Chapter 7 Shipboard Operations

1.0 Introduction

TDI-Brooks has procedures, plans and instructions, including checklists as appropriate for shipboard operations concerning safe navigation, shipboard safety protocols, science operations, communications, winch/crane operations, and hygiene.

For further details on the below procedures reference the corresponding SOP.

2.0 Bridge Procedures

Bridge procedures describe the duties of the bridge crew, Captain’s Standing Orders, navigation and voyage planning, and operation and maintenance of the bridge equipment. Details for bridge procedures may be found in corresponding SOP.

Each vessel operated by TDI-Brooks has a set of Captain’s standing orders. All licensed officers must acknowledge that they have read and understand the Captain’s standing orders prior to standing their first watch by signature on the Standing orders with date signed.
3.0 Navigation

Safe navigation is largely managed through voyage plans. Information and instructions for submitting voyage plans are described in corresponding SOP.

4.0 Deck Operations

Deck operations involve both scientific/technical and vessel operations. Consequently, the Captain may expect to interact with the Party Chief in scientific/technical matters. The immediate responsibility for deck operations lies with the officer of the watch, who, in turn, reports to the Captain and keeps the Captain informed. The winch operator is the deck supervisor during scientific/technical operations.

5.0 STCW Work Hours

STCW hours tracking and record keeping details are in corresponding SOP.

6.0 Basic Vessel Hygiene and Food Service

The Chief Mate is responsible for basic hygiene on the vessel and overseeing Galley Health and Safety, which is detailed in corresponding SOP.

7.0 Communications

Details of communication procedures are described in corresponding SOP.

8.0 Ship Stability Policy

Every vessel carries a ship stability letter and booklet. The additions of temporary equipment, deck gear, and samples acquired in operations could potentially exceed the safe stability envelope.

While the stability letter and draft marks are the ultimate criteria of vessel loading, the stability calculators provide an empirical tool for determining if changes in deck gear or configuration would result in reduced operating range or stability.

Senior Management is responsible for ensuring the vessel stability is calculated and found acceptable before proposed changes such as adding/removing power packs, winches or containers or additional structures are made.

The Captain is responsible for calculating vessel's stability and recording stability calculations and draft (fore, aft and mid ships) in the ship's log as part of the pre-departure checklist.
Changes in permanently mounted equipment (included in the light ship calculation) are not permitted for the stability analysis. Calculations must include weights and calculations in the "worst case" condition (highest point and heaviest load - as in loads extracted from the seabed on an A-frame). Calculations must also take into account the samples (weight and height above baseline) acquired throughout the project and their storage locations aboard the vessel.

Any structural vessel alterations or changes in the lightship must be approved through Class and Flag Administration and a new stability letter generated.

### 9.0 Permit to Work Procedures

Permit to Work process is an important means of fulfilling TDI-Brooks’ general duty to ensure the health and safety of employees. Non-routine work, such as maintenance, cleaning, equipment installation and refurbishment, can produce health and safety risks over and above those normally encountered in the workplace. To controls these risks, “Permit-to-work” are used.

For more information on the jobs / tasks that are required to have a “Permit-To-Work” below can be found in their corresponding SOPs.

- Confined Space
- Energy Isolation
- Hot Work
- Working at Heights

### 10.0 Personal Protective Equipment (PPE)

TDI-Brooks has developed a PPE Matrix that clearly indicates what type of PPE is required to mitigate the hazards of common tasks. Employees are instructed not to do a task without the required PPE, to inspect their PPE before each use and to immediately remove from service PPE that is damaged or defective in any way.

Tasks that are not covered by the PPE matrix will require JSA or Job Safety Analysis by the supervisor of the employees conducting the work. The results of the JSA will determine what PPE is required for the task.

The primary responsibility for enforcing the PPE requirements rests with the HSE Officer on board and Party Chief. Individuals not following the PPE policy will be asked to leave the work area until they have all the required PPE.

PPE is provided at no cost to the employee. However, each individual must provide steel-toed footwear. If employees provide their own PPE, such as prescription safety eyewear, it must meet the minimum requirements of the appropriate standard and be maintained per manufacturer recommendations.
11.0 Hazard Communications Program

TDI-Brooks maintains a Hazard Communication Program in accordance with OSHA’s 29 CFR 1910.1200. The HazCom Program is described in the corresponding SOP.

12.0 Incident Reporting and Investigation

TDI-Brooks maintains a computer-based program, to record and track incident/accident reporting and investigation procedures. Details may be found in the corresponding SOP.