## Supporting Statement for Requirements for MODUs and Other Vessels Conducting Outer Continental Activities with Dynamic Positioning Systems

## [per USCG-2014-0063; RIN 1625-AC16]

# OMB No.: 1625-new COLLECTION INSTRUMENTS: Instruction

#### A. JUSTIFICATION

1. Circumstances that make the collection of information necessary.

This collection of information is comprised of seven elements:

# a. Make Available Certificates of Training Completion for Dynamic Positioning Operators (DPO) and Dynamic Positioning Operator, Qualified (DPOQ):

Title 46 U.S.C. 1331 – 1356a, and 33 CFR 140.315 authorize this recordkeeping requirement. The owner or operator of a vessel using a Dynamic Positioning (DP) system is required to maintain a copy of each DPO and DPOQ training record on board the vessel. This documentation ensures the Coast Guard that all DPOs and DPOQs operating the vessel's DP system have received the required training and practical experience in the operation of the DP system and its components as specified under 33 CFR 140.315.

#### b. Submit Annual DP Failure Investigation Report:

Title 46 U.S.C. 1331 – 1356a, and 46 CFR 61.50-4 authorizes this reporting requirement. Dynamic Positioning System Assurance Organizations (DPSAOs) must submit an annual report to the Coast Guard Outer Continental Shelf (OCS) National Center of Expertise (NCOE) that contains each DP investigation summary reported to it by vessel owners and operators using a DP system to maintain station. These reports would provide information on the frequency of DP incidents, the events that led to a DP incident, and whether these causes were being addressed to prevent similar DP incidents from occurring in the future.

#### c. Report DP Incidents that Result in an Emergency Disconnect:

Title 46 U.S.C. 1331 – 1356a, and 33 CFR 140.335 authorize this reporting requirement. The owner or operator of a drilling vessel (Mobile Offshore Drilling Unit - MODU) using a DP system is required to report to the Coast Guard OCS NCOE a DP incident that results in an Emergency Disconnect. As emergency disconnects can result in catastrophic damages and/or injuries and fatalities, it is important for the Coast Guard to be notified immediately so that it can take immediate action if a serious event occurred, and to ensure that operations are not resumed until the cause of the incident has been addressed.

#### d. Report DP Incidents that Result in a Serious Marine Incident:

Title 46 U.S.C. 1331 – 1356a, and 33 CFR 140.335 authorizes this reporting requirement. The owner or operator of a vessel using a DP system is required to report to the Coast Guard OCS NCOE a DP incident that results in a Serious Marine Incident. As serious marine incidents can result in catastrophic damages and/or injuries and fatalities, it is important for the Coast Guard to be notified immediately so that it can take immediate action if a serious event occurred, and to ensure that operations are not resumed until the cause of the incident has been addressed.

#### e. Submit Application to become a Recognized DPSAO:

Title 46 U.S.C. 1331 – 1356a, and 46 CFR 61.50-3 authorizes this reporting requirement. An organization wishing to become a recognized DPSAO must submit an application to the Coast Guard OCS NCOE which demonstrates that it has met the requirements set forth in 46 CFR 61.50-3. This information

ensures the Coast Guard that the organization acting on its behalf for all DP-related matters is competent and well-practiced in spotting, correcting, and responding to events that may lead to or have led to DP incidents.

#### f. Report Location and Time of DP Surveys:

Title 46 U.S.C. 1331 – 1356a, and 46 CFR 61.50-2 authorizes this reporting requirement. The DPSAO must notify the cognizant Officer in Charge, Marine Inspection (OCMI) of the time and location that a DP survey is to occur at least 30 days in advance of the survey. This information provides the Coast Guard with the information necessary to schedule and plan to attend the DP survey if the Coast Guard wishes to attend.

#### g. Submit DP System Plans:

Title 46 U.S.C. 1331 – 1356a, and 46 CFR 62.20-2 authorizes this reporting requirement. The DPSAO must submit a copy of the approved DP system plans for a drilling vessel or new non-drilling vessel of at least 6,000 GT ITC to the Commanding Officer, of the Marine Safety Center (MSC). This information will allow the Coast Guard to validate compliance with the requirement s in this rule of drilling vessels and other vessels of at least 6,000 GT ITC that use a DP system, as well as to ensure that the DPSAO is performing its duties as a recognized DP assurance organization.

This information collection supports the following strategic goals:

- Department of Homeland Security
  - Prevention
- Protection
- Coast Guard
- Safety
- Maritime Security
- Prevention Policy & Response Policy Directorates (CG-5P & CG-5R)
  - Safety: Eliminate deaths, injuries, and property damage associated with commercial maritime operations.
  - Human and Natural Environment: Eliminate environmental damage associated with maritime transportation and operations on the U.S. Outer Continental Shelf.
- 2. Purposes of the information collection.

a. The "Certificate of Training Completion" enables compliance verification for this critical area to ensure that each DPO and DPOQ has received the proper training and has the necessary experience required to correctly operate a DP system in routine and emergency operations.

b. The "Annual DP Failure Investigation Report" provides valuable feedback to ensure that future such incidents do not occur, which would reduce the probability of significant casualties or property damage from occurring in the future. Further, this information would allow the Coast Guard to determine whether the DPSAO is still under compliance with the requirements necessary of an authorized DPSAO specified in 46 CFR 61.50-3.

c. The "Notification of DP Incidents that result in Emergency Disconnects" ensures that the Coast Guard is notified immediately of DP incidents that result in catastrophic damages and/or injuries and fatalities. This would allow the Coast Guard to take immediate action if a serious event occurred, and to ensure that operations are not resumed until the cause of the incident has been addressed.

d. The "Notification of DP Incidents that result in Serious Marine Incidents" ensures that the Coast Guard is notified immediately of DP incidents that result in catastrophic damages and/or injuries and fatalities. This would allow the Coast Guard to take immediate action if a serious event occurred, and to ensure that operations are not resumed until the cause of the incident has been addressed.

e. The "Application for Recognition as a DPSAO" ensures that DPSAOs are highly qualified at conducting a FMEA, testing a vessel's Critical Activity Mode of Operation (CAMO) and Activity Specific Operating

Criteria/Well Specific Operating Criteria (ASOC/WSOC), and conducting DP failure investigations. This would reduce the likelihood that significant casualties or property damage occur because of a poorly created CAMO or ASOC/WSOC.

f. The "Notification of the Location and Time of DP Surveys" provides the Coast Guard the opportunity attend the DP survey to conduct oversight of the DPSAOs conducting the survey. Oversight of the DPSAOs allows the Coast Guard to determine whether the DPSAO is still under compliance with the requirements of an authorized DPSAO specified in 46 CFR 61.50-3.

g. The "Submission of DP System Plans" ensures safe design for all vessels that use a DP system to conduct Critical OCS Activities by requiring that systems be verified by independent third party, which would reduce the probability of significant casualties or property damage. Classification, plan review and certification requirements serves as a fundamental building block for safe DP operations by ensuring a minimum level of reliability for a DP system verified by a qualified third party, particularly for higher risk vessels.

#### 3. Consideration of the use of improved information technology.

This information may be sent by mail, phone, fax or electronically submitted via e-mail to-

- the Officer in Charge, Marine Inspection (OCMI) at a CG Sector Office, for a DPSAO conducting a DP survey.
- the Coast Guard OCS NCOE, for a vessel owner or operating reporting a DP incident resulting in either an Emergency Disconnect or a Serious Marine Incident, or for a DPSAO submitting annual DP Investigation Reports and Applications to become a recognized DPSAO.
- the MSC, for a DPSAO submitting DP system plans.

A comprehensive list of contact info for Coast Guard units can be found at: <u>http://www.uscg.mil/top/units/</u>. We estimate that 75% of the reporting and recordkeeping requirements will be done electronically.

4. Efforts to identify duplication.

There are no other forms or similar information available elsewhere for these purposes.

#### 5. <u>Methods to minimize the burden to small businesses if involved</u>.

Consideration has been given to the burden imposed upon small businesses. The requirements are designed to minimize the burden for both large and small businesses. It takes up to 6 minutes of the respondent's time to make available a "Certificate of Training Completion" (per DPO/DPOQ) and to notify the OCMI on the time and location that a DP survey is set to occur (per vessel), 20 minutes to notify the Coast Guard OCS NCOE of a DP incident that results in an Emergency Disconnect or Serious Marine Incident, 30 minutes to submit a copy of the vessel's DP system plans to the MSC, 4 hours to summarize, compress, and submit an annual DP Investigation Report (per vessel), and 30 hours to fill out the "Application for Recognition as a DPSAO."

#### 6. Consequences to the Federal program if collection were conducted less frequently.

a. This requirement is concerned with the safety of personnel, equipment, and the vessels on which they are found. The recordkeeping requirement is considered necessary to ensure the safety of lives and property. This is a onetime requirement per DPO/DPOQ employed.

b. The reporting requirement is designed to summarize all DP investigations conducted throughout the year as a result of a DP incident. The reporting requirement is considered necessary to ensure that the causes of DP incidents are being properly addressed and corrected so that similar DP incidents can be prevented in the future. If this information were not required, there would be no available means for the U.S. Coast Guard to verify the compliance vessel owners and operators with the requirements in this rule. Further, the Coast Guard could not be sure that vessel owners and operators are taking the steps needed to prevent future DP incidents from occurring in the future.

c. The reporting requirement is designed to provide the Coast Guard with ample time to respond to an event that could result in catastrophic damages and/or injuries and fatalities. By delaying when an owner or operator must report a DP incident that results in an emergency disconnect, the Coast Guard's response may not be quick enough to prevent further damages.

d. The reporting requirement is designed to provide the Coast Guard with ample time to respond to an event that could result in catastrophic damages and/or injuries and fatalities. By delaying when an owner or operator must report a DP incident that results in serious marine incident, the Coast Guard's response may not be quick enough to prevent further damages.

e. This reporting requirement is a one-time event made to verify that DPSAOs are highly qualified at conducting a FMEA, testing a vessel's CAMO and ASOC/WSOC, and conducting DP failure investigations. Without this information, the Coast Guard cannot be certain that the DPSAO is qualified to identify and correct poorly created CAMO or ASOC/WSOC, which could increase the likelihood that significant casualties or property damage occur as a result of DP incidents.

f. This reporting requirement is designed to coincide with a particular event, i.e., DP surveys for which specific time intervals are specified in 46 CFR 61.50-2. The reporting requirement is considered necessary to determine whether the DPSAO is still under compliance with the requirements of an authorized DPSAO specified in 46 CFR 61.50-3.

g. This reporting requirement is a one-time event made to ensures the safe design of DP systems for all vessels that use a DP system to conduct Critical OCS Activities. It also provides the Coast Guard with an opportunity to verify that the DPSAO is still under compliance with the requirements of an authorized DPSAO specified in 46 CFR 61.50-3.

7. Special collection circumstances.

This information collection is conducted in manner consistent with the guidelines in 5 CFR 1320.5(d)(2).

8. Consultation.

The Coast Guard published on November 28, 2014, a Notice of Proposed Rulemaking (NPRM) entitled "Requirements for MODUs and Other Vessels Conducting Outer Continental Shelf Activities with Dynamic Positioning Systems" [USCG-2014-0063; RIN 1625-AC16; 79 FR 70944]. The rulemaking proposes to—

 establish minimum design, operation, training, and manning standards for mobile offshore drilling units (MODUs) and other vessels using dynamic positioning systems to engage in Outer Continental Shelf activities. Establishing these minimum standards is necessary to improve the safety of people and property involved in such operations, and the protection of the environment in which they operate. This notice of proposed rulemaking would decrease the risk of a loss of position by a dynamically-positioned MODU or other vessel that could result in a fire, explosion, or subsea spill, and supports the Coast Guard's strategic goals of maritime safety and protection of natural resources.

The NPRM 90-day comment period closes on February 26, 2015.

9. Provide any payments or gifts to respondents.

There is no offer of monetary or material value for this information collection.

10. Describe any assurance of confidentiality provided to respondents.

There are no assurances of confidentiality provided to the respondents for this information collection.

11. Additional justification for any questions of a sensitive nature.

There are no questions of sensitive language.

#### 12. Estimate of annual hour and cost burdens to respondents.

- The estimated number of is respondents is 719.
- The estimated number of responses is 5,988.
- The estimated hour burden is 1,096.
- The estimated cost burden is \$104,838.

The above numbers are all first-year figures. The annual reporting hour and cost burdens on Industry are summarized in Appendix A and are based on the following information:

#### Respondents:

The annual number of respondents is equal to the annual number vessels using a DP system to maintain station in the U.S. OCS, as well as the number of DPSAOs working on behalf of the U.S. Coast Guard.

#### Responses:

a. Certificate of Training Completion. The estimated annual number of Certificates of Training Completion for DPSOs and DPSOQs takes into account 3 distinct populations of US domestic and foreign vessels: (1) Existing MODUs that use a DP system, (2) Existing Offshore Supply Vessels (OSVs) and crewboats that use a DP system, and (3) Newly Constructed MODUs, OSVs, and crewboats that use a DP system.

(1) All existing MODUs that use a DP system to maintain station on the U.S. OCS must maintain a copy of each DPSO's or DPSOQ's Certificate of Training employed to assist in the operation of the DP system on board the vessel.

(2) All existing OSVs and crewboats that use a DP system to maintain station on the U.S. OCS must maintain a copy of each DPSO's or DPSOQ's Certificate of Training employed to assist in the operation of the DP system on board the vessel.

(3) All newly constructed MODUs, OSVs, and crewboats that use a DP system to maintain station on the U.S. OCS must maintain a copy of each DPSO's or DPSOQ's Certificate of Training employed to assist in the operation of the DP system on board the vessel.

The estimated first year number of Certificates of Training Completion that must be maintained on board the vessel is equal to the sum of the populations (1) and (2), multiplied by the number of DPOS and DPOQs employed to assist in the operation of the DP system per vessel (8 employees). The estimated second and third year number of Certificates of Training Completion that must be maintained on board the vessel is equal to population (3) multiplied by the number of DPSOS and DPSOQs employed to assist in the operation of the sum of the sum of the populations (1) and (2) multiplied by the number of DPSOS and DPSOQs employed to assist in the operation of the DP system per vessel, and the sum of the populations (1) and (2) multiplied by the annual turnover rate of DPOs and DPOQs (38.9% per year).

b. Annual DP Failure Investigation Report. The estimated annual number of DP Failure Investigation Summary Reports that must be submitted by DPSAOs to the Coast Guard OCS NCOE takes into account 3 distinct populations of US domestic and foreign vessels: (1) Existing MODUs that use a DP system, (2) Existing OSVs and crewboats that use a DP system, and (3) Newly Constructed MODUs, OSVs, and crewboats that use a DP system to maintain station on the U.S. OCS.

The estimated annual number of DP Failure Investigation Summary Reports that must be submitted to the Coast Guard OCS NCOE by the DPSAO is equal to the sum of the populations (1), (2), and (3). This assumes that each vessel that uses a DP system to maintain station on the U.S. OCS would experience at least one DP incident per year.

c. Notification of DP Incidents that result in Emergency Disconnects. The estimated annual number of DP Incidents that result in an Emergency Disconnect that must be reported to the Coast Guard OCS NCOE takes into account 2 distinct populations of US domestic and foreign vessels: (1) Existing MODUs that use a DP system, and (2) Newly Constructed MODUs that use a DP system to maintain station on the U.S. OCS.

The estimated annual number of DP Incidents that result in an Emergency Disconnect that must be reported to the Coast Guard OCS NCOE by the vessel owner or operator is equal to the sum of the populations (1) and (2) multiplied by the rate that a vessel experiences a DP incident (1.45 times per year) times the percentage of DP incidents that result in an Emergency Disconnect (19% of the time).

d. Notification of DP Incidents that result in Serious Marine Incidents. The estimated annual number of DP Incidents that result in a Serious Marine Incident that must be reported to the Coast Guard OCS NCOE takes into account 2 distinct populations of US domestic and foreign vessels: (1) Existing MODUs that use a DP system, and (2) Existing Newly Constructed MODUs, OSVs, and crewboats that use a DP system to maintain station on the U.S. OCS.

The estimated annual number of DP Incidents that result in a Serious Marine Incident that must be reported to the Coast Guard OCS NCOE by the vessel owner or operator is equal to the sum of the populations (1), and (2) multiplied by the rate that a vessel experiences a DP incident (1.45 times per year) times the percentage of DP incidents that result in Serious Marine Incident (5% of the time).

e. Application for Recognition as a DPSAO. The estimated annual number of applications submitted by DP assurance organizations to the Coast Guard OCS NCOE takes into account 2 distinct populations of third-party organizations: (1) Third-party Organizations that would already meet the requirements set forth in 46 CFR 61.50-3, and (2) Third-party Organizations that are likely to meet the requirements set forth in 46 CFR 61.50-3 in the future.

f. Notification of the Location and Time of DP Surveys. The estimated annual number of times that a DPSAO must notify the cognizant OCMI of the time and location that a DP survey is set to occur takes into account 2 distinct populations of US domestic and foreign vessels: (1) Existing MODUs that use a DP system, and (2) Newly Constructed MODUs, OSVs, and crewboats that use a DP system to maintain station on the U.S. OCS.

The estimated first year number of times that a DPSAO must notify the cognizant OCMI of the time and location that a DP survey is set to occur is equal to population (1). The estimated second and third year number of times that a DPSAO must notify the cognizant OCMI of the time and location that a DP survey is set to occur is equal to the sum of populations (1) and (2), since DP surveys must be conducted annually.

g. Submission of DP System Plans. The estimated annual number of DP system plans that must be submitted by DPSAOs to the MSC takes into account 2 distinct populations of US domestic and foreign vessels: (1) Existing MODUs that use a DP system, and (2) Newly Constructed MODUs and OSVs of at least 6,000 GT ITC that use a DP system to maintain station on the U.S. OCS.

The estimated first year number of DP system plans that must be submitted to the MSC by the DPSAO is equal to population (1). The estimated second and third year number of DP system plans that must be submitted to the MSC by the DPSAO is equal to population (2).

#### Wage Rates:

To account for the opportunity cost to industry of complying with new Coast Guard requirements concerning DP systems, the Coast Guard uses an average wage rate estimated by a Coast Guard subject matter expert from the Eighth District or data presented by the Bureau of Labor Statistics (BLS).

In order to calculate the loaded wage rate for a DPSAO, we use the BLS' mean hourly wage for "Transportation Inspectors". The Coast Guard then applied a load factor of 1.42 to the median hourly wage to calculate a loaded hourly wage \$41 for a DPSAO.<sup>1</sup>

According to an Officer-in-Charge, Marine Inspector (OCMI) of the Eighth District, a captain, master, or owner/operator of a DP operated vessel has an average daily wage of \$850. It is expected that a captain, master, or owner/operator would work 8 hours per day. The Coast Guard calculated that the loaded hourly wage of a captain, master, or owner/operator is \$143.<sup>2</sup>

13. <u>Total annualized capital and start-up costs</u>.

There are no capital, start-up or maintenance costs associated with this information collection.

#### 14. Estimates of annualized Federal Government costs.

The estimated first year cost to the Federal Government is \$286,068 (see Appendix B). All of the Government's efforts to review these reporting and recordkeeping requirements are expected to be made by personnel at the O-3 levels. This analysis uses the "In Government" wage rates from COMDTINST 7310.1(series).

15. Reasons for changes in burden.

This is a new collection due to a rulemaking, the Requirements for MODUs and Other Vessels Conducting Outer Continental Shelf Activities with Dynamic Positioning Systems NPRM [USCG-2014-0063; RIN 1625-AC16].

16. Plans for tabulation, statistical analysis, and publication.

This information collection will not be published for statistical purposes.

17. Approval for not explaining the expiration date for OMB approval.

The Coast Guard will display the expiration date for OMB approval of this information collection.

18. Exception to the certification statement.

The Coast Guard does not request an exception to the certification of this information collection.

#### B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS

This information collection does not employ statistical methods.

<sup>&</sup>lt;sup>1</sup> BLS, Employer Costs for Employee Compensation, 2<sup>nd</sup> Quarter 2014, Private Industry, Wages/Salaries: \$20.55 per hour, Cost of Benefits: \$8.68 per hour, Ratio: \$8.68/\$20.55=.42, Load Factor: 1.42. <u>http://www.bls.gov/news.release/pdf/ecec.pdf</u>

<sup>&</sup>lt;sup>2</sup> The median income listed by BLS for a captain or master is \$39 unloaded. Based on input from District personnel, a captain or master of a vessel with DP would require a higher level of expertise and experience than other vessels and would be paid a higher wage.