

OFFSHORE SUPPORT INDUSTRY

November 2023

EXAMINERS REPORT

Question 1.

Students were expected to produce a drawing of a Service Operating Vessel and the sketch should provide sufficient detail to demonstrate understanding of the basic structure and equipment incorporated in the vessel.

Answer should include a suitably annotated sketch showing general arrangement, propulsion, increased accommodation, helideck, warehouse/workshop areas, Active Heave Compensation Crane (AHC).

Description of features – DP2, propulsion arrangement described ie. number and location of thrusters/azimuths and approximate dimensions.

Transfer of technicians (gangway & via DC) Gangway operating up to 3.5m Hs

Enclosed warehouse/workshop, containers skidding etc.

Elevator for stepless cargo and personnel transfer between decks and gangway platform.

High comfort accommodation facilities

Awareness of modern design for to achieve low noise, vibration, vessel motion

Environmental design features, sulphur emission areas, heat recovery HVAC system and 'Clean Design' class notation.

Question 2.

Students should know the main cargoes carried and be able to provide a description in some detail regarding their use and how they are carried safely:

Cargoes should include: Fuel, water, drilling fluids, stores, food, drill pipe, casing, technical equipment, dry bulk (cement, barytes, bentonite etc.)

Deck cargo generally carried in containers, half heights and skips tubulars carried on deck – drill pipe, casing, tubing.

Discussion should include:

Hazardous Cargo carried in containers on deck at specifically designated areas, IMDG code governs

Bulk cargoes carried in dedicated tanks below deck.

Tank cleaning

Special products (Methanol/MEG)/Toluene etc.

Project cargo

Question 3.

Students should have a general understanding of each of the terms/acronyms:

Mutual Hold Harmless

To establish a legally binding set of provisions between the vessel owner (including all their sub-contractors) and the charterer and the charterer's sub-contractors.

Method of extending KK indemnities to charterer and owner's groups.

Not generally covered by standard P&I terms

Lay-up

Laid-up or Lay-up - ships temporarily been taken out of profitable service due to poor market conditions.

Charter earnings insufficient to cover a ship's running costs.

Reducing owner's overheads, manning costs, fuel, insurance costs during

non-profitable period.

Considered a sustainable option compared to the sale of ships at low price.

Comparison of 'hot' and 'cold' layup.

Taut Wire

A DP Position Reference System (PRS) used by DP vessels comprising a heavy weight lowered to the seabed usually from the side of the vessel.

Maintained under continuous tension with a heave compensation system.

The position of the vessel is determined by the vertical angle and length of the taut wire deployed.

Usually one of a number of PRS comprising a DP 2 system.

Still favoured by many diving contractors due to physical sighting of wire.

Moonpool

A large well constructed between a vessel's main deck and the underside of the hull.

Facilitates the safe launching of equipment principally, Remote Operating Vehicles (ROV's) and diving bells.

Also provides access for drilling operations

Provides a sheltered area from the prevailing environmental conditions, wind and waves.

Oil Companies International Marine Forum

A voluntary association of the major Oil Companies.

Focus on the safe and environmentally responsible operation of oil tankers, terminals and offshore support vessels.

Developed OVID (Offshore Vessel Inspection Database) derived from SIRE (Ship Inspection Report Programme)

Launch & Recovery System

Equipment designed to facilitate the safe and efficient launching and recovery of various types of marine equipment.

Principally used in the deployment of ROV/AUV; FRC/Daughter Craft and Diving Bells.

Question 4.

Students were expected to describe these two industry inspection tools and how both audit/inspection systems assesses the capability of the vessel and its management with an emphasis on operation of Safety Management Systems and compliance with the ISM/ISPS codes.

OVID – Offshore Vessel inspection Database.

Universal database of OSV inspections developed by OCIMF.

Providing assurance for charterers on the selection of OSVs by provision of a web-based inspection tool and a database of inspection reports.

Inspections undertaken by OCIMF accredited inspectors.

Online reporting system to avoid the requirement of repeated vessel audits by different charterers.

CMID – Common Marine Inspection Document.

A vessel auditing document developed by IMCA that assesses an OSV relative to:

Compliance with statutory requirements.

Compliance with non – statutory industry guidelines.

Suitability for the intended worksopes – 'fit for purpose'

Question 5.

Students should understand that in a time charter risk of delay is essentially borne by charterers.

If no contrary terms, owner entitled to receive hire throughout charter period.

Purpose of 'off-hire' clause to stop paying hire if delay caused by operation of the vessel.

Burden of proof for withholding hire rests with charterers.
To withhold hire charterer must be clearly within terms of the 'off-hire' clause.
If 'off-hire' not established, withholding payment is breach of contract.
Reference to specific charter parties and relevant clauses
Examples.

Question 6.

Students should be able to give a general description of offshore windfarms - unmanned installations, generally quite close to shore and describe how maintenance concepts will involve either an onshore or offshore based strategy. Onshore based maintenance and service strategy involves day-to-day access to the wind farm using Crew Transfer Vessels (CTVs) operating from a shore base. Usual for smaller windfarms less than 40 nm from shore. A description of CTVs should be included – speed, capacity (cargo/persons), operating costs, access/egress arrangements etc. Offshore based maintenance and service strategies involve Service Operation Vessels (SOVs) which will operate similar to OCV in the O&G sector. A description of SOVs should be included – capacity (cargo/persons), facilities, workshops, access/egress arrangements (Walk-to-Work), DP capability etc. Use of Daughter Craft. An indication of Current charter rates should also be included. The extent of helicopter operations should be discussed (unusual, being used mainly for emergency). No landing option on WTGs (sometimes on larger offshore sub-stations) personnel deployed by winch onto platforms at WTG tower base. Onshore logistics - quayside infrastructure, warehousing, workshops, logistics and operational planning should be included. Major component repair, refurbishment and replacement by specialised OCV vessels should also be discussed.

Question 7.

Students should be able to show awareness of IMO Conventions and industry standards and distinction between them (statutory/non-statutory).

IMO not a regulatory body - develops conventions and codes which when ratified are implemented and enforced by the Flag States.

Large number of IMO conventions but the key ones to include are:

SOLAS, MARPOL, STCW and SAR

ISM and ISPS are codes stipulated within SOLAS (Regulations IX and XI respectively).

Detail on these key conventions/codes:

ISM – Mention of the vessels requirement for a valid Safety Management Certificate (SMC) and the vessel operators Document of Compliance (DOC).

Appointment of a DPA.

ISPS – Requirement for vessels to have an approved Ship Security Plan (SSP) and appointment of a Ship Security Officer (SSO) onboard and a Company Security Officer (CSO) ashore.

MARPOL – Highlight the six annexes covering: (I) Oil; (II) Noxious liquids in bulk; (III) Harmful substances in package form; (IV) Sewage; (V) Garbage; (VI) Air pollution – Sox/NOx emissions.

STCW – Safe Manning Documents/Maritime Working Time Directive (MWTDD) controlling hours of work.

IMDG Code.

Maritime Labour Convention (MLC) 2006 developed by the International Labour Organisation.

SOLAS has provision for Port State Control where contracting governments can inspect ships (with the power of detention) of other contracting states should they have concerns that the ship and its equipment don't comply with the requirements of international conventions.

Industry standards (non-statutory) such as the Common Marine Inspection Document (CMID) produced by IMCA and the Offshore Vessel Inspection Database (OVID) produced by the OCIMF. The IMO also has non-mandatory codes for offshore supply vessels (OSV Code) and mobile drilling units (MODU Code).

Understand role of Classification Societies and trading certificates.

Key certificates:

- Safety Construction
- International Loadline
- Safety Equipment
- Safety Radio

Safe Manning Document

Question 8.

The explanation should cover the full range of broker services/activities and include:

Core services: Chartering/Sale & Purchase

Understanding fundamental broker/client relationship.

Presenting business to potential clients

Negotiating terms/Checking and finalising contract details.

Post-fixture work

Adding value:

Good working relationship and fully understanding your clients requirements

Demonstrating integrity, earning trust

Discretion/confidentiality – balanced by need to circulate information

Integrity/trust in one broker scenarios -Broker servant to his client and the negotiation

24/7 availability – Duty Broker

Market Specialisation

Detailed technical knowledge on specific vessels/operators/ports/facilities

Market Intelligence/Perception

Market Research

Maintaining a quality

Web/online services

Cultural awareness

Arbitration/Mediation