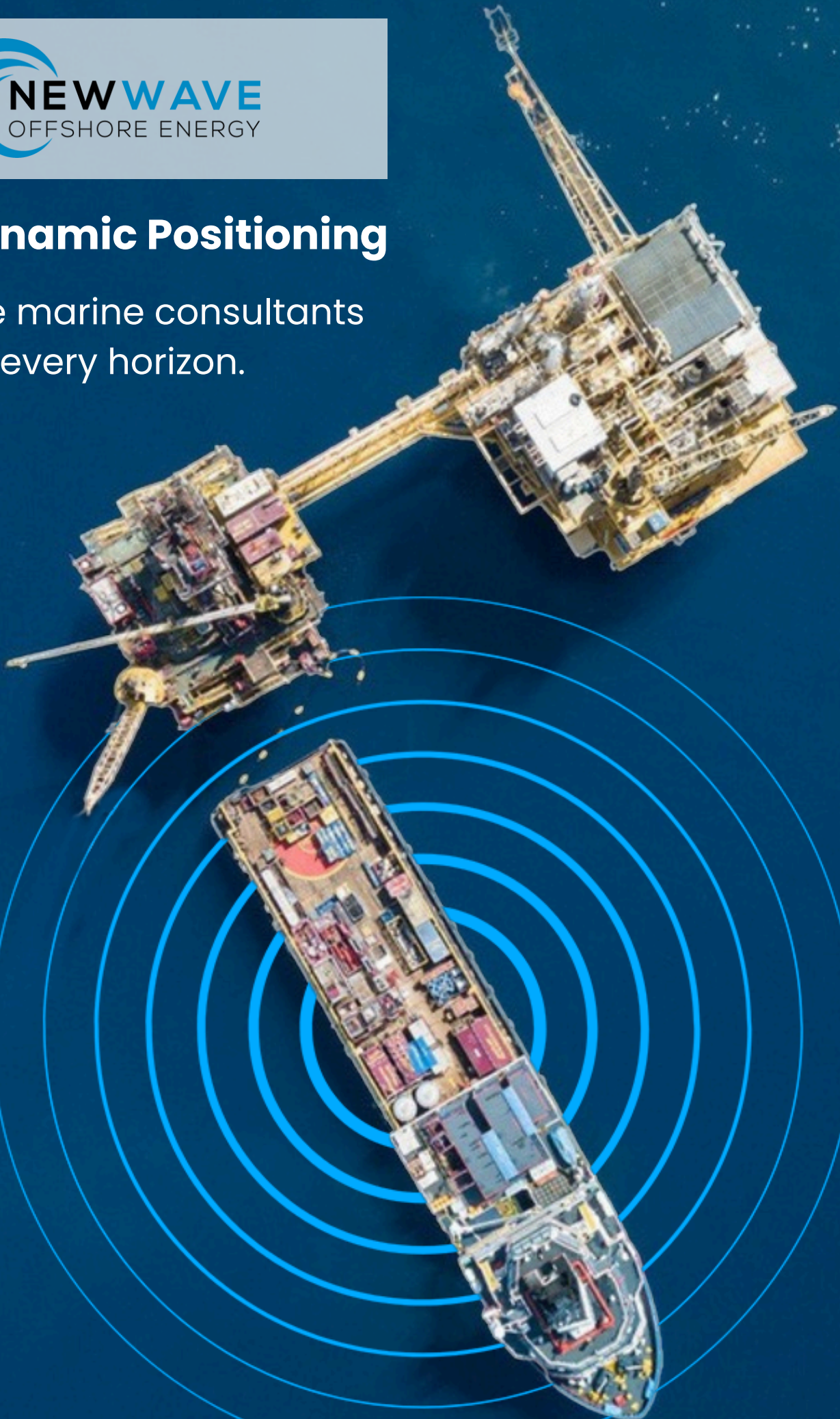




Dynamic Positioning

The marine consultants
for every horizon.



Dynamic Positioning Services



DP FMEA

The FMEA systematically examines potential failures in DP systems, thoroughly evaluating their effects on the vessel's ability to maintain position. A detailed FMEA comprehensively analyzes redundancy strategies and protection mechanisms, guaranteeing essential operational safety and reliability.

DP Assurance

Comprehensive compliance and documentation services, thoroughly verifying Class, Flag, owner, and operator regulatory requirements. Our method ensures precise record-keeping across deck and engineering departments, supported by detailed inspection reporting of essential vessel machinery.

Annual DP Trials

Systematic validation of redundancy concepts and critical equipment performance enhances operational efficiency while ensuring technical compliance. A well-structured trial package provides valuable technical insights and significant time savings.

FMEA Services

The FMEA should be treated as a living document and updated to reflect any and all equipment updates. FMEAs can remain class approved for the year build of the vessel while upgrades commence over the years. Updates to the FMEA can also encompass new guidance and recommendations from the industry, which results in a more attractive vessel.

Service Offerings

- DP FMEA
- Proving Trials
- Annual Trials
- Closed Bus Plausibility Analysis
- DP Assurance and Audit
- Incident Investigation
- DP Operations Manual
- DP Specification Review
- Various DP Gap Analyses
- FMEA Services
- Operating Guidelines & Activity Modes
- CMID and OVID

Gap Analysis

FMEA – Designed to assess whether the existing document demonstrates the necessary level of fault tolerance, this analysis accounts for critical differences in Class approval standards across global maritime regions. Shipyard FMEAs often overlook essential equipment, introducing unquantified operational risks. Our Gap Analysis system provides a strategic approach and identifies potential design vulnerabilities by comparing existing documentation against industry standards. Our proactive evaluation helps reduce risks that could lead to costly system upgrades or charter cancellations.

Annual Trials – This analysis reduces potential downtime—often up to five days—while thoroughly testing all critical DP equipment. Trials identify tests that can be integrated into planned maintenance during routine operations, such as rig moves. Additionally, the analysis verifies whether all critical DP equipment is covered in testing. The finished document shows weaknesses in the trials program, enabling better preparation to validate the vessel's redundancy concept and performance while optimizing crew-executed tests to save time.

Operations Manual – Often missing the vessel-specific operational guidance they were designed to provide, these documents can leave new crewmembers vulnerable to errors without proper orientation on critical DP operations. Frequently, they fail to address the industrial mission, vessel-specific operating modes, DP configurations, or power system setups. This Gap Analysis identifies deficiencies within the document, enabling necessary updates to create a robust handbook that enhances crew familiarity and ensures safe, efficient vessel operations.

Proving Trials – Blackouts and other consequential incidents on DP vessels have demonstrated that redundancy splits and protection schemes may appear fault-tolerant yet still be vulnerable. The industry now recommends specific testing to validate the protection scheme and redundancy concept across various DP classes and power system configurations. For aging vessels operating in common bus setups, looking back at the initial proving trials is critical to ensure all risks have been assessed. This tool is also important before initial proving trials, allowing design flaws to be identified early—preventing costly upgrades later in the vessel's lifecycle.





FMEA Services

Management - Effective FMEA management throughout the vessel's lifecycle is essential for mitigating risks related to modifications and upgrades. A proactive approach allows organizations to identify and prevent potential hazards, minimizing the risk of unplanned operational downtime.

Update - Aging vessels can maintain compliance with the standards in place at the time of their construction. However, updating the FMEA to reflect the latest industry standards and cost-saving strategies enhances competitiveness, particularly during market downturns.

Upgrade - Major vessel upgrades necessitate an updated FMEA to reflect significant modifications. The revised FMEA assesses these changes and their impact on other critical systems, ensuring continued operational reliability and compliance.

Newbuild - The shipyard FMEA can be developed with input from the vessel owner and operator, ensuring all stakeholders' concerns are addressed. Early collaboration during the initial study facilitates a smooth transition from design and construction to delivery and charter.

Operating Guidelines and Activity Modes

WSOG - Well Specific Operating Guidelines

CAM - Critical Activity Mode

ASOG - Activity Specific Operating Guidelines

TAM - Task Appropriate Mode

FISOG - Field Specific Operating Guidelines

Marine Assurance

OVID - Offshore Vessel Inspection Database

CMID - Common Marine Inspection Document

Visit newwaveoffshore.com for more information
or call us at +1 (832) 639 - 3383