

**STRICTLY
 TO BE
 ACCOUNTABLE**



TASK SPECIFIC THINK PROCEDURE

Brief Description of Task: DriveOff - DriftOff

PLAN	INSPECT	IDENTIFY HAZARDS	COMMUNICATE	CONTROL
1. A DriveOff occurs when the DP system receives an erroneous signal and rapidly increases thrust to quickly move the vessel to a new location. 2. A DriftOff occurs when power to the thrusters is lost and the vessel is forced off station by the environment.	<ul style="list-style-type: none"> Reference Systems – De-select wayward references that move out of alarm circle. Ensure enough power is available and sufficient thrusters are on line. Environmental Conditions – Heavy winds, Currents & Seas may move vessel off location. 	<ul style="list-style-type: none"> Loss of DP Control Maximum Stroke Out is reached on Riser Tensioner System then the Slip Joint. This parameter will be reached before the Lower Ball Joint Angle Limit is exceeded; if so the Drill Floor will initiate an EDS (Emergency Disconnect Sequence). 	<ul style="list-style-type: none"> Notify the Drill Floor IMMEDIATELY if loss of Station Keeping Ability is imminent or a fundamental failure to major systems has occurred. Notify ECR or Electrical Dept to rectify problem. Notify Captain, OIM 	<ul style="list-style-type: none"> USE THIS : TSF OPS DOC MANUAL HQS – OPS – 004
3. In order to anticipate these emergencies in a systematic manner & prevent damage, etc, WATCH CIRCLES are established. Watch Circles are Well Specific.	<ul style="list-style-type: none"> SDPM Posplot Screen, RAM Screen, Conifer with Sub Sea Engineer, Drill Floor. 	<ul style="list-style-type: none"> See above. 	<ul style="list-style-type: none"> The Bridge & Drill Floor should co-operate closely on established priorities so that there is no doubt or dissention. At the time of the emergency, the DPO & Driller on Duty shall act to the same priorities without undue hesitation. 	<ul style="list-style-type: none"> The SDPM system does have a DP Capability Plot feature.
3. The Watch Circles for BPs DORADO Well are: Green WC: 0 to 9 M White WC: 9 to 18 M Yellow WC: 18 to 54 M Red WC: over 54 M Initiate EDS	<ul style="list-style-type: none"> Green: DP System is operating normally. WX & Backups OK; Position is remaining within expected limits. White: Advisory. Notify Master, OIM, Driller & Toolpusher, Co Man. Yellow: Degraded Operating Status; Preparations should be made to shut in the well & Disconnect. Red: Initiate Emergency Disconnect Sequence 	<ul style="list-style-type: none"> Yellow: Environmental conditions have approached operational limits. Yellow: Some system failure has resulted in degraded positioning control. 	<ul style="list-style-type: none"> RED: The process of the Emergency Disconnect Sequence is defined thusly: 1. The detection of an abnormal operating condition affecting the INTEGRITY of the vessel to maintain station. The DPO or Driller may initiate a RED Alert and subsequent EDS. 2. EDS execution: the shear ram should close the well, all BOP functions should be blocked and the LMRP should be separated from the BOP. 	<ul style="list-style-type: none"> RED: cont Confirmation that the EDS function has been correctly performed. Movement of the vessel along the pre-ordained escape route to a safe location clear of any subsea architecture and preferably into deeper water.

SCENARIOS					
1. Total Loss of Power to Propulsion System.	<ul style="list-style-type: none"> Call ECR by any means to ascertain problem. 	<ul style="list-style-type: none"> This is a fundamental failure requiring the dedication of all assets to correct immediately. 	<ul style="list-style-type: none"> Check in with ECR first then give Drill Floor update; contact Captain, OIM. 	<ul style="list-style-type: none"> See above. 	
2. Loss of position due to excessive environmental forces, with EDS.	<ul style="list-style-type: none"> Ensure all available thrusters and enough power is on line. 	<ul style="list-style-type: none"> Loss of Station Keeping Ability. 	<ul style="list-style-type: none"> Notify Drill Floor, Captain, OIM, ECR. 	<ul style="list-style-type: none"> See above. 	
3. Excursion due to runaway thruster.	<ul style="list-style-type: none"> Check SDPM console, thruster pages. If damage is likely to occur by high RPM or other forces, initiate Emergency Shutdown of thruster via the proper button next to the screen 	<ul style="list-style-type: none"> Loss of Station Keeping Ability. 	<ul style="list-style-type: none"> Notify Drill Floor, Electrical Supervisor & ECR 	<ul style="list-style-type: none"> If feedback greatly exceeds setpoint, de-select errant thruster. 	
4. Loss of reference systems, thrusters, generators, UPSs, leading to a RED Alert.	<ul style="list-style-type: none"> 		<ul style="list-style-type: none"> Notify Drill Floor, ETs, ECR 	<ul style="list-style-type: none"> 	
5. Loss of propulsion system leading to loss of position, no EDS.	<ul style="list-style-type: none"> 			<ul style="list-style-type: none"> 	
6. Loss of position due to excessive environmental forces, no EDS.	<ul style="list-style-type: none"> 			<ul style="list-style-type: none"> 	

<p>7. Loss of reference Systems, thrusters, generators, LPSS or switchboard buses leading to a yellow alert.</p>	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> •
<p>PLAN List the step-by-step operational procedure for completing the task. State WHAT will be done – Do Not define HOW at this point. Be as general as possible and use specifics only when they are critical to the operation (e.g. weight, time, location, equipment, etc.). If it is impossible to list all of the essential steps of the operation here, use a second worksheet or break the operation into two or more sub-operations.</p>	<p>INSPECT List WHAT equipment, materials, areas are to be inspected for each step of the operation, be sure to include personal protective equipment. If the same equipment is used in more than one step, there is no need to repeat.</p>	<p>IDENTIFY Brainstorm the potential hazards and risks associated with each operational step, piece of equipment, materials and work area.</p>	<p>COMMUNICATE WHAT information needs to be communicated to WHO? Ensure that all personnel performing the task understand how to perform the task safely, the hazards, risks, and controls required. Anyone else who might be affected by or might affect the task must clearly understand their role.</p>	<p>CONTROL WHAT precautions should be taken to avoid risk of injury or property damage? How will the task be conducted to reduce the risk to an acceptable level as low as reasonably practical?</p>

TSF Deepwater Horizon

