

Offshore Oil & Gas Production at the Hibernia Platform **Score Sheet – Mission #3 Tow Tank**

School/Team: _____

Team captain: _____

Mission station officials: _____

Set-Up and Safety Check

- All power cords, power bars, pressurized cylinders, etc. are secured.
- A fuse is present in the vehicle's electrical system.
- No hazardous materials are leaking onto the pool deck.
- Vehicle is hand-launched by team members in a safe manner.
- No team member has entered the water in order to prepare and/or launch vehicle.
- Vehicle is in the water near the control shack at the end of the 5-minute set-up period.

Note: Teams may attach the gasket and/or the hot stab to their ROV on the pool deck or when the ROV is in the water at the side of the pool. The attachment should be completed during the 5-minute set up time.

Mission official's notes: _____

- Team is ready for the mission:** _____ (official's initials)

Note: An official's decision to disqualify a team due to safety concerns is final. If there is a safety concern, please contact the lead official or competition coordinator.

Fuses

EXPLORER: If a team blows their 40-amp fuse, their mission performance period is over. The team will receive points for the mission tasks they have completed up to that point, but will not receive a time bonus score.

RANGER: The mission time clock does NOT stop in the case of a blown fuse. If a RANGER class team blows MATE's in-line 25-amp fuse, they are allowed one replacement fuse. If the vehicle blows the second MATE fuse, their mission performance period is over. The team will receive points for the mission tasks they have completed up to that point, but will not receive a time bonus score.

Mission #3 involves:

- **Transporting the gasket to the wellhead.**
- **Removing the wellhead's protective cover.**
- **Installing the gasket into the wellhead.**
- **Replacing the wellhead's protective cover.**
- **Transporting the hot stab to the wellhead.**
- **Inserting the hot stab into the port on the wellhead.**
- **Removing the hot stab from port on the wellhead.**
- **Returning the hot stab to the surface.**

Note: The mission tasks MUST be done in order. If the ROV drops the gasket or the hot stab while transporting them to the mission area, it may recover them and continue with the mission. After removing the wellhead's protective cover, the ROV can continue to hold on to the cover while inserting the gasket or it can release the wellhead cover (e.g. place it on the bottom of the tank). Once the ROV has inserted the hot stab into the port, the ROV MUST release the hot stab and wait for the officials to confirm a successful insertion before retrieving it. The ROV can return to the surface any time during the mission performance period.

Mission #3: Offshore Engineering Basin (time 20 minutes, score 80 points)	
TASK	SCORE
Transport the gasket from the surface to the wellhead under the control of the ROV.	10 0
Remove the wellhead's protective cover so that it is completely separated from wellhead.	10 0
Install gasket to fit completely inside the wellhead and remain there once the ROV releases it.	10 0
Replace the wellhead cover so that it fits completely on the wellhead and remains once the ROV releases it.	10 0
Transport the hot stab from the surface to the wellhead under control of the ROV so that its line is and remains attached to the ROV.	10 0
Insert the hot stab into the wellhead port so that it remains once the ROV releases it.	10 0
Remove the hot stab from the wellhead port	10 0
Return the hot stab to surface under control of the ROV. The hot stab cannot dangle on its line below the ROV and the line must remain attached to the vehicle.	10 0
Total Score – Mission #3:	
PENALTY POINT DEDUCTION	
Illegally pulling tether* _____ infractions X -5	
Illegal communication* _____ infractions X -5	
Modifications made to props that remain after the performance period	-5
Exceeded 5-minute demobilization period _____ minutes X -1 =	
TIME BONUS	
1 point for every minute and 0.01 point for every second under 20 minutes	
Duration of Mission: _____	
Minutes under 20 remaining: _____ X 1 point = _____	
Seconds remaining: _____ X 0.01 point = _____	
Time Bonus – Mission #3:	
TOTAL MISSION #3 SCORE	

*Issue a warning for the first infraction. Begin deducting points AFTER the first infraction.

Mission official's initials: _____ **Team captain's initials:** _____