wind heeling moment criteria for normal operating conditions with a 1.4 area ratio requirement when performing the calculations stated in 46 CFR 174.055.
 - b. A 10 degree range of positive stability between the first intercept and second intercept angle, or the angle of heel at which downflooding of the vessel would occur, whichever angle is less.
 - c. At least 5 foot degrees of residual righting energy between the first and second intercept angle, or the angle of heel at which downflooding of the vessel would occur, whichever angle is less.
 - d. In meeting subparagraphs a. through c. above, the minimum metacentric height (GM) is to be 1 foot for all leg positions including the full range of leg positions encountered while jacking.

If a liftboat cannot meet these stability options, a modified criteria may be accepted by the Coast Guard when tied to operating restrictions. Restrictions may include:

1. Decreased route;
2. Maximum allowable water depth permitted for operation;
3. Approved emergency evacuation procedures; and/or
4. Curtailment or change in operation based upon environmental factors including wave height.

MACHINERY PIPING SYSTEMS. Firemain, bilge, and ballast systems should be capable of operation at all times, including the elevated mode. Any arrangement necessary for drawing raw water suction should be permanent.

HYDRAULIC SYSTEMS. Hydraulic jacking systems and other miscellaneous systems should substantially comply with the provisions of 46 CFR 58.30. All jacking systems should be demonstrated to be "fail-safe." A failure of the jacking system should initiate an audible and visual alarm to alert vessel personnel.

192

23 MAR 1988

CRANES. All cranes installed aboard liftboats should comply with the guidelines specified in NVIC 4-78.

FIRE-FIGHTING EQUIPMENT. All liftboats should be equipped with a firemain system meeting the requirements of 46 CFR 95.10.

LIFESAVING EQUIPMENT. Primary lifesaving equipment meeting the requirements of 46 CFR 94 should be provided based on vessel tonnage and operating route. Additionally, each life raft required on the vessel should meet the requirements of 46 CFR 108.506 (c). Modification of this requirement may be permitted if it can be demonstrated, to the satisfaction of the Commandant, that an alternate means for safe abandonment of the vessel is provided for all emergency situations.

OPERATING MANUAL. Each unit should be provided with a Coast Guard approved operating manual which is readily usable by vessel personnel and substantially complies with the provisions of 46 CFR 109.121.

VESSEL OPERATIONS. All vessel operations should comply with the requirements of 46 CFR 109, as applicable.

Cancelled by NVIC 8-91, dated 2 May 1991

193

Cancelled by NVIC 8-97, dated 21 May 1997.