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16711 Policy Letter No. 03-01

From: Commandant To: Distribution

Coast Guard

FEB 1 1 2003

Subj: IN-SERVICE INSPECTION PROGRAM (ISIP) FOR FLOATING FACILITIES IN THE OUTER CONTENENTAL SHELF (OCS)

Ref:

(a) 33 CFR 143.120 Floating OCS Facilities

- (b) 46 CFR 107.261, 107.265 Drydock or Special Examination, Special examination in lieu of drydocking for column stabilized units or surface type units when specially approved by the Commandant
- (c) NVIC 12-69 Special Examination in Lieu of Drydocking for Large Mobile **Drilling Units**
- (d) NVIC 1-89 Underwater Survey Guidance
- 1. As early as 1989 it was recognized that there were and continue to be new and unique floating facilities being constructed to work in the OCS that are not adequately addressed by the MODU drydocking regulations referenced in 33 CFR 143.120. Facilities introduced to the United States OCS over the last decade include Tension Leg Platforms (TLPs), Mini TLPs and SPARs. These facilities are characterized by their large size, which exceeds the capacities of most drydocks, and a tendency to remain permanently located on a single mooring for the life of the facility. For these reasons, typical drydocking cycles become complex, if not logistically impossible. To address these problems, the ISIP was introduced. Each company operating one of these facilities must ensure that a customized and approved ISIP Plan is developed. The ISIP must address the hull (internal and external) inspection intervals, taking into account the unique structure and operations of these facilities. Reference (a) refers floating facilities to reference (b), for drydock inspection requirements. Reference (a) also provides for equivalencies when appropriate and is the basis for authorizing floating facilities to participate in the ISIP to meet drydocking requirements. The ISIP does not apply to MODUs, FPSOs, industrial vessels and other vessels that have a reasonable ability to be drydocked or can be adequately addressed by references (c) and (d).
- 2. The purpose of this policy is to establish guidelines that provide consistency for the drydocking requirements of floating facilities while maintaining the authority of the OCMIs to modify inspection intervals as necessary to address the uniqueness of each facility, its history, and its operations. Companies requesting to use this program shall develop their ISIP Plans, for submittal to the OCMI of the zone that a facility will initially be operating, following the requirements provided in enclosure (1), "In-Service Inspection Program Plan - Organization." The requirements of enclosure (1) draw heavily from reference (d) as modified by the comments in paragraph 4 of this letter. The ISIP Plan is a two-part document that addresses prescriptive and operational considerations, as well as provides plans that identify the crucial/high stress inspection points. The Operational Procedures and Requirements section of the ISIP Plan will be

reviewed by the cognizant OCMI. OCMIs may seek additional guidance from the appropriate district office and/or G-MOC-2, as necessary. This ISIP should be submitted to the OCMI a minimum of 90 days prior to entry of the facility into service. The Structural Critical Inspection Points (SCIP) section of the ISIP Plan must include an explanation as to why a section/area is designated as a SCIP and must be reviewed by the facility's classification society. In the event the structure is not under classification, the Coast Guard Marine Safety Center (MSC) will conduct the review of the SCIP section of the ISIP and must include an explanation as to why the area is being designated as such. Submission for review by the MSC shall be submitted a minimum 90 days prior to entry of the facility into service. Upon completion of their review, the Class or MSC shall provide a statement stating: "This plan has been reviewed and appropriately identifies all crucial and high stress areas to be inspected."

- 3. The ISIP plan should be approved prior to the initiation of operations by the floating facility. Plans that have been approved prior to the date of this policy letter may continue to be used unless a situation occurs (such as excessive wastage, cracking, etc.) that results in the OCMI determining that the plan should be reviewed and modifications required. Changes and modifications to plans with approval dates prior to the date of this policy letter are required to meet the provisions of this policy.
- 4. The following areas are specific to the ISIP program and represent a deviation from the policy set forth in reference (d):
 - a. Prior to the ISIP Program entry:
 - (1) Because TLPs and SPARs are generally too large to examine in drydock, a full assessment of the hull structure shall be made prior initial placement of it, or its sections, into the water. As listed in reference (d), a full video survey of the condition of the hull or its parts shall be made for future reference purposes. Notification of the major events surrounding the construction and launching of the facilities hull shall be made to the OCMI of the zone that the facility will initially be operating; providing ample opportunity for Marine Inspectors to examine and document the initial condition of the hull.

b. Inspection Cycles

- (1) At least 40% of the facilities' hull must be examined each year of a 5-year period, coinciding with the anniversary date of the Certificate of Inspection (COI). The result being that the facility is examined twice both internally and externally during a 5-year period.
- (2) The OCMI may allow a floating facility to conduct a modified inspection program that requires at least 20% of the facilities' hull to be examined both internally and externally each year of a 5-year period, coinciding with the anniversary date of the Certificate of Inspection (COI). The result being that the facility is examined once both internally and externally during a 5-year period. The decision to allow a facility to be placed on the modified inspection program should be based on the

results of previous examinations of similar facilities, the quality of the operating companies previous inspections for other facilities and any unique operating conditions of the facility. In addition, if the facility experiences any significant fractures or hull degradation during the initial cycle, the OCMI may require a more stringent inspection schedule or return to the equipment schedule in subparagraph b. (1) above.

c. Inspection Procedures:

- (1) For those facilities placed on the modified inspection program, the internal structural examination shall be conducted on a different portion of the internal areas of the facility than the external hull examination. The result should be a complete examination of the hull from either internal or external means every 2.5 years. The remaining portions of the internal structure and outer hull must then be completed over the next 2.5 years resulting in a complete internal and external exam by the end of a 5-year period.
- (2) The underwater examination of the external hull shall include all applicable sea valves, sea chests, cathodic protection, and special examinations of critical structures which have been designated in the approved ISIP plan.
- d. Application for Continued Participation in the Underwater Survey Program by Facilities 15 Years of Age and Older:
 - (1) After 15 years of service, the hull inspection intervals will return to the full requirements of both internals and external hull examinations required twice in 5 years. The owner may make a request to remain on a modified inspection program directly to the cognizant OCMI. In considering an extension of the modified inspection program, the OCMI shall consider: (a) the change in condition of the hull from the initial underwater surveys to the most recent survey (gauging report as detailed in Section 3 of NVIC 1-89 may be accepted to assess condition); (b) the repair frequency of critical areas; and (c) coating and condition of internal tanks and voids. Based on this and any additional information, the OCMI may extend the ISIP for this floating facility 5 or 10 additional years. If desired, the owner will need to request a new extension at the conclusion of each OCMI approved extension to continue the intervals listed in either paragraph 4 (b), (1) or (2).

e. Survey Procedures

- (1) It is understood that the majority of facilities will not be capable of increasing freeboard for visual inspection of the hull, through a reduction in ballast. Where a facility cannot practically "light ballast," such as a TLP or SPAR, it may remain at operating drafts for the survey.
- (2) Though these floating facilities are designed to survive extreme weather situations, such as hurricanes, they do not have the ability to relocate or change orientation to

the seas. Severe weather situations could potentially damage sensitive structures. A passing weather system that causes evacuation of a facility or wave damage to topside structure will initiate an out of cycle underwater and internal structural inspection to assess the post storm condition. 25% of underwater critical areas and 25% of internal structures must be examined within 30 days of return of a facility to operations. On a case-by-case basis and depending on relative timing, the cognizant OCMI may apply these inspection results towards the following scheduled underwater hull and internal structural inspections. If a near miss situation caused the evacuation of a facility, this out of cycle inspection can be waived by the OCMI if the company can demonstrate that local wave heights were not extreme with respect to normal operations.

5. If you have questions or comments regarding this matter, please contact the OCS Program Manager in G-MOC-2 at (202) 267-0499.

R/M/GAUVIN

Acting Chief, Office of Compliance By direction of the Commandant

Encl: (1) In-Service Inspection Program Plan - Organization

Dist: CG LANTAREA (Am)

CG PACAREA (Pm)

All Districts (m)

All Activities

All Marine Safety Offices All Marine Safety Units

In-Service Inspection Program (ISIP) Plan - Organization

Table of Contents

- I. Introduction
 - A. General Description / Plan Organization
 - B. Regulatory compliance, standards and interface with regulators
 - C. Nomenclature
 - D. References
- II. Operational Procedures and Requirements,
 - A. Inspection Procedures
 - Description of underwater body inspections and internal structural inspection. NVIC 1-89 (as modified by this policy letter) should be consulted in development of this section. NVIC 1-89 can be found at: http://www.uscg.mil/hq/g-m/nvic/l_89/n1-89.htm
 - 2. Detailed scope of individual inspection types that may potentially be employed such as hull gauging, ROV operations, tank entry, NDT, and visual inspections.
 - Special inspection techniques, interval and procedures for those crucial/high stress locations.
 - Discussion of general dive operations, safety standards and interaction with diving contractors.
 - 5. Procedural checklists for each operation.
 - B. Inspection Schedule and Frequency
 - Outline of general inspection schedule and frequency as required on the policy letter. This should discuss high level scheduling and complement the detailed inspection cycles for components listed in Section C.
 - C. Facility Component Identification
 - 1. General description of facility including listing of measurements and particulars.
 - 2. Hull description. Description of hull and special features including general discussion of scantlings and areas of high stress concerns. (Inspection cycles and general inspection procedures.)
 - Structural Critical Inspection Points. General discussion of types of areas that
 are considered critical and types of inspections. Reference details in Section III
 of this document for all specifics.



- 4. Sea chest and sea valves. (Listing, details, inspection cycles, general inspection procedure.)
- 5. Cathodic protection systems and anodes. (Listing, details, inspection cycles & general inspection procedures.)
- 6. Accessible compartments & voids. (Listing, details, inspection cycles, & general inspection procedures.)
- 7. Inaccessible compartments & voids. (Listing, details, inspection cycles, & general inspection procedures.)

D. Reporting and Documentation

- 1. General record keeping procedures for reports and surveys (company policy).
- 2. Notification and report delivery procedures involving the classification society and the Coast Guard.
- 3. Specific record keeping procedures and report contents for each component category in Section C of this document.
- 4. Record keeping for dives conducted during inspections of the underwater hull.

E. Damage Assessment & Repair Procedures

- 1. Discussion of categories of damage and company procedures to mitigate.
- 2. Casualty notification procedures with regard to 33 CFR 149.30 and 46 CFR 109 following damage to facility relating to underwater body and hull structure.
- Specific procedures and methods to investigate damage or potential damage to the hull or internal structures.
- 4. Procedures to submit proposed methods for repair of both underwater defects and damage to the classification society and the Coast Guard.

III. Structural Critical Inspection Points

- A. Details of structurally critical locations on the hull of the facility. (Listing, details, inspection cycles, & general inspection procedures.)
- B. Drawings detailing the crucial/high stress inspection points as determined by a recognized classification society or by the Marine Safety Center.

This ISIP organization shall be followed in development of new ISIPs. Companies may add additional sections or make minor deviations from the outlined structure as long as the minimum contents have been included and basic outline adhered to. Companies may also include large tables and procedural lists as appendixes that are referenced from within the main document.

ISIPs that have been approved prior to release of this policy letter may retain their original formatting. However, format revisions must follow this guidance.

