

### Dynamic Positioning (DP)

This exercise will take place on a dive support vessel, located at an offshore oilfield. The exercise will start with participants setting the vessel up on DP. Using DP, the participants will then be required to move the vessel to a position near a platform. With the assistance of an ROV, the vessels crane will then be connected to and recover an object from the sea bed.

The oilfield is in operation and there is a field standby vessel. There will be vessel traffic in the vicinity. Along with operating the DP system, the participants will be required to safely navigate their vessel, while complying with collision regulations and all pertinent navigation practices.

This exercise will take place on a bridge simulator with full bridge functionality. DP, joystick, manual levers, radar, electronic chart, navigation lights, sound signals, etc. will all be available and expected to be used as required.

#### REFERENCES:

- DP System Manual Chapter (USB Stick) to be picked up at CMS W2104

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**Exercise location:** Heritage Bridge Simulator (Main floor - CMS)

### Seamanship

This exercise challenges participants to demonstrate traditional seamanship skills, communicate with manual visual communication methods, and recognize lights, shapes, and signals from the International Regulations for Preventing Collisions at Sea (ColRegs).

The participating team will take on the assigned tasks of using the International Code of Signals' flags to send and receive messages, rig blocks and tackles and other equipment used for deck work, tie knots and splice rope, work with heaving lines and mooring lines, and demonstrate knowledge of the Collision Regulations. Some of the tasks are timed and all should be completed in the maximum allowable exercise time.

#### REFERENCES:

- Seamanship Techniques, D.J. House
- <http://www.seasources.net/PDF/PUB102.pdf> (INTERCO pp. 3, 6-8, 9sect.6, 22-23, Chapters 2&3)  
One representative from each team can pick up a hard copy of INTERCO from Capt. Ennis.
- <http://www.surreyknots.org.uk/igkt-knot-charts.htm>
- <https://www.youtube.com/watch?v=O6Xc9RIL2g0>
- <https://paperzz.com/doc/8757468/rigging-stages--bosun-s-chair--and-rope-ladders>
- <http://www.animatedknots.com/index.php?Logolmage=LogoGrog.png&Website=www.animatedknots.com>
- [https://laws-lois.justice.gc.ca/PDF/C.R.C.,\\_c.\\_1416.pdf](https://laws-lois.justice.gc.ca/PDF/C.R.C.,_c._1416.pdf) (Collision Regulations)

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**Exercise location:** Rigging Room (First Floor- MI)

### Emergency Management

This will be an exercise with the outcome having an impact on either the Cargo or Stability of the vessel or both. Participants will be given a situation as if they were onboard a vessel navigating a coastal area, where they will encounter a marine emergency requiring them to re-evaluate the stability and or the cargo onboard of their vessel. Participants will be required to effectively manage the emergency and carry out a review of the condition of the vessel to verify if the vessel still meets the requirements. This calculation and stowage plan could affect the choice of action for the emergency.

#### REFERENCES:

- Stability Calculation & Management information will be distributed directly by Captain Victor March.

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**Exercise location:** SEN Simulator (Third floor - MI)

### Emergency Towing

Participants will be required to tow a disabled 12000 DWT tanker drifting towards a shoal on the coast of British Columbia. The emergency towing vessel to be used will be an offshore anchor handling vessel with twin props and two high lift rudders, one stern tunnel thruster, one bow tunnel and one Azimuthing bow thruster. The emergency tow vessel will have its tow line and recovery lines rigged on the deck. The disabled vessel has a small tow wire rigged in the port forward fairlead on the bow. The weather and sea state will be considered safe for connecting and towing.

The emergency tow vessel will start approximately one mile from the location of the disabled tanker. If the tow is not connected in sufficient time the tanker will ground on the shoal. If the emergency tow vessel is not careful of its navigation it may also ground, while attempting to take the tanker under tow. Good navigation, seamanship techniques, and safety will be very important.

#### REFERENCES:

- Practical Seamanship. Author Danton

**Contact:** Captain Eben March [Ebenezer.March@mi.mun.ca](mailto:Ebenezer.March@mi.mun.ca) Office: CMS Offshore Operations Bld Room W204

**Exercise location:** Offshore Operations Simulator (Main floor - CMS)

### Shiphandling/Navigation

Participants will be required navigate their ship to approach a tanker anchored in Placentia Bay to transfer fuel. The bridge team are to navigate the ship safely through the confined waters of the traffic zone, enter the anchorage area and maneuver the ship safely so that the **PORT** side is alongside the **STARBOARD** side of the other ship. Both vessels should lie parallel to each other with loading/dischage manifolds facing each other. The ship will follow the routing as laid out by the traffic separation scheme until entering the anchorage.

#### REFERENCES:

- Radio Aids to Marine Navigation 2021 - Part 3 Vessel Traffic Services
- Ship to Ship Transfer Guidelines/Operational Safety Guidelines and Check Items for Oil Tankers - Checklist 1 <http://shipsbusiness.com/ship-to-ship-transfer.html>
- STS Transfer Operations Plan- American Bureau of Shipping (ABS)- Online Resource available at <https://ww2.eagle.org/content/dam/eagle/rules-and-resources/forms/STS-Transfer-Operations-Plan.doc>
- STS operation Manual- Chapter 3.2, Chapter 4 and Chapter 5 ( 5.1.7) [https://www.mavroudis.com.cy/media/cms/stsoperation\\_594A6B428D834.pdf](https://www.mavroudis.com.cy/media/cms/stsoperation_594A6B428D834.pdf)
- Collision Regulations, appropriate to navigational safety and detection or targets and action to avoid collision

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**Exercise location:** Full Mission Bridge Simulator (Bottom floor - CMS)

### Search and Rescue

The event will be a series of short scenarios where the participants will have to demonstrate the core STCW skills demanded of a FRC operator. The participants will launch and recover from a moving ship; search for and recover survivors in the water; and tow disabled survival craft out of danger to a place of safety. A different participant will act as coxswain for each scenario.

#### REFERNCES:

- [https://media.defense.gov/2017/Mar/28/2001723002/-1/-1/0/CIM\\_3120\\_6.PDF](https://media.defense.gov/2017/Mar/28/2001723002/-1/-1/0/CIM_3120_6.PDF)
- <https://ccga-gcac.ca/library/?action=category&lcid=124>

**Contact:** Captain Anthony Patterson; [Anthony.Patterson@virtualmarine.ca](mailto:Anthony.Patterson@virtualmarine.ca)

**Exercise location:** TBD