

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 10-91

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Subj: Inspection and Certification of Floating Detention Facilities

- Ref: (a) NVIC No. 10-82, "Acceptance of Plan Review and Inspection Tasks Performed by the American Bureau of Shipping (ABS) for New Construction or Major Modification of U.S. Flag Vessels"
- (b) NVIC No. 8-84, "Recommendations for the Submittal of Merchant Vessel Plans and Specifications"

1. **PURPOSE.** This Circular provides information to vessel designers, owners, operators, shipyards, and municipal officials, as well as Officers in Charge, Marine Inspection (OCMI) concerning the construction, operation, and Coast Guard inspection of non-self-propelled floating detention facilities.
2. **BACKGROUND.**
 - a. During recent years, large municipalities have found that the number of land-based prisons and detention facilities is insufficient to properly accommodate the high numbers of prisoners being incarcerated and detainees awaiting arraignment. This has become particularly acute with the escalating "war on drugs." Increasingly, judges and other officials have ordered prison officials to relieve prison overcrowding. This often results in the early release of prisoners. One alternative, apparently quicker than increasing the number of land-based prisons, is to use accommodation barges to house prisoners and detainees. Some of these barges are specially designed and built, while others are converted from vessels of other uses.
 - b. Traditionally, prisons have been built ashore and the Coast Guard has had no involvement in their construction or their operation. In 1987, the city of New York was tasked with creating an additional 100 prison beds per month due to the crackdown on drugs. It decided to use two surplus Staten Island ferries to house minimum security prisoners. These vessels had been Coast Guard inspected passenger vessels. The city requested that the Coast Guard continue certification while the ferries were used for their new purpose. Even though these vessels were not specifically designed as prisons, with some security modification, they were able to be brought on line very quickly, relatively speaking, so the city could comply with the courts' requirement to adequately house the prisoners at Rikers Island in New York Harbor.
 - c. Considering their use for minimum security prisoners, the OCMI inspected these vessels giving consideration to their use only while moored. At that time, this was viewed to be a local short-term solution to the prison overcrowding situation. The city also leased a foreign flag accommodation barge for this purpose, for which inspection was not requested, nor was it provided.

- d. In 1989, the city approached the Coast Guard with a request for the inspection and certification of a new 800-bed maximum security floating detention facility. At this point, it became apparent that the floating alternative to the traditional land-based prison facility might have national, if not international, application.

3. DISCUSSION.

- a. Historically, owners of other substantially moored vessels, such as floating restaurants or floating museums, have sought to avoid Coast Guard regulation by having their vessels considered permanently moored and designated "substantially land structures." However, some owners have noted advantages in retaining the vessel status. When a vessel retains vessel status, and performs a service for which inspection is required (e.g., carries passengers for hire), Coast Guard inspection and certification is mandatory under Title 46, United States Code (46 U.S.C.) - Shipping. Generally, if a vessel is engaged in a service for which inspection is not required by law, it will not be inspected except as may be specifically agreed to on a case-by-case basis.
- b. In most large metropolitan areas, crime is on the increase. prison overcrowding is a continuing problem. The construction of more prison space is obviously a more favored alternative than the possible release of prisoners where adequate facilities cannot be provided.
- c. The Coast Guard expends a tremendous amount of material and effort in surveillance and interdiction of illegal drug activities. The marine inspection program can directly support this primary mission area by assisting in the effort to produce adequate detention facilities, specifically those which are vessels, to effectively incarcerate drug offenders.
- d. Construction time for facilities ashore is estimated at five to seven years depending on the controversy over the sitting, rules, and approval procedures of the cognizant municipality. Construction of a floating facility can be accomplished by a shipyard in approximately two years. Further, U.S. shipyards have the capacity and can perform the construction needed to provide these facilities.
- e. Floating detention facilities will clearly exceed 100 gross tons. Due to the large number of persons on board these vessels, it is appropriate to apply standards equivalent to those applicable to passenger vessels under Title 46, Code of Federal Regulations (46 C.F.R.), Subchapter H. However, the Coast Guard's regulations for passenger vessels, as well as the international standards, were not written with such vessels in mind. The basic Coast Guard and International Maritime Organization philosophy for the protection and escape of passengers and crew is very different from that of a maximum security prison. Thus, the Coast Guard's passenger vessel regulations cannot be fully applied.
- f. The application of certain American Bureau of Shipping (ABS) Rules and shore-based building requirements is appropriate to establish an equivalent level of safety to that of a passenger vessel, i.e., provide ample protection in the case of an emergency and an efficient means of emergency egress if necessary. ABS recently published preliminary rules for floating accommodation and hotel barges. Designers for shore-based prison facilities are guided by the National Fire Protection Association (NFPA) Life Safety Code for Detention and Correctional Facilities.

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- g. The owner (or bareboat charterer) of a floating detention facility is likely to be the state or local municipality. Although compared to passenger vessels, these facilities are not engaged in the carriage of "passengers for hire" because it is not likely that valuable consideration will flow directly or indirectly to the owner, charterer, operator, agent or any other person interested in the vessel (46 C.F.R. 70.10-3). However, where such consideration does exist, e.g., a privately owned accommodation barge for which the municipality pays the owner for its use, inspection is mandatory if the facility retains its vessel status. Alternatively, such a facility may request designation as "substantially a land structure" (see section 10.1 of the Marine Safety Manual).
- h. A vessel designated "substantially a land structure" is not considered a vessel for inspection purposes, however, it remains subject to the other regulations, such as those promulgated under the Ports and Waterways Safety Act. It will also be subject to the building, electrical, and fire codes as may be applied by the local municipality.

4. IMPLEMENTATION.

- a. Since the basic philosophy of Coast Guard and international regulations concerning protection and escape of passengers and crew is quite different from the concept of protecting and controlling prisoners and correction officials, guidance on the application of the vessel safety regulations for this unique service is provided by this Circular.
- b. Upon request from a state or local municipality, the Coast Guard will provide inspection and certification under the provisions of 46 C. F.R. Subchapter H for a floating detention facility that is, otherwise, not subject to inspection. Enclosure (1) to this Circular should be used as a guide in applying these regulations.
- c. Except as discussed in paragraphs 4.e and 4.f, floating detention facilities engaged in the carriage of "passengers for hire" are subject to and shall be inspected as passenger vessels. The guidance in enclosure (1) may also be applied to these vessels.
- d. The provisions of this Circular are to be applied not only to new construction, but also to existing vessels converted to detention facilities. For converted vessels, these provisions will be applied insofar as is reasonable and practicable. Further guidance may be sought from Commandant (G-MVI) where exceptions are noted.
- e. The provisions of this Circular apply to U.S. flag vessels. They also apply to foreign flag vessels in U.S. waters. A foreign flag floating detention facility, unless designated "substantially a land structure," must have a Coast Guard Certificate of Inspection (COI). The current international safety conventions do not address detention facilities, therefore, they cannot be considered to provide standards similar to those of the U.S. inspection standards. Inspection certificates issued by another administration will not be recognized.
- f. A floating detention facility which is permanently moored and thus taken out of navigation, will, upon request, be designated "substantially a land structure" and not be subject to the inspection laws of 46 U.S.C.

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- g. Except as otherwise specifically noted in enclosure (1), questions regarding the application of this Circular are to be directed to Commandant (G-MVI).

A handwritten signature in black ink that reads "A. E. HENN". The letters are stylized and cursive.

A. E. HENN
Rear Admiral, U.S. Coast Guard
Chief, Office of Marine Safety,
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End: (1) Inspection and Certification of Floating Detention Facilities

Inspection and Certification of Floating Detention Facilities

1. GENERAL.

- a. The Coast Guard may agree to inspect floating detention facilities in a vessel status upon request of the cognizant municipality. Due to the large number of persons on board, these vessels will be inspected to standards similar to those applicable to passenger vessels under 46 C.F.R., Subchapter H.
- b. Since the philosophy of passenger vessel regulations are quite different from that of a maximum security prison, it will be necessary to deviate from certain requirements that are impracticable or otherwise inappropriate. In doing so, these vessels will be reviewed as a system for which an equivalent level of safety to that intended for passenger vessels will be expected. In determining the equivalent arrangements, consideration will be given to the proposed route and conditions of operation. For example, a floating detention facility at anchor without readily available egress to shore will be viewed differently than those that are moored to a pier and have such egress.

2. REGULATIONS TO BE APPLIED AND EQUIVALENCIES.

- a. The basic regulations which will be applied to floating detention facilities, whether subject to inspection because they carry "passengers for hire," or inspected as vessels upon the owner/operator's request, are:
 - (1) 46 C.F.R. Subchapter H - Passenger Vessels;
 - (2) 46 C.F.R. Subchapter F - Marine Engineering;
 - (3) 46 C.F.R. Subchapter J - Electrical Engineering;
 - (4) 46 C.F.R. Subchapter S - Subdivision and Stability; and
 - (5) 46 C.F.R. Subchapter O - Pollution
- b. In addition to the regulations, designers and builders should refer to other appropriate NVIC's such as those on structural fire protection (currently NVIC 6-80) and fire fighting equipment (currently NVIC 6-72, Change 1).
- c. Because of the differing philosophies, a floating detention facility cannot meet all the requirements of 46 C.F.R. 72, particularly with regard to structural fire protection and means of escape. The basis for equivalencies in these subject areas should be the NFPA "Life Safety Code" No. 101, Chapter 14 - "New Detention and Correctional Occupancies," and other chapters referenced therein.
- d. The Coast Guard will consider other arrangements providing an equivalent level of safety on a case-by-case basis. Such concepts are to be submitted to Commandant (G-MVI) for approval.

3. INSPECTION AND CERTIFICATION.

- a. For new construction, an Application for Inspection of U.S. Vessel (Form CG-3752) should be submitted to the OCMI responsible for the zone in which the floating detention facility will be built. A copy should be sent to the OCMI responsible for the zone in which the vessel will operate. The application should indicate that the vessel is a barge and that it will be employed as "passenger vessel - detention facility." The maximum - number of persons (specified by category: crew, prisoners, staff, visitors, others) that could be on the vessel at any given time should be indicated. The route should indicate the geographic location in which the vessel will be moored. It should stipulate whether it will be offshore or alongside a pier.
- b. Floating detention facilities will be subject to inspection in accordance with 46 C.F.R. Part 71 except as may be specifically modified by this Circular. This includes inspection after accidents and the inspection of any significant modification or repair (see 46 C.F.R. 71.40 and 71.55).
- c. Upon satisfactory inspection, finding the floating detention facility in compliance with the applied regulations and equivalent arrangements, the OCMI will issue/reissue a COI. Floating detention facilities will be certificated for service as "passenger vessels" with a "detention facility" use code.
- d. These vessels will have on board a substantial number of persons comprised of crew, inmates, staff, and visitors, etc. The total number of persons allowed by the OCMI will be reflected on the COI based on the category into which they fall.
- e. The route and condition of operation will be restricted to a specific mooring site, an important factor in determining the equivalent level of safety. Relocation of a Coast Guard certificated floating detention facility will be subject to approval of the OCMI.
- f. When deficiencies, for which corrective action is not immediate, are noted by the Coast Guard inspectors, a Form CG-835 (Notice of Merchant Marine Inspection Requirements) will be issued. It will be acknowledged by the master and the senior corrections official on board. A letter from the OCMI to the owner/operator will follow. The Coast Guard will be permitted unlimited access to and may report deficiencies to the appropriate board of corrections having oversight of these correctional facilities.
- g. The OCMI may demand the surrender of or otherwise revoke the COI issued to the floating detention facility at any time the vessel is found not to be in compliance with the conditions of its COI. If the vessel is one for which inspection is mandatory, use must be discontinued until the COI is restored. The Coast Guard assumes no liability for the consequential release of prisoners.
- h. If a certificated floating detention facility is removed from a vessel status for a period of time and then reapplies for inspection, all modifications and repairs made during that period must be reflected on the latest plans. The revised plans must be submitted to the OCMI for approval before that facility will again be considered for certification.

4. DOCUMENTATION

- a. A floating detention facility which is considered for inspection purposes to be a vessel, as opposed to "substantially a land structure," need not be documented as a vessel unless it is actually used for transportation.
- b. A floating detention facility, which is documented as a vessel, may still be designated "substantially a land structure" and need not surrender its vessel documentation.

5. PLAN REVIEW.

- a. Plans for new construction may be submitted in accordance with current NVIC's, references (a) and (b) in particular. ABS may review and approve, on behalf of the Coast Guard those NVIC 10-82, Section 1 plans for which there is no deviation from passenger vessel rules. For areas in question, conceptual review and approval may be requested first from Commandant (G-MTH) who will determine whether ABS review will be acceptable or if Coast Guard review will be required.
- b. If ABS does not perform the plan review, or in the case of those areas reserved for Coast Guard review, plans are to be submitted to the Coast Guard Marine Safety Center (MSC).
- c. In addition to those plans listed in NVIC 10-82, for floating detention facilities, the following plans and systems are specifically reserved for review and approval by the Coast Guard MSC:
 - (1) Structural fire protection (including fire load calculations if required);
 - (2) Emergency egress (as opposed to passenger vessel "means of escape");
 - (3) Ventilation;
 - (4) Security systems;
 - (5) Fire protection systems (fixed and portable); and
 - (6) Lifesaving equipment.
- d. The set of final design plans should be reviewed and stamped by a licensed registered professional fire protection engineer for compliance with NFPA 101 prior to submittal to the Coast Guard. A written report and a marked up set of these plans should be submitted to the MSC. The report and markings on the plans should address the requirements for and location of all fire-screen insulation, including main fire zone and subdivisions, stairway and elevator enclosures, control space enclosures, type of all doors in such subdivisions and enclosures, ventilation system including dampers and other fire control features, alarm systems, fire detection and extinguishing systems, and any other items affecting fire safety.
- e. Plans for the conversion or alteration of an existing vessel shall first be discussed with the OCMI, who shall determine whether such plans need to be submitted to the MSC or the OCMI for review. The OCMI may also find it appropriate to accept ABS review of certain plans for alterations.

6. STRUCTURAL FIRE PROTECTION.

- a. Although it will not be possible to apply all fire protection regulations of Subchapter H to floating detention facilities, the basic principles underlying these regulations will be applied in establishing an equivalent level of safety. These basic principles are:
- (1) Division of the vessel into main vertical zones by thermal and structural boundaries;
 - (2) Segregation of spaces by category of use;
 - (3) Restricted use of combustible materials;
 - (4) Detection of any fire in the zone of origin with sound and visual alarms at normally manned control stations;
 - (5) Containment and extinction of any fire in the space of origin;
 - (6) Protection of emergency egress or access for fire fighting; and
 - (7) Ready availability of fire extinguishing appliances.
- b. The maximum length of main vertical zones (MVZ's) permitted by 46 C.F.R. 72.05-10(b) is 131 feet. However, given the required smoke detection and sprinkler systems, the ease of access to shore based fire fighters, egress to areas of safe refuge on land, and the vessel's restricted route, the length of MVZ's may be extended. MVZ's generally should not exceed 150 feet in length.
- c. Where tempered security glass, mounted in steel frames, is used in the MVZ boundaries in way of guard spaces that are manned at all times, the glass must be tested and properly rated for the required boundary. Alternatively, security glass which is not rated for the required boundary, may be accepted in such spaces protected by an automatic sprinkler depending on factors such as the sprinkler spacing and sprinkler distance from the glass on both sides. Where the guard spaces are not intended to be occupied at all times, properly rated fire doors may be installed to seal these penetrations in the fire boundaries.
- d. The hull, structural bulkheads, decks, and deckhouses should be constructed of steel or other equivalent metal construction of appropriate scantlings. The use of combustible materials in construction (e.g., finishings, deck overlays, etc.) as provided in the regulations should be kept to a minimum. Usually combustible furniture and furnishings are kept to a minimum for security reasons. The only combustibles contained in -spaces occupied by prisoners are mattresses, linen, and personal belongings which are to be stowed in a steel locker. These spaces have non-combustible chairs and benches without upholstery, no rugs, carpets, or draperies. Therefore, fire load calculations of each "accommodation" area will only be necessary for prisoner spaces with more elaborate furnishings installed. Administrative spaces are considered to be of comparable risk as similar spaces aboard any other vessel. Fire load calculations are required for these spaces only when unusual amounts of combustibles are to be installed.
- e. Furnishings using polyurethane foam will not be accepted. All mattresses and upholstered furniture should be satisfactorily tested in accordance with the State of California, "Flammability Test Procedure for Mattresses for Use in High Risk Occupancies," April 1980.

7. EMERGENCY EGRESS.

- a. There will be at least two means for emergency egress (i.e., means of escape on passenger vessels), as required by 46 C.F.R. 72.10, from all areas generally accessible to the prisoners and visitors. Two means of egress are also required from those areas where correction officials and the crew may be quartered or normally employed. It should be shown that unlocking arrangements, egress sizing, egress corridor lengths, travel distances to exits, and areas of refuge conform to the requirements of 46 C.F.R. Subchapter H or NFPA 101.
- b. Compliance with NFPA 101 can be accepted as an equivalent to Subchapter H for these facilities when they have an independent area of safe refuge. That is, where these vessels are docked next to a pier, readily available egress to a "secure¹¹ area, e.g., holding pen, on the pier should be viewed as similar to a land based facility where egress is to a prison "yard." If these vessels are to be anchored out, then readily available egress to an independent barge or floating dock could serve the same purpose.
- c. Restriction of the detainees aboard the vessel is implicit to its function. Accordingly, it is recognized that access to and escape from certain areas of the vessel can be permitted only under the control of authorized staff personnel. Authorized corrections personnel and/or crew, who will open normally locked doors in order to permit controlled movement and emergency egress, should be delineated in the station bill (see paragraph 15.a.(2) below). To facilitate timely egress in an emergency, the number of different types of locking devices and different keys should be minimized. Although these keys must be secured in such a manner that they are accessible only to authorized users, they must also be readily available in case of an emergency. The manner in which this is accomplished should be addressed in the evacuation plan (see paragraph 15.a.(3) below).
- d. A remote unlocking/opening device should be provided for prison cells, sally ports and interior doors. For new construction, there should be two master stations from which all interior doors may be opened.
- e. For each MVZ, there should be a means of evacuation from the main deck to the shore. One such means of evacuation may serve the two adjacent MVZ's, provided it is collocated with a stairtower serving as a primary escape route for the two adjacent MVZ's.

8. VENTILATION.

- a. Air conditioning and ventilation fans should be capable of remote shutdown at a manned location. The fans serving a specific zone should also shut down automatically upon activation of the smoke detection system in that zone.
- b. Fire dampers in ventilation ducts should be operable from both sides of a fire boundary. Consideration will be given to one (non-inmate) side operation if the dampers are remotely controlled at a manned station or if they are automatically closed by a smoke sensing system. The dampers should be located as close as possible to the protected space yet separated from inmate access.

- c. When the location or operation of dampers deviates from the requirements of the regulations, an indication of this (on the plans or in writing) with explanation should be provided to facilitate plan review and approval.
- d. Mechanically assisted smoke control on a zone basis should be provided to develop a differential pressure smoke control system following the guidance in NFPA 101, section A-7-3.1. The pressure differential is utilized to confine smoke to the compartment of origin. The smoke evacuation system plan should be reviewed and stamped by a professional fire protection engineer.

9. FIRE PROTECTION SYSTEMS.

- a. All fire fighting equipment, fixed or portable, should be Coast Guard approved per 46 C.F.R. 76. A proposal to use other than approved equipment may be submitted to Commandant (G-MTH-2).
- b. The detention facility should be equipped with a smoke sensing system in all areas. This system should alarm in the vessel's control center as well as automatically alert the responsible shipboard fire fighting personnel. When equivalent arrangements include use of a local shore-based fire station for fire fighting, fire alarms on the facility should also automatically alert that fire station.
- c. The detention facility should be fully protected by an automatic water sprinkler system. To satisfy the concern for false activation of sprinklers by prisoners, an automatic dry-pipe sprinkler with precaution system may be used. In such systems, actuation of the fire detection system installed in the same areas as the sprinklers shall permit water to be discharged only through those sprinklers actuated by the fire. In certain cases, where other arrangements are provided, spaces that are occupied or under observation at all times when prisoners are on board, may have manual sprinklers provided those sprinklers can be activated from a control location that is manned at all times.
- d. Fixed gas fire fighting systems are to be installed in such locations as required by the regulations. Where such Systems are installed, the water sprinkler system discussed in paragraph 6.c above is not required.
- e. Fire stations must be located so as to provide the required coverage, i.e., enable hoses to reach any space with at least two streams of water.
- f. Fire hydrants, hoses and fire fighting equipment accessible to prisoners may be kept locked in closets or cabinets to ensure the equipment remains on location and in serviceable condition. The number of different types of locking devices and different keys should be minimized. Although these keys must be secured in such a manner that they are accessible only to authorized users, they must also be readily available in case of an emergency. The manner in which this is accomplished should be addressed in the fire control and safety plan (see paragraph 15.a.(1) below). Personnel should be frequently drilled in the access and use of this equipment.

- g. There are to be at least two independently driven and segregated pumps: one a bilge pump and one a fire pump. They must be capable of simultaneous operation. Each should be capable of serving the purpose of the other. Alternatively, where dedicated pumps are installed, standby power pumps should be provided. Capacities are to be in accordance with the regulations (46 C.F.R. Subchapters F and H).

10. ELECTRICAL SYSTEMS.

- a. In general, all electrical systems are to meet the requirements for non-self-propelled vessels stated in 46 C.F.R. Subchapter J - Electrical Engineering regulations with the exception of the requirements regarding the main and emergency sources of power.
- b. There should be two independent sources of power, one of which may be from shore for those vessels that are moored to a pier. The other, which is deemed to be the backup or standby source of power is to auto-start upon the loss of primary power and located on the vessel itself. The backup power source must be capable of carrying the vessel's full electrical load.
- c. Vessels that will be anchored must have an emergency power system in accordance with the requirements of 46 C.F.R. 112 in addition to the two independent sources of power mentioned above.

11. SECURITY SYSTEMS.

- a. Electrically powered security systems should be designed to Underwriters Laboratories, Inc. specifications or shown to be equivalent. They should be so designed to ensure that they do not degrade other Coast Guard required systems.
- b. Electrical door release mechanisms should be fitted with an emergency source of electrical power, and should be capable of local manual mechanical operation.

12. LIFESAVING EQUIPMENT

- a. Primary lifesaving equipment, i.e., lifeboats, liferafts, etc., should be provided to the satisfaction of the cognizant OCMI. Primary lifesaving equipment need not be fitted if the vessel is to be kept moored while persons are on board, and the vessel is equipped with sufficient and well separated means of egress to shore with alternate routes in case a primary route should be blocked by fire.
- b. For a floating detention facility moored/anchored offshore, primary lifesaving equipment may be required. The type and quantity will depend on the distance from shore, the temperature of water, and the availability of other nearby rescue resources. The rescue equipment must be of such quantity and so arranged that evacuation of all persons on board is possible within 30 minutes of the order to evacuate.
- c. A rescue boat, if required, may be moored away from the vessel for security reasons, but must be nearby and immediately available in an emergency. For floating detention facilities that have lifeboats on board, one of these lifeboats may be designated as the rescue boat.

- d. Sufficient ring buoys with line and waterlights should be provided. Generally, one ring buoy should be provided for every 50 feet of exposed (to weather where there is the possibility of falling overboard) deck area.
- e. personal flotation devices should be provided to the satisfaction of the OCMI.
- f. Floating detention facilities need not be fitted with line throwing guns, emergency position indicating radiobeacons, or ship's distress signals, unless they are moored/anchored offshore in such a location and in such a manner that the OCMI finds it appropriate to require such equipment.

13. STABILITY AND SUBDIVISION.

- a. A floating detention facility should be designed to meet stability and subdivision requirements in 46 C.F.R. Subchapter 5. Two compartment subdivision is required.
- b. Sliding watertight doors should be capable of local and remote operation. Local controls may be kept locked if the remote controls are located in a manned location and flooding alarms are fitted.

14. DRYDOCKING.

- a. Drydocking examinations should be conducted at the intervals specified in 46 C.F.R. 71.50-3 except as modified in 14.b below.
- b. After completion of a satisfactory internal structural examination, drydocking may be deferred by the OCMI, up to a maximum interval of 15 years between drydockings, if:
 - (1) A satisfactory external and internal coating is used;
 - (2) The number of through hull fittings is minimized and each is readily accessible for inspection from inside the hull;
 - (3) An impressed current cathodic protection system is employed;
 - (4) A bilge alarm system is employed;
 - (5) The depth of water at the mooring site is such that, if flooding occurred, the vessel would settle on the bottom without flooding normally occupied spaces; and
 - (6) No wastage or other structural defects are noted during the internal examination.
- c. Internal structural examinations will be performed periodically in accordance with 46 C.F.R. 71.50-3. Inspectors will enter a representative number of voids at each inspection for certification to confirm that corrosion is being controlled. At each fifth year anniversary, a representative number of water and fuel tanks would also be checked.
- d. Nondestructive testing of the hull and/or underwater surveys may be required to support deferral of the drydocking.

15. EMERGENCY PLANS AND DRILLS.

- a. The following emergency plans and bills are to be submitted to the OCMI. Except for those items which are to be posted, these plans may be incorporated into one booklet.
- (1) Fire Control and Safety Plan - This plan should be submitted for approval by the OCMI with a copy to MSC. The plan should address those items described in NVIC 8-84. It should identify the location of all fire fighting equipment and address the procedures for responding to a fire. It should identify the personnel, by position description, who are responsible for fire fighting and other associated duties. If a local land-based fire station is on-call, this should be indicated. This plan should also address the procedures for conducting fire drills. General arrangement plans showing the location of fire detection and fire fighting equipment shall be posted in accordance with 46 C.F.R. 78.45.
 - (2) Watch Quarter and Station Bill - This bill should identify, by position description, all those persons performing duties on board the vessel. It should indicate their normal duties and their duties in case of certain emergencies, e.g., fire, flooding, power failure, etc. It should be posted where it is accessible for periodic reference by these personnel.
 - (3) Evacuation Plan - A formal evacuation plan should be submitted to the OCMI for approval. This plan should specifically address prisoner, staff, and visitor movement and evacuation procedures in the event of an emergency for which evacuation is deemed appropriate, e.g., fire, smoke, etc. This plan should also address the procedures for conducting evacuation drills. It should include a requirement for "key drills" to test procedures for manually unlocking spaces grouped as "zoned impeded egress," "impeded egress," and "contained," as used in NFPA 101. A preliminary evacuation plan should be submitted to MSC along with other plans submitted for review. This will allow the MSC to review the emergency egress routes and procedures, to ensure that it adequately complements the design aspects of the vessel.
- b. Drills required and frequency.
- (1) Fire - Weekly and at each inspection for certification and reinspection.
 - (2) Evacuation - Quarterly and at each inspection for certification and reinspection.

16. MANNING.

- a. The COI will prescribe the required 24 hour manning considered necessary for the safe operation of the vessel for the intended route and conditions of operation. Each watch should consist of at least a licensed master and one licensed engineer.
- (1) All licensed personnel should fulfill the requirements of 46 C.F.R. Part 10 as may be modified by the OCMI in consideration of the specialized nature of these vessels.
 - (2) The master will be responsible for the safety of the vessel and its occupants, ensuring the proper placement and maintenance of all safety systems and equipment, e.g., fire detection systems, fire fighting equipment, lifesaving equipment, etc.

- (3) The watchstanding engineer will be responsible for the proper operation of shipboard engineering services and associated Systems and equipment.
 - (4) The duties and authorities (relative to the senior corrections official on board) of the licensed personnel are to be clearly delineated in the emergency plans (see paragraph 15.a above).
- b. The vessel shall be staffed on an around-the-clock basis by a force of uniformed and civilian corrections personnel. Training shall be provided to this force as required to properly support the licensed watchstanders in the accomplishment of their duties. A station bill (see paragraph 15.a.(2) above) will set forth the duties and duty stations of each member of this force considering various emergency situations. In addition to the licensed individuals, the COI should specify the minimum number of trained uniformed and civilian corrections personnel that must be on board.